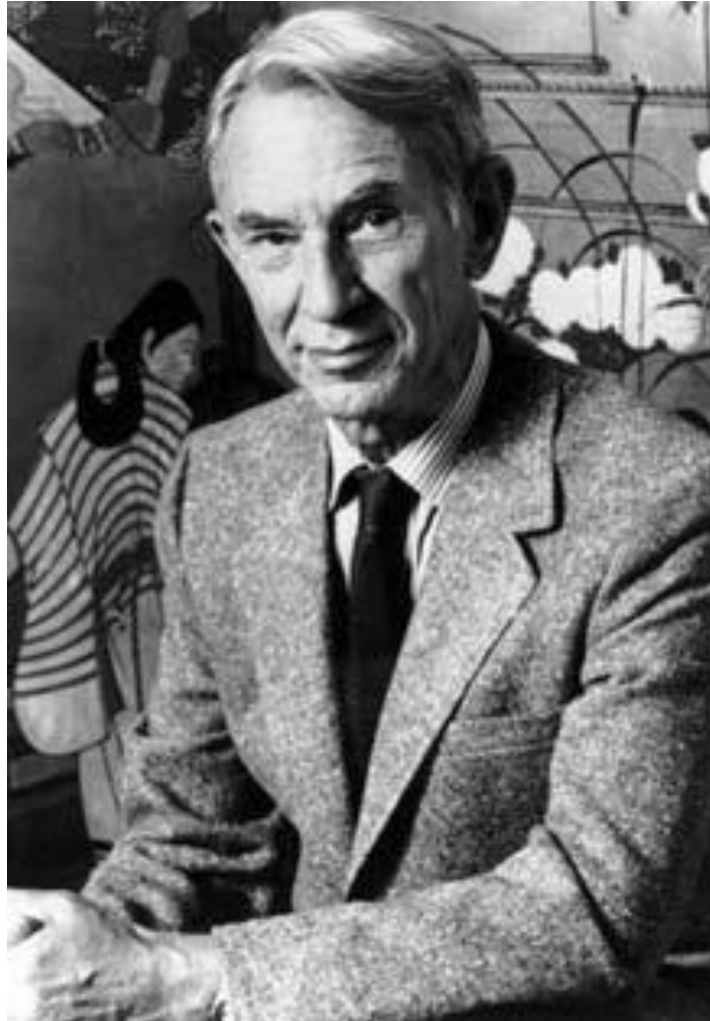


THE EDWIN O.
REISCHAUER CENTER
FOR EAST ASIAN STUDIES



The United States and Japan in Global Context: 2022

The Paul H. Nitze School of Advanced International Studies
The Johns Hopkins University
Washington, DC



Edwin O. Reischauer

October 15, 1910 – September 1, 1990

Established in 1984, with the explicit support of the Reischauer family, **the Edwin O. Reischauer Center for East Asian Studies** at the Paul H. Nitze School of Advanced International Studies (SAIS) actively supports the research and study of trans-Pacific and intra-Asian relations to advance mutual understanding between Northeast Asia and the United States. The first Japanese-born and Japanese-speaking US Ambassador to Japan (1961–66), Edwin O. Reischauer later served as the center’s Honorary Chair from its founding until 1990. His wife Haru Matsukata Reischauer followed as Honorary Chair from 1991 to 1998. They both exemplified the deep commitment that the Reischauer Center aspires to perpetuate in its scholarly and cultural activities today.

The US-Japan Yearbook Class of 2022



From left to right: Watahiki Fumitoshi, Goto Yasuhiro, Nishant Annu, Moriya Koketsu, Bradley Isakson, Lauren Mosely, Ariqa Herrera, William Brooks, Michael Lawrence, Elliot Seckler, Haoting Luo, Keisuke Inada, Yoriko Maruyama, Joseph McGrath, and Jennifer Lee

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The Year at the Reischauer Center

Kent Calder

Ever since its establishment in 1984, the Reischauer Center for East Asian Studies at SAIS has been a leader in non-partisan policy research in Washington. We have pursued a central focus on US-Japan relations, supported by in-depth coverage also of key Asian regional issues. Every year we strive to enrich the trans-Pacific dialogue with creative research that brings together the finest international scholars and professionals.

Once again, our central research goals were attained in 2021–2022, the COVID-19 pandemic notwithstanding. We pursued a full schedule of online events, including nine major international conferences and four individual web dialogues, including one with Tokyo Governor Koike Yuriko. In addition, the Reischauer Center also resumed in-person seminars for the first time in nearly two years and held sixteen in-person events as well, highlighted by the Reischauer Memorial Lecture of Ambassador Tomita Kōji. Overall, this year emerged as one of the busiest and most vigorous years, both programmatically and intellectually, in Reischauer Center history.

A central contribution to the Center’s research each year is our Yearbook of US-Japan Relations in Global Context, authored entirely by SAIS graduate students. The Yearbook is unique among annual US university publications, and it has been published continuously since the early days of the Center. It is produced under the careful guidance of Professor William Brooks, whose extensive and diversified career spans both academia and US government service over more than three decades.

After receiving his PhD from Columbia University, Bill taught history at the university level, including SAIS, before joining the State Department. He was posted to the US Embassy in Tokyo, twice as an economic officer and a third time as head of the Embassy’s translation and media-analysis unit. After retiring from the Department, Professor Brooks returned to SAIS in 2010 as a key member of our research and teaching faculty. Apart from his editorial responsibilities with the Yearbook, Bill continues to teach multiple courses relating to public diplomacy and US-Japan relations, while advising both students and visitors as well. We are immensely fortunate to have Bill with us at the Reischauer Center.

Our research staff this past year included a broad range of senior participants, in addition to the graduate students who produced the research included in this Yearbook. The Center hosted eight Visiting Scholars from a variety of academic and professional backgrounds and seven post-graduate Reischauer Policy Research Fellows, supported ably and sincerely by Research Manager Neave Denny. During 2021–2022 we were also fortunate to have Non-Resident Reischauer Center Fellows from both Europe and East Asia, as well as the United States, who participated actively in the extensive online activities that we conducted this year.

A special highlight for us in 2021–2022 was the in-person appearance of Ambassador Tomita Kōji, Japan’s senior representative in the United States, to deliver the 2021 Reischauer Memorial Lecture on October 25. This lecture series, initiated in 2004 with an address by current Bank of Japan Governor Haruhiko Kuroda, honors annually a distinguished Japanese or American

who has made special contributions to US-Japan relations, in the tradition of former US Ambassador to Japan Edwin O. Reischauer. Ambassador Tomita delivered a most thoughtful and finely crafted set of remarks, derived from his own high-level personal experience, on the art of diplomacy in the international capitals where he has served.

The 2021 Reischauer Memorial Lecture with Ambassador Tomita Kōji, who presented on “US-Japan Relations in the Post-COVID World” on October 25, 2021



Reischauer Center Policy Research Fellows and Student Researchers with Prof. Toshiko Calder, Dr. Kent Calder, Am. Koji Tomita, Dr. William Brooks, and Research Manager Neave Denny (left to right)



The COVID-19 pandemic continued to constrain our research activities, especially those travel-related. We were, however, able to host five outside speakers in person, and we do appreciate their efforts in coming to Washington at a difficult time. We were also able to capitalize on the convening capabilities of Zoom technology to hold a record nine online international conferences. These included sessions on “Asia after Afghanistan,” “AUKUS and the Indo-Pacific,” “Okinawa 25 Years after the Futenma Agreement,” “Fifty Years of Global Economic Crisis and US-Japan Cooperation,” “East Asia and a Changing Caribbean,” and “The Dawn of a Post-Covid World.” For support of our work on broad geo-economic issues of global importance across the year, including conference discussions, we are grateful to the Center for Global Partnership of the Japan Foundation as well as to the Japan Economic Foundation.

One special challenge for me personally this past year was my responsibilities in SAIS-wide administrative positions, while simultaneously leading the Reischauer Center. From July 1 to the end of October I served as interim Dean of SAIS, at the request of Johns Hopkins University leadership. Following a short subsequent interval as Senior Advisor to our new Dean Jim Steinberg, who arrived November 1, I then served as Vice Dean for Education and Academic Affairs from the beginning of January 2022 until June 30. This academic year was thus a busy time, but I was fortunate to have strong support from Neave Denny, first as Special Assistant to the Dean during my Deanship tenure, and then in her continuing role as Research Manager of the Reischauer Center.

Fortunately my Deanship did allow opportunities to enrich our Reischauer Center programming schedule with Dean’s Forum events that addressed issues simultaneously relevant to the US-Japan relationship that has so deeply concerned me across my career. I structured these Dean’s Forum events as bilateral dialogues with major statesmen and intellectual leaders to elicit ideas of prospective importance to SAIS students and faculty. My first Dean’s Forum guest was Joseph Nye, Dean Emeritus of Harvard University’s John F. Kennedy School of Government, followed by John Ikenberry of Princeton University. I also exchanged ideas at the Dean’s Forum with the experienced Mexican diplomat Juan-Jose Gomez Camacho and finally with Governor Koike Yuriko of Tokyo.

**“A Conversation with the Governor of Tokyo, Yuriko Koike”
with moderator Dr. Kent Calder on October 29, 2021**

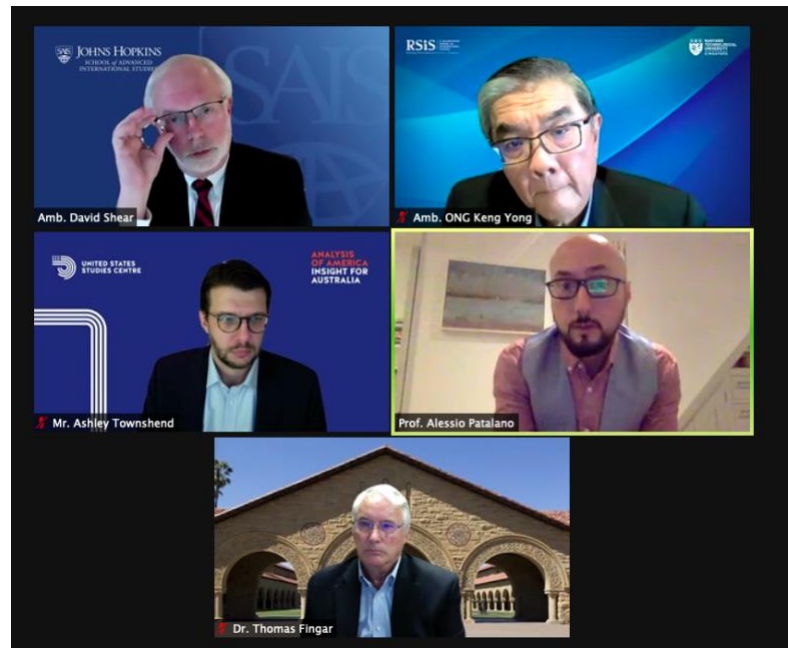


As this was a complex year administratively for me, and one of transition logistically for all of us due to COVID, our research also naturally pursued multiple themes, while retaining an overall focus on issues important to the US-Japan relationship. One continuing theme, of course, was the impact of COVID-19, and related health-security issues. A highlight in this regard was our webinar at the end of March 2022 on “Prospects for the COVID Pandemic in Asia and the World” with Dr. Jennifer Nuzzo of the Johns Hopkins Center for Health Security as keynote speaker. This event marked the culmination of a two-year project on “Covid and Asia,” supported by the Japanese Ministry of Foreign Affairs, for which we are grateful. The project is culminating in a major Reischauer Center publication, available in hard cover during the fall of 2022 and strongly supported intellectually by our outstanding Reischauer Policy Research Fellows.

As always, bilateral US-Japan issues, and research on the Japanese political economy itself, were major concerns of the Reischauer Center this year, even beyond this Yearbook itself. With the strong support of Professor Bill Brooks, and the participation of Ambassador David Shear as well, we convened a major webinar on Okinawa issues twenty-five years after the Futenma agreement in December 2021, highlighted by Governor Denny Tamaki of Okinawa’s presentation. Dr. Mireya Solis of the Brookings Institution also spoke on Japanese economic statecraft.

Broader issues in US-Japan-Asia relations were also naturally a major topic of concern. They were led intellectually by Professor David Shear, whose distinguished thirty-year State Department career included a tour as Ambassador to Vietnam as well as senior posts relating to US relations with both China and Japan. Ambassador Shear was instrumental in organizing two major webinars during the year, dealing with “Asia after Afghanistan” and also “AUKUS and the Indo-Pacific.”

“AUKUS and the Indo-Pacific” moderated by Amb. David Shear on November 3, 2021



Although we heard from distinguished senior scholars and decisionmakers this year, the role of younger researchers was also crucial. You will see their handiwork, of course, in this Yearbook—both written and edited entirely by students. We have worked to involve and recognize both students and other young researchers explicitly in some of the year’s signature events—especially the student research yearbook conference in December 2021 and our student-faculty April 2022 dialogue on the Ukraine conflict. Their quiet work behind the scenes in supporting research and in organizing events, such as the “East Asia and the Caribbean” event in March 2022, should also not be forgotten.

Concluding the academic year, we heard from our Visiting Fellows, who have provided concrete, informed insights to enrich our research program from its earliest days. Sugiyama Keishiro of the Ministry of Finance spoke on Japanese budgeting; Sasaki Fumiko of Columbia University on Chinese space power; Watahiki Fumitoshi of TEPCO on Japanese Renewable Energy; and Goto Yasuhiro from the Ministry of Economy, Trade and Industry who spoke on Japan’s post-Fukushima measures.

I am now approaching two decades with the Reischauer Center, which has been the highlight of my academic career. One special satisfaction has been to see our international network grow and prosper. This past year we established new personal ties to Singapore, Saudi Arabia, Mexico, and the Caribbean, as well as to Japan. And in a particularly meaningful development for me, a former Reischauer Center Visiting Fellow, Saeki Norihiko, returned to the Rome Building to speak, now as the Executive Director of JETRO Los Angeles. Our Center is maturing and developing a respected role in the global policy world, thus beginning to fulfill one of my fondest dreams. For this, I am personally grateful, and I hope that readers of this fine Yearbook will share our sense of pride and satisfaction as well.

Sincerely,

Kent Calder
Reischauer Center for East Asian Studies
Johns Hopkins University SAIS
Washington, D.C.
August 2022



THE EDWIN O.
REISCHAUER CENTER
FOR EAST ASIAN STUDIES

Reischauer Center Seminar Series

<p>9/7/2021 2:30 – 3:30 Rome 806</p>	<p>ALL Reischauer Center Welcome Meeting!</p>	<p><i>Reischauer Center Visiting Scholars, Fellows, & Researchers</i></p>
<p>9/10/2021 9:00 – 10:30 <i>Online</i></p>	<p>Prof. Kuni Miyake Special Advisor to the Cabinet of Prime Minister Yoshihide Suga, Former Deputy Director-General of Middle East Bureau, Japan’s Foreign Ministry</p> <p>Dr. Joseph Chinyong Liow Dean, College of Humanities, Arts, and Social Sciences, Tan Kah Kee Chair Professor of Comparative and International Politics Nanyang Technological University</p> <p>Mr. Ashley Townshend Director, Foreign Policy and Defence, United States Studies Centre, University of Sydney</p> <p>Ambassador David Shear Senior Fellow, Reischauer Center for East Asian Studies, JHU SAIS Former Assistant Secretary of Defense for East Asia</p> <p>Dr. Kent Calder Interim Dean, Johns Hopkins University School of Advanced International Studies (SAIS), Director for the Reischauer Center for East Asian Studies</p>	<p><i>Asia After Afghanistan</i></p>
<p>9/13/2021 4:30 – 6:00 <i>Online</i></p>	<p>Dr. Joseph Nye Former Dean Harvard Kennedy School</p>	<p><i>SAIS Global Dialogue with Dr. Calder</i></p>

	<p align="center">Dr. Kent Calder Interim Dean, Johns Hopkins University School of Advanced International Studies (SAIS), Director for the Reischauer Center for East Asian Studies</p>	
<p>9/20/2021 2:30 – 4:30 Rome 806</p>	<p align="center">Dr. William Brooks Senior Visiting Scholar Reischauer Center</p>	<p align="center"><i>Combat Fake News!</i> <i>Introduction to Research Methods and Report Writing</i></p>
<p>09/30/2021 1:30 – 2:30 Dean’s Suite</p>	<p align="center">Amb. Juan José Gómez Camacho Ambassador of Mexico to Canada</p>	<p align="center"><i>Reischauer Center Policy Fellows and Researchers Meeting with Ambassador Gomez-Camacho: The Future of Asia and Public Diplomacy Careers</i></p>
<p>10/06/2021 4:30 – 6:00 Webinar</p>	<p align="center">Dr. Mireya Solis Director, Center for East Asia Policy Studies Knight Chair in Japanese Studies Senior Fellow, Foreign Policy Program The Brookings Institution</p>	<p align="center"><i>New Directions in Japanese Economic Statecraft</i></p>
<p>10/14/2021 4:30 – 6:00 Rome 806</p>	<p align="center">Mr. Norihiko Saeki Executive Director, Japan External Trade Organization (JETRO Los Angeles) Special Advisor, Ministry of Economy, Trade and Industry of Japan (METI)</p>	<p align="center"><i>Enhancing U.S. and Japan Collaboration in Energy and the Environment</i></p>
<p>10/25/2021 5:00 – 6:00 Kenney-Herter</p>	<p align="center">Ambassador Koji Tomita Japanese Ambassador to the United States</p>	<p align="center"><i>Reischauer Center Memorial Lecture</i></p>
<p>10/29/2021 9:00 – 10:30 Webinar</p>	<p align="center">Gov. Koike Yuriko Governor of Tokyo Japan</p>	<p align="center"><i>A Conversation with the Governor of Tokyo, Yuriko Koike</i></p>
<p>11/03/2021 6:00 – 7:30 Webinar</p>	<p align="center">Dr. Thomas Fingar Shorenstein APARC Distinguished Fellow, Stanford University; Former Deputy Director of National Intelligence for Analysis</p> <p align="center">Dr. Alessio Patalano Professor of War and Strategy in East Asia; Director, King’s College Japan Programme, UK</p>	<p align="center"><i>AUKUS and the Indo-Pacific</i></p>

	<p>Amb. David Shear Senior Fellow, Reischauer Center for East Asian Studies; Former Assistant Secretary of Defense for Asia, and US Ambassador to Vietnam</p> <p>Ashely Townshend Director, Foreign Policy and Defence, United States Studies Centre, University of Sydney</p> <p>Amb. Ong Keng Yong Executive Deputy Chairman, RSIS, NTU, in Singapore; Director, Institute of Defence and Strategic Studies in RSIS</p>	
<p>11/12/2021 1:30 – 3:00 Rome 806</p>	<p>Dr. Patricia Maclachlan Professor of Government and Mitsubishi Heavy Industries Professor of Japanese Studies, University of Texas at Austin</p>	<p><i>Betting on the Farm: Institutional Change in Japanese Agriculture</i></p>
<p>11/17/2021 4:00 – 5:30 Homewood Campus</p>	<p>Reischauer Policy Research Fellows and JHU Undergraduate East Asia Club</p>	<p><i>Asia Career Panel Mentoring</i></p>
<p>11/18/2021 4:30 – 6:00 Rome 806</p>	<p>Dr. Daniel Aldrich Director of the Security and Resilience Studies Program, Professor of Political Science and Public Policy, Northeastern University</p>	<p><i>Why Social Ties Matter in Shocks</i></p>
<p>12/02/2021 3:30 – 5:00 Webinar</p>	<p>Joe Bauer China Studies 2021 M.A. Candidate</p> <p>Vivian Chen Japan Studies 2022 M.A. Candidate</p> <p>Emma Riley ERE Concentrator 2021 M.A. Alumna</p> <p>Kojiro Tonosaki Strategic Studies 2021 MIPP Alumnus</p> <p>Monica Weller Japan Studies 2022 M.A. Candidate</p>	<p><i>US-Japan Student Research Yearbook Conference</i></p>

Dr. William Brooks
Professor, JHU SAIS
Senior Advisor
Reischauer Center for
East Asian Studies

Dr. Fumiko Sasaki
Professor, Columbia University
Visiting Scholar
Reischauer Center for
East Asian Studies

Neave Denny
Executive Director
US-Japan Relations 2021
Yearbook Conference
Research Manager
Reischauer Center

12/16/2021
9:30 – 11:00
Webinar

Gov. Denny Tamaki
Governor of Okinawa, Japan

Dr. William Brooks
Professor, JHU SAIS
Senior Advisor
Reischauer Center for
East Asian Studies

Amb. David Shear
Senior Fellow, Reischauer Center for
East Asian Studies;
Former Assistant Secretary of Defense
for Asia, and US Ambassador to Vietnam

Dr. Kent Calder
Interim Dean, Johns Hopkins University
School of Advanced International Studies
(SAIS), Director for the Reischauer
Center for East Asian Studies

*The Okinawa Issue: 25 Years
after the Futenma Agreement*

01/12/2022
8:00 – 9:30
Webinar

Dr. William Brooks
Senior Advisor, Reischauer Center,
Japan Studies, Professor

Dr. Kent Calder
Vice Dean, JHU SAIS,
Director of the Reischauer Center

Dr. William Grimes
Associate Dean for Academic Affairs,
Professor of International Relations
Boston University

*Global Economic Crisis and
US-Japan Cooperation
1971-2021*

	<p>Dr. Yoshiko Kojo Professor, School of International Politics, Aoyama Gakuin University</p> <p>Amb. Kurt Tong Partner, The Asia Group, Former Consul General to Hong Kong and Macau</p>	
<p>1/28/2022 2:00 – 3:00 Rome 806</p>	<p>All Reischauer Center Members</p>	<p><i>Spring 2022 Welcome Back!</i></p>
<p>02/02/2022 4:30 – 5:30 Webinar</p>	<p>Vice Admiral Ota Fumio, PhD Retired Japan Marine Self Defense Force</p>	<p><i>A Taiwan Crisis is Japan's Crisis</i></p>
<p>02/21/2022 4:30 – 6:00 Rome 806</p>	<p>Dr. Jaehan Park Postdoctoral Associate, Albritton Center for Grand Strategy, Texas A&M University</p>	<p><i>Pivoting Grand Strategy: Explaining the Geographic Orientation of Rising Powers</i></p>
<p>02/24/2022 6:00 – 7:00 PM Webinar</p>	<p>Dr. Makoto Iokibe Special Advisor to the Imperial Household Agency Chancellor Prefectural University of Hyogo</p> <p>Dr. Tosh Minohara Professor, Graduate School of Law Kobe University Chairman Research Institute for Indo-Pacific Affairs</p> <p>Amb. David Shear Senior Fellow, Reischauer Center for East Asian Studies Former Assistant Secretary of Defense for East Asia</p> <p>Dr. Kent Calder Vice Dean for Education and Academic Affairs, JHU SAIS, Director of the Reischauer Center for East Asian Studies</p>	<p><i>70 Years Strong: The US-Japan Alliance and Its Implications for Asian Diplomacy</i></p>
<p>03/02/2022 4:30 – 6:00 Webinar</p>	<p>Amb. Richard Bernal, Ph.D. Senior Associate, Center for Strategic and International Studies Former Ambassador of Jamaica to the USA</p>	<p><i>East Asia and a Changing Caribbean</i></p>

Prof. Margaret Myers
Director, Asia and Latin America
Program, Inter-American Dialogue
Professor,
Johns Hopkins SAIS

Dr. Francisco González
Associate Professor of International
Political Economy and Latin American
Politics,
Johns Hopkins SAIS

Dr. Kent Calder
Vice Dean for Education and Academic
Affairs, Johns Hopkins SAIS
Director, Edwin O. Reischauer Center for
East Asian Studies

Lauren Mosely
Policy Research Fellow
Reischauer Center for East Asian Studies

03/17/2022
10:30 – 12:00
BOB 500

Ms. Margot Carrington
Former Minister Counselor for Public
Affairs
U.S. Embassy Tokyo

*Challenges and Successes in U.S.
Public Diplomacy in Japan:
1994-2018*

03/30/2022
9:00 – 10:30
Webinar

Dr. Jennifer Nuzzo
Associate professor in the Department of
Environmental Health and Engineering
and the Department of Epidemiology
Senior scholar at the Johns Hopkins
Center for Health Security

Mr. Hirokazu Saito
Senior Advisor of Eurasian Affairs
Mitsubishi Corporation

Dr. William Brooks
Professor of Japan Studies
Johns Hopkins SAIS
Senior Advisor
Reischauer Center for East Asian Studies

Dr. Kent Calder
Vice Dean for Education and Academic
Affairs, Johns Hopkins SAIS
Director, Edwin O. Reischauer Center for
East Asian Studies

*The Dawn of a Post-COVID
World? Prospects for the COVID
Pandemic in Asia and the World*

<p>04/09/2022 - 04/10/2022</p>	<p>Reischauer Center Members</p>	<p><i>Sakura Matsuri Cherry Blossom Festival in Washington, DC</i> <i>Japan Bowl Networking Reception in Nitze Building</i></p>
<p>04/21/2022 10:00 – 11:30 Rome 812</p>	<p>Mr. Fumitoshi Watahiki Visiting Scholar, Reischauer Center Johns Hopkins SAIS</p>	<p><i>Economic and Political Impacts of Renewable Energies in Japan and Fossil Fuel Exporters</i></p>
<p>04/26/2022 9:30 – 11:00 Webinar</p>	<p>Dr. Jacopo Pepe Senior Researcher The Global Issue Division of the German Institute for Security and International Affairs</p> <p>Dr. Kent Calder Vice Dean for Education and Academic Affairs, Johns Hopkins SAIS Director, Edwin O. Reischauer Center for East Asian Studies</p> <p>Ms. Lam Tran Reischauer Policy Research Fellow Reischauer Center for East Asian Studies</p> <p>Mr. Anu Anwar PhD Candidate Reischauer Student Researcher Reischauer Center for East Asian Studies Johns Hopkins SAIS</p> <p>Ms. Shahad Turkistani MA Candidate Reischauer Student Researcher Reischauer Center for East Asian Studies Johns Hopkins SAIS</p> <p>Mr. Connor O'Brien MA Candidate Johns Hopkins SAIS</p>	<p><i>Student-Faculty Dialogue: The Ukraine Conflict and East Asia's Future</i></p>
<p>04/28/2022 10:00 – 11:30 Rome 812</p>	<p>Mr. Keishiro Sugiyama Visiting Scholar, Reischauer Center, Johns Hopkins SAIS</p>	<p><i>The FY2022 Budget and Japan's Finances</i></p>
<p>05/05/2022 8:00 – 9:00 Nitze 217</p>	<p>Dr. Satohiro Akimoto Chairman of the Board and President, Sasakawa Peace Foundation USA</p>	<p><i>Sasakawa USA Delegation meeting with Policy Fellows and Student Researchers</i></p>

<p>05/04/2022 2:00-3:30 Rome 418</p>	<p>Dr. Fumiko Sasaki Visiting Scholar, Reischauer Center Johns Hopkins SAIS School of International and Public Affairs Columbia University</p>	<p><i>China's Rising Space Power, CCP's Survival, and Indo-Pacific Geopolitics</i></p>
<p>05/19/2022</p>	<p>All Reischauer Members</p>	<p><i>End of the Year Celebration</i></p>
<p>05/25/2022</p>	<p>SAIS Graduates</p>	<p><i>SAIS Graduation</i></p>

Introduction

William L. Brooks

The Reischauer Center of Johns Hopkins University's School of Advanced International Studies (SAIS) offers a unique graduate course, *United States-Japan Relations in Global Context*, in which the students research and write academic papers of publishable quality that reflect some of the main themes or events chosen that year as representative of bilateral ties between Japan and the United States in a broad context. Under the tutelage of senior advisors, the students carry out independent research that includes interviewing experts in relevant fields. The papers are then edited and published as chapters in a yearbook of the same name as the course. The Reischauer Center's yearbook on US-Japan relations has been published since 1986, making it one of the longest, continuous annual surveys of bilateral ties of its kind.

Given the current state of the world in which the very existence of the international liberal order is being challenged, it is no wonder that the essays presented in this Yearbook reflect the authors' anxieties about the cumulative impact of the devastating COVID-19 pandemic, Russia's brutal invasion of Ukraine, growing tensions in the Indo-Pacific, especially the Taiwan Strait, and a looming collision course between China and the United States.

Indeed, the post-COVID world is becoming much more dangerous, with Russia now a rogue nation challenging the international order; North Korea seeming to realize that there is no penalty of significance to its developing and testing nuclear weapons and nuclear warhead-capable missiles that could even reach the United States, let alone Japan; and an increasingly unrestrained China, now seen by NATO in a recent statement as a "threat" to global peace. China appears to be watching Russia, for if Putin can invade Ukraine and ultimately get away with it—the UN Security Council being toothless—Beijing may think a military solution for the Taiwan issue may be worth the risk for it, too.

Our research papers this year, reflecting such a global inflection point, cover Japan's and other countries' responses to the COVID-19 crisis, Japan's decisive reaction to Putin's invasion of Ukraine, the question of the Quad as a strategic security dialogue, the use of economic statecraft in the Indo-Pacific, and suggestions on how to avoid a future Taiwan Strait crisis. Other crucial issues covered in the papers include taking stock of Japan's official development assistance, the future of nuclear energy in an energy-starved Japan, and the impact of the demographic crisis on rural Japan.

In this tumultuous period in global history, it is encouraging to see US-Japan relations stronger than ever in meeting regional and global challenges, as these papers will show from various angles. One key factor on the Japan side has been the surprisingly strong leadership of Kishida Fumio, the current prime minister, whose bold and decisive efforts to strengthen the Alliance and build close ties with President Joe Biden, as well as to back the G7 in responding to the Russian invasion of Ukraine, has significantly raised Japan's profile in the international community. Japan has seemingly crossed the Rubicon in its security commitments.

Revolving Prime Ministers: Kishida Replaces Suga Who Replaced Abe

After winning the Liberal Democratic Party (LDP) presidential race, former Foreign Minister Kishida Fumio was elected Prime Minister Kishida by the National Diet in October 2021. He is a third generation Diet member, his father and grandfather having been Lower House lawmakers, and he heads the Kochikai, one of the oldest factions in the party. Representing Hiroshima, Kishida is known as a moderate politician who has a self-effacing, consensus-building political style. Proud of his ability to “listen to others,” he is not likely to run his office with the top-down management style of then-prime minister Abe Shinzo, who transformed Japanese foreign and domestic policies during his long term in office (2012–2020). Kishida will not likely introduce radical changes that would go against the grain of the still powerful right-leaning wing of the party. But he has already proved not to be risk averse when making decisions on issues that threaten Japan’s national security interests—as with bolstering Japan’s defense capabilities and lining up with the United States and Europe on responses to the Ukraine crisis.

Kishida’s predecessor, Suga Yoshida, was only in office for about a year when he announced in September 2020 that he would not be running for reelection as LDP president that month, thus stepping down as prime minister. Suga, who had served then-Prime Minister Abe as chief cabinet secretary for his entire tenure in office, came into power on Abe’s coattails when he resigned due to illness. He did not have a strong support base in the LDP and was not known for his communication and decision-making skills, resulting in a lackluster record of achievements while in office. His popularity in the polls plummeted when he proved unable to satisfactorily manage the pandemic crisis that was raging across Japan during his time in office.

Suga inherited Abe’s policy agenda, and to a great extent, Kishida has kept much of it intact, although he promises to address festering social and economic inequities in Japan with a policy line he has labeled “new capitalism.” The specific contents of that policy are still under discussion.

In regional affairs, Kishida is already facing the pressing task of navigating relations with an increasingly assertive China, as discussed below. Historically, the faction Kishida leads has had a dovish reputation, which favors relying on the United States for the bulk of Japan’s security while focusing policies on economic growth—known as the “Yoshida Doctrine” after former Prime Minister Shigeru Yoshida. That tradition will not likely be resurrected by Kishida, however. He is receptive to the notion of Japan taking on more defense-of-Japan responsibilities in the Alliance, and he has emulated Abe’s diplomatic reach in the regional and global spheres. Kishida has said: “There are some things that bother me about Japanese politics today. There is an emphasis on strong leadership, US-centric diplomacy, and hawkishness. I don’t deny the significance of each of these, but I believe that balance is important.” Keeping that balance may prove difficult, however, due to the crescendo of crises that Kishida faces on his watch.

Kishida introduced his foreign policy vision, called “realism diplomacy for a new era,” at the Yomiuri International Economic Society on December 22, 2021. During his address, Kishida struck a balance between the need for Tokyo “to say what needs to be said” to Beijing and maintaining a stable bilateral relationship. The prime minister also highlighted the importance of missile defense and the debate over whether the Self-Defense Forces (SDF) should have the

capability to attack enemy bases that are readying to fire missiles at Japan. Kishida's foreign policy in short reflects a realistic approach that takes into account the growing complexities of Japan's security environment. Kishida has stressed this in his policy stances. "It's important to be grounded in thorough realism and confidently protect Japan," Kishida once told close aides. "There are no doves or hawks."

Kishida has a vested interest in preserving and nurturing the still-popular domestic and foreign policy agenda of Abe. For example, during his four and a half years as foreign minister under Abe, Kishida inherited Abe's vision of a "free and open Indo-Pacific," and his belief in cooperating with other democracies. "The international community is undergoing major changes, and authoritarian states are gaining more and more power," Kishida said in a 2021 interview, adding that measures to deal with an increasingly authoritarian China are needed. "I have a strong sense of crisis about this." He touched on the need for Japan to possess "enemy base strike capabilities," a euphemism for preemptive strikes, which are limited by the country's pacifist constitution, and said he wants to improve the country's defenses. At the same time, he would like to maintain a stable relationship with China. In that sense, Kishida is a diplomatic realist like his predecessor Abe, who had the same goals.

The invasion of Ukraine also has pushed revision of Japan's Constitution into the spotlight. The ruling LDP has been hard at work drafting new proposed amendments that include language added to the war-renouncing Article 9 that would specify the existence of an armed force in Japan. This was one of Abe's top priority goals when he was prime minister. It seems certain that Kishida would go along with this part of the proposed set of constitutional revisions.

Kishida was foreign minister under Abe for four years, giving him excellent diplomatic credentials. As one of his major achievements, Kishida negotiated with his South Korean counterpart a 2015 agreement to resolve once and for all the vexing "comfort women" issue—women, many of whom were Koreans, forced to serve as prostitutes for the Japanese military during the Pacific War. That landmark agreement was repudiated by the Moon Jae-in government (2017–2022), but there are signs that it is being resurrected by the new government of President Yoon Suk-yeol which just came into power. In general, Kishida seems to be the right person for settling some of the outstanding issues between Japan and Korea, but rising tensions in the region with China are also a force driving the two countries toward reconciling some of their differences for the sake of national security interests.

Since taking office, Kishida has faced one crisis after another, including a worsening of the pandemic and the economic impact of disrupted supply chains across Asia, but the biggest challenge has been how Japan should respond to Russia's invasion of Ukraine, which has profound implications for the future of the international liberal order.

COVID-19 Diplomacy

At this writing, parts of the world are still being ravaged by the COVID-19 pandemic, and while it has waned in some countries, it does not look like the COVID-19 virus and its mutations are going away soon. We humans will have to live with the virus. It also became clear over the past two years that the international system set up to respond to pandemics is broken. What exists,

such as the recently established COVAX, which under the WHO is underfunded, slow to respond, and prone to political interference. It seemed that it was every nation for itself, with little resolve to work together on a global scale. In the end, COVAX failed on its promise to vaccinate the world. The United States remained an outlier, even withdrawing from the WHO, a foolish decision that President Joe Biden has now reversed.

This is not to say that the United States and other wealthy countries were entirely stingy in their donations; the United States in 2020 alone contributed \$9 billion in pandemic-related aid, but international communities have also called attention to vaccine inequality. There is also a consensus in medical circles that the United States must learn to work with other countries or regional organizations, as well as private partners, to build a global health system that can effectively meet the next pandemic, which surely will come sooner or later.

Two papers in this Yearbook examine from different perspectives the policy impact of the COVID-19 pandemic on Japan. **Jennifer Lee** focuses her research attention on the diplomatic response, and **Yoriko Maruyama** covers the home-front response. In her well-documented study of Japan's COVID diplomacy, Lee compares the responses of Japan, the United States, and China. Her study goes well beyond the listing of vaccine and equipment donations and other related assistance to probe the motivations of each country, both humanitarian and strategic, the former being to stop the spread of the disease in vaccine-lacking countries and the latter to boost the country's international image and influence as a leading aid donor. Lee makes recommendations for how the nations can strengthen both their own standing and global health security.

Maruyama's deep dive into Japan's efforts to control the coronavirus at home concludes that the government was "overly conservative" in its policy responses. She lists not only the successful areas—the number of cases and fatalities from the viruses are relatively low—but also points out where the government could have done better. Indeed, Tokyo's decisions to basically close to country to foreign travelers, including workers and hundreds of thousands of foreign students, seemed excessive and unnecessary. At this writing in June, Japan has remained closed to tourists and casual travelers for over two years. Group tourists, businesspeople, and foreign students can now enter the country. This policy has hurt Japan's image in the world, discouraged students and others from trying to get into Japan, and dealt a blow to the Japanese economy, which used to draw millions of tourists each year.

Japan especially suffered from a lack of vaccine supply, having to rely on imports that at first were slow to come. It is still way behind other advanced countries in administering booster shots to the Japanese population. As a result, the Cabinet Office announced on March 22, 2022, the launching of a Strategic Center of Biomedical Advanced Research and Development (SCARDA) to promote home-grown vaccines for infectious diseases.

The economic impact of the COVID-19 pandemic, even before the Ukrainian crisis, disrupted supply chains across Asia, including China, creating shortages of goods, parts, and raw materials across the world, including Japan of course. Earlier this year, China's industrial heartland that includes Shanghai remained on lockdown, following the zero-Covid policy of Xi Jinping. Japan had to overcome successive surges in cases, and the country is now slowly opening its borders to travelers from abroad.

Japan Responds to Russia's Invasion of Ukraine

Russia's invasion of Ukraine was a wake-up call for Japan, for it revealed the true nature of Vladimir Putin's reckless disregard for the rules and order of the international community. The Japanese public was shocked by Russia's relentless brutal attacks on civilian targets, such as schools, hospitals, shopping malls, and apartment buildings, and the piling up of blatant war crimes committed by the invading army. Tokyo's swift and decisive response to Russia's invasion of Ukraine was unprecedented. The Kishida administration lined up with its G7 partners and imposed an unprecedented level of economic sanctions against Russia, including a freezing of the assets of Russia's Central Bank and individual sanctions against President Vladimir Putin himself and those close to him. The measures represent a stark contrast to the response following the 2014 annexation of Crimea, when the Japanese government was led by former Prime Minister Abe Shinzo.

In his meticulously argued paper, **Elliot Seckler** compares Japan's responses to Russia's 2014 and 2022 invasions of Ukraine. In the first incursion, Japan only reluctantly went along with Western-imposed sanctions, while in Putin's latest invasion, Japan immediately aligned itself with the NATO allies. Seckler concludes that tectonic shifts in international security, including the environment around Japan, became a key factor for Japan's about-face on Russia. In 2014, then-Prime Minister Abe gave priority to wooing Putin on the northern territories front and downplayed Russia's annexation of Crimea. By 2022, Japan was already convinced that Putin was only playing Japan on the territorial issue in order to get more project investments.

In its series of punitive measures, Tokyo also expelled nine Russian diplomats in April 2022 in response to revelations about mass killings in Bucha, a city on the outskirts of Kyiv. Tokyo's series of tough actions took many Americans and Europeans—not to mention the Japanese themselves—by surprise. Russia was clearly taken aback.

In addition, Tokyo stripped Russia of its “most-favored nation” trade status and froze assets owned by Vladimir Putin. It even made the difficult decision recently to wean itself from oil and gas imports from that country. Japan imports about 4 percent of its crude oil and about 10 percent of its LNG from Russia, based on its investments in Sakhalin energy projects.

The Japanese public has shown overwhelming approval for the government's sanctions (82 percent in a Yomiuri poll). Japan's media has devoted much of the daily news to covering the terrible suffering that Putin's army has imposed on the Ukrainian people. There is tremendous sympathy for the plight of the Ukrainian people, and the Japanese government has even accepted more than 1,300 refugees fleeing Ukraine.

Russia responded swiftly to Japan's punitive actions, with the Foreign Ministry announcing it will suspend negotiations for a postwar peace treaty with Japan, thus ending all hope for an agreement on the four northern islands that the Soviet Union seized from Japan and the end of World War II. Tokyo has been negotiating their return since the 1950s. The Japanese government, having shifted its policy of conciliation toward Russia, now officially states that the Northern Territories are an “inherent territory of Japan” and are currently “illegally occupied by Russia.”

The war in Ukraine has had a strong impact on Japan's defense and security policies. On March 8, 2022, the government revised its guidelines for the implementation of Japan's three principles on the transfer of defense equipment to enable Japan to provide bulletproof vests and other defense equipment to Ukraine. Japan's National Security Council then approved the government's decision making it possible for Japan to provide non-lethal equipment to Ukraine, which is "under armed attack in violation of international law."

Following the revision, Defense Minister Kishi Nobuo issued a dispatch order to the Air Self-Defense Force (ASDF) for the mobilization of a KC-767 transport and aerial refueling plane to deliver bulletproof vests, helmets, and other equipment to Poland. Once it arrived, the equipment was transported to Ukraine. The Ukrainian government had asked the Japanese government to provide lethal defense equipment such as antitank guns, but Tokyo refused the request due to the lack of legal basis for providing "arms" to foreign countries.

Japan's decision to provide defense equipment to Ukraine has much precedent. For example, on September 10, 2021, Defense Minister Kishi, meeting with his Vietnamese counterpart Phan Van Giang in Vietnam, signed an accord to enable exports of Japanese defense equipment and technology to Vietnam, as well as to promote bilateral defense cooperation to maintain the international order based on the rule of law. Vietnam was the eleventh nation with which Japan has signed a defense equipment and technology transfer deal. The Ukraine decision was the first involving a country at war.

Kishida Lays out Broad Strategy at Shangri-La

In a speech on June 10, 2022, at the Shangri-La Dialogue in Singapore, Prime Minister Kishida revealed a broad strategy for Japan's evolving role in the Indo-Pacific region. The new strategy, which he referred to as the 'Kishida vision for peace,' explains in great part Japan's responses to the invasion of Ukraine. The Prime Minister laid out five initiatives: maintaining and strengthening the rules-based free and open international order by bringing in new developments towards a free and open Indo-Pacific, enhancing security by advanced reinforcement of Japan's defense capabilities in tandem with reinforcing the Japan-US alliance and strengthening security cooperation with other like-minded countries, promoting realistic efforts toward a world without nuclear weapons, strengthening the functions of the United Nations along with reform of the UN Security Council, and finally, strengthening international cooperation in new policy areas such as economic security.

Kishida stressed that Japan was committed to building a stable international order through dialogue and not confrontation, but he also said Japan must be prepared for "the emergence of an entity that tramples on the peace and security of other countries by force or threat without honoring the rules." In order to prevent such situations, Japan must enhance its deterrence and response capabilities, Kishida said.

The Prime Minister blasted Russia for its invasion of Ukraine and reiterated Japan's commitment to supporting Ukraine and imposing sanctions on Russia. He warned that the situation in Ukraine today could be East Asia tomorrow, a veiled swipe at China over its disputed claims in

the region. Although Kishida did not openly name China in his speech, he pointed to disputes in the East and South China seas, along with growing tensions over Taiwan.

In his speech, Kishida noted Japan's planned efforts to strengthen nations in the Indo-Pacific in security and economic aspects. Japan is committed to transferring patrol boats in the region, strengthening regional maritime law enforcement capabilities, and providing defense equipment and technology transfers.

China Worries

Much of this Yearbook directly or indirectly deals with rising China and the implications for the US-Japan relationship. Many in the United States and Japan are concerned about what China's future intentions are not only in the Indo-Pacific region but also toward the global order. The consensus among many pundits is that China sees a future world order built on spheres of influence, with Washington being pushed out of Asia. They think that China, seeing the messy US withdrawal from Afghanistan and apparent turn away from global responsibilities during the years of the Trump administration, viewed the United States as weak, divided, and unable to recover its former stature in the international community. In such a world, China then may see its chance to assert its own hegemony in the region and global leadership.

During the decades since the Washington normalized relations with Beijing, there was a conceit in the United States that it could over time reshape China into a power more to its liking, or what policymakers called a "responsible stakeholder." The predictions were wrong, especially over the past decade after Xi Jinping came into power, because China has become a modern military power showing its might in regional waters and an economic power that has not reached the level of liberalization that American audiences had wanted. Although China wants to be a major player in the WTO and now in the CPTPP, to which it has formally applied, it still relies on a state-led economic model that contains many unfair business and trading practices. Foreign companies active in China encounter an unlevel playing field, with Chinese companies being state-owned, receiving subsidies, and engaged in industrial espionage or technology stealing from foreign firms. Yet, China's economic interdependence with the United States and Japan, among other countries, also needs trade and investment with them in order to sustain its growth.

The political liberalization in China that the US had expected at one time also has not come to fruition. China's authoritarian government has become more assertive and restrictive, not just in terms of human rights abuses and the squelching of Hong Kong's democratic movement but also by ignoring the unspoken desires of the affluent Chinese middle class, which now expects new rights and reforms to accompany their wealthy lifestyles.

In that context, Beijing under Xi Jinping may see Taiwan as ripe fruit ready for the picking. So, is a Taiwan contingency likely? **Haoting Luo** argues in her thoughtful paper that conflict need not inevitably happen if preventive diplomacy is aptly applied by the entities involved: Taiwan being willing to return to a dialogue with China; and Beijing willing to respond and return to a peaceful resolution of the Taiwan issue. She believes that there is enough leeway in Beijing's policy to allow a return to the status quo in which China and Taiwan return to seeking a peaceful resolution. She also sees the possibility of Japan playing an intermediary role of nudging each side,

including the United States, to use diplomacy to help reduce tensions and even head off a crisis across the Taiwan Strait

Fulfilling such a gap will not be easy, as **Moriya Koketsu's** carefully argued paper on a semiconductor alliance shows, but Japan's threat perception has been growing. In recent years, Japan has become increasingly concerned about China's military buildup and assertiveness in the East and South China Seas. And now, with the Ukraine war, Tokyo fears that Beijing will take clues from Russia and prepare to launch its own military effort to take over Taiwan. As seen in Prime Minister Kishida's frequently repeated statement, "East Asia is the Ukraine of tomorrow," Japan is clearly worried about China.

Dramatic Changes in Japan's Defense Policy

Prime Minister Kishida has rejected calls from a small group within the LDP, including from former Prime Minister Abe, for Japan to consider a nuclear-sharing arrangement with the United States. Under NATO's nuclear-sharing arrangement, Germany, Italy, the Netherlands, Belgium, and Turkey host American B-61 nuclear weapons on their soil. Members of the alliance maintain aircraft capable of carrying them, as well as provide conventional support in the event of a nuclear mission.

Kishida told lawmakers in April that the government "does not intend to discuss" the matter, citing Japan's three non-nuclear principles and Japan's nuclear energy law, which is predicated on peaceful use of nuclear technology. He said that that nuclear sharing would be "unacceptable" if it involves deploying American nuclear weapons in Japan during peacetime and carrying them on Japanese fighter jets in wartime. Kishida represents a district in Hiroshima, which was atom bombed in World War II. Moreover, the public's allergy to nuclear weapons and even nuclear power makes such a proposal dead on arrival.

The Prime Minister, however, is willing to go along with a more urgent goal: a dramatic rethink of Japan's long-standing security strategy set off by China's growing military power and North Korea's nuclear and missile threats to Japan's very existence. Russia's invasion of Ukraine may have been the catalyst, if not the impetus, for Kishida's desire to allow moves toward a national security policy, starting with a revision of the 2013 National Security Strategy, to be followed by updates of other key defense papers by the end of the year.

China's increasing maritime assertiveness in the East and South China Seas are particularly unsettling for Kishida, who now promises to consider "every option" to "drastically strengthen" the country's defense capabilities, including acquiring the controversial capability to strike enemy bases. The idea of having the strike capability to attack enemy bases is not new; in 1956, Prime Minister Hatoyama Ichiro deemed such could be justified as a right to self-defense and thus not a violation of Japan's war-renouncing Constitution. It is likely that acquiring this capability will be included in the revised National Security Strategy. The only sticking point is to get the approval of the LDP's coalition partner, the Komeito, which has been reluctant to go along with the proposal.

Why then is the Kishida government considering an enemy-base strike capability? Recently, China and North Korea have begun to develop hypersonic missiles and missiles that

follow irregular orbits. Irregular-orbit missiles make interception difficult by falling first, then rising in altitude. The Japanese government has recognized the difficulty of intercepting missiles with its current missile-defense system, and it has started to discuss acquiring the capability of striking enemy bases, which would neutralize missiles before they are launched.

Another proposal that Kishida has been willing to back is to dramatically increase Japan's defense budget, now capped at 1 percent of GDP, to 2 percent of GDP—which until now has been a target for each NATO member. That goal seems likely to be included in the National Security Strategy, as well. But reaching that goal over a ten-year period is likely to be difficult for it would involve year-on-year hikes

Japan's defense budget for the current fiscal year through March 2023 totaled ¥5.4 trillion (\$44 billion), setting a record high for the eighth consecutive year and up 1.1 percent from the initial budget in the previous year. The budget has risen incrementally for a decade now and corresponds to about 1 percent of GDP.

Another area of defense expenditures scheduled for increases is Host-Nation Support (HNS) or the budgeted funds that Japan uses to support the US stationing of forces on US military bases in Japan.

On December 21, 2021, the two governments agreed that Japan will increase its share of the cost for hosting US forces in the country to 1.05 trillion yen (\$9.2 billion), or 211 billion yen (\$1.8 billion) annually, for five years starting in fiscal 2022. Japan will include spending for the procurement of training equipment to enhance the Alliance's deterrence and Japan's defense capabilities with China's rise in mind. The agreement was formally signed by defense and foreign affairs cabinet ministers in January 2022.

Japan's Overdependence on China

According to a report by Japan's Cabinet Office, released in early February 2022, over 20 percent of items imported to Japan in 2019 were highly dependent on China, underscoring the need for Japan to consider the vulnerabilities in its supply chains.

In value terms, 1,133 of some 5,000 imported items, accounting for 23 percent of all the items, were found to have more than a 50 percent dependency on China. The ratio was especially high in such items as clothing, game consoles, face masks, mobile phones, and personal computers. Japan had higher dependence on China compared with other countries. The United States had 590 such items in 2019, while Germany had 250. The report warned that consumer goods are likely to be more affected in Japan if imports from China are stalled.

Aside from China, the report said some industrial materials such as metal have an over 50 percent dependency ratio with a specific country, pointing to concern that the supply of materials could be constrained if a serious incident occurs in the main exporting country, thus affecting Japan's production activities.

The report came as Japan and other countries have moved to enhance supply chain resilience after facing a shortage of semiconductors that has led to a reduction in vehicle output worldwide as well as needing face masks in the early stage of the COVID-19 pandemic.

In such a situation, what should Tokyo and the Washington do to shore up vulnerabilities in their supply chains that lean heavily on China? In his carefully researched paper, Koketsu examines the semiconductor industry, which over-relies on China for processing and ingredients. He fears that China might use economic statecraft to cut off supplies, and he suggests that the United States and Japan need to diversify sources of production and supply, as well as to collaborate even to the point of coproducing microchips.

In her richly detailed paper, **Ariqa Herrera** examines economic security from a national security perspective, focusing on the United States and Japan and their responses to the COVID-19 pandemic, supply-chain disruptions, and the possibility that China at some point may use its economic statecraft as an offensive tool against those two countries. Like Koketsu, she argues that Washington and Tokyo must further align their economic-security policies not only to respond to a natural disaster but also to deliberate disruptions to the supplies of components and materials that have national-security implications.

As of May 2022, the United States and Japan have already begun to counter the overdependence on critical high-tech products from China by deepening cooperation in building supply chains for advanced semiconductors. The two governments are also working on a framework to prevent technology leaks to China and other countries. Japan's desire to strengthen semiconductor cooperation with the United States is driven by concerns about waning domestic development and production in the industry. Japan had about 50 percent of the global semiconductor market of about 5 trillion yen (\$38 billion at current rates) in 1990. But that market share has shrunk to about 10 percent, although the industry size has ballooned to about 50 trillion yen.

What Is the Quad and What Does It Do?

Credit former Prime Minister Abe for formulating and then implementing a regional strategy with allies and partners that morphed by 2019 into the formalized Quadrilateral Security Dialogue or the Quad with Japan, the United States, Australia, and India as its members.

In fact, much of the conceptual framework for US regional strategy harks back to Abe's speeches and initiatives, such as the Free and Open Indo-Pacific (FOIP) idea. Although the driving force for the Quad was China's growing influence, the group's focus was on shared values and institutions.

In his perceptive and persuasive paper, **Joseph McGrath** argues that the "ambiguity of the Quad's explicit goals ... allows for the necessary flexibility to respond quickly to various security issues"—which is exactly what the Quad is doing. It has taken pains not to cast itself as a coalition to contain China but as a force for public good

For example, as early as mid-2021, the United States and other Quad members began to address supply-chain vulnerabilities for semiconductors and other strategic products. Stressing the

public good aspect, the Quad also pledged to donate at least a billion doses of COVID-19 to developing countries in the region by the end of 2022. This was a response to Beijing's use of vaccine donations to boost its image and influence among developing countries.

Japan's Demographic Crisis

According to data released by the Japanese government in September 2021, 29.1 percent of Japanese, or 36.4 million people, were 65 or older, making Japan by far the most aged society in the world, followed by Italy (23.6 percent) and Portugal (23.1 percent). According to the government report, approximately one out of four elderly people in Japan is employed, reflecting the government's revision of various regulations and statutes to enable people to remain viable workers into old age amid the rapid decline in the overall size of the labor force.

Japan's policy of closing the country to foreigners during the COVID-19 pandemic has made the situation worse. In 2021, Japan's population had its largest drop on record, falling by 644,000 to just over 125.5 million. This reflected not only the rapidly aging society but also the decline of foreign residents due to strict border controls over the pandemic.

According to the Ministry of Internal Affairs and Communications (Kyodo News, April 15, 2022), Japan's population stood at 125,502,000 as of October 1, 2021, down 644,000 from a year earlier for the eleventh consecutive year of decline. The drop was the biggest since comparable data became available in 1950. The number of foreign nationals living in Japan dropped by 25,000 to 2,722,000, the Ministry announced. This has exacerbated Japan's labor shortage, with businesses unable to fill gaps by hiring foreign workers.

Most studies of Japan's demographic crisis focus on the urban population, but **Bradley Isakson** examines in his well-documented paper the situation in Japan's rural areas, including interviews with locals in Gumma Prefecture, where Brad lived and worked for several years. Japan's rural populations are shrinking as a result of rural-urban migration and low fertility rates. The paper looks closely at local efforts to mitigate rural decline, using interviews conducted by the author with friends, town officials, and small business owners in the context of broader nationwide strategies. Isakson argues that centralized efforts to revitalize the rural areas have not been effective and future projects should focus on local autonomy with national financial support.

Expanded immigration as a partial solution to Japan's demographic crisis is outside the scope of Isakson's paper, but it is worth noting that the Japanese government has begun to seriously consider the option. According to *Nikkei Asia* (November 17, 2021), the Japanese government and ruling party are considering letting foreign nationals working in farming, food service and other sectors remain in the country indefinitely as soon as next fiscal year. If so, it would be a major turning point for a country that has avoided opening up to immigrants. Permanent residency is now granted only to those immigrants in certain specialty occupations, such as engineers. The government is rethinking this stance due to the acute labor shortage in Japan brought on by the rapidly aging population.

Under the existing program created in 2019 to fill understaffed sectors, including manufacturing and janitorial work, foreign nationals with experience but without special training are permitted to work in Japan for up to five years. They are not allowed to bring their families. In

another category, those who have shown to be skilled laborers may renew their visas indefinitely and bring their families, as long as they do not have criminal records. But this category is reserved only for only construction and shipbuilding. Now this category will open up to fourteen sectors, and the five-year cap will be removed.

Foreign Aid Is Japan's Stealth Power

Japan has long been one of the world's top donors of official development assistance (ODA) to the developing world, with the quality and efficacy of its aid improving vastly over the years. Yet, little attention is given in the developed world to Japan's superlative achievements with its ODA programs. In his comprehensive look at Japan's ODA, **Michael Lawrence** fills that knowledge gap nicely and argues that Japan should receive well-deserved recognition as a "foreign aid superpower."

We can see the evolution of Japan's ODA through the Japanese government's various revisions over the years of its Development Cooperation Charter, which spells out the basic policy on foreign aid. By the end of 2022, the government will complete an update of its foreign aid charter to reflect the rapidly changing international environment, marked by China's increasingly assertiveness in the region and the impact of the COVID-19 pandemic. The last revision was in 2015.

The new charter is expected to call for expansion of the ODA budget and enhancement of economic security, a top priority now for Tokyo. The new charter is set to call for utilizing ODA programs strategically in a bid to strengthen Japan's relations with Southeast Asian countries and Pacific Island nations.

Japan earmarked an ODA budget 561.2 billion yen for fiscal 2022 from April, less than half of the peak of 1,168.7 billion yen in fiscal 1997. In the field of economic security, the government will aim to strengthen supply chains to secure stable supplies of strategic goods, such as semiconductors.

Japan also plans to make international contributions in health and medical fields as a key element of its diplomatic strategy after providing humanitarian assistance in response to Russia's invasion of Ukraine and COVID-19 vaccines to developing countries.

One key element in making revisions will be to secure a strong budget for official development aid programs. The UN calls on countries to spend 0.7 percent of their gross national income (GNI) on ODA programs. Japan's percentage is around 0.3 percent. As with national defense, it is hard to say in ODA spending that Japan is playing a role commensurate with its economic power. The government would like to turn the charter revision into an opportunity to drastically increase ODA spending.

Japan's Energy Crisis: Is Nuclear Power the Answer?

The invasion of Ukraine has created a global energy crisis that will lead to blackouts in Japan unless steps are taken quickly to ensure a safe, stable domestic power supply. Beset by

shortages in supply and souring energy prices, Japan is trying to make adjustments that will help, including speeding up the introduction of renewables, but the growing view is that only the return to nuclear power—including introducing advanced reactors—will make any difference. That is easier said than done, however. Only this March, Tokyo Electric Power Co. and Tohoku Electric Power Co. for the first time issued electrical power outage warnings for the regions they serve. These areas were teetering on the brink of large-scale blackouts.

The Special Committee on Nuclear Regulations of the ruling LDP this May submitted to the Kishida government a report calling for faster and more efficient safety inspections of Japan's existing nuclear power facilities. The report pointed out that the Japan Nuclear Regulation Authority (NRA) has been taking too much time to conduct its safety inspections, and as a result, only ten of the nuclear power plants shut down following the 2011 Fukushima disaster have been restarted. The Special Committee thus called for the use of enhanced predictive analysis for safety inspections, for example by making use of data from inspections of nuclear power plants that have already passed inspection.

The NRA is an organization that operates independently from other Japanese government agencies. It was established to conduct safety inspections following the 2011 accident at the Tokyo Electric Power Co. Fukushima Daiichi reactor.

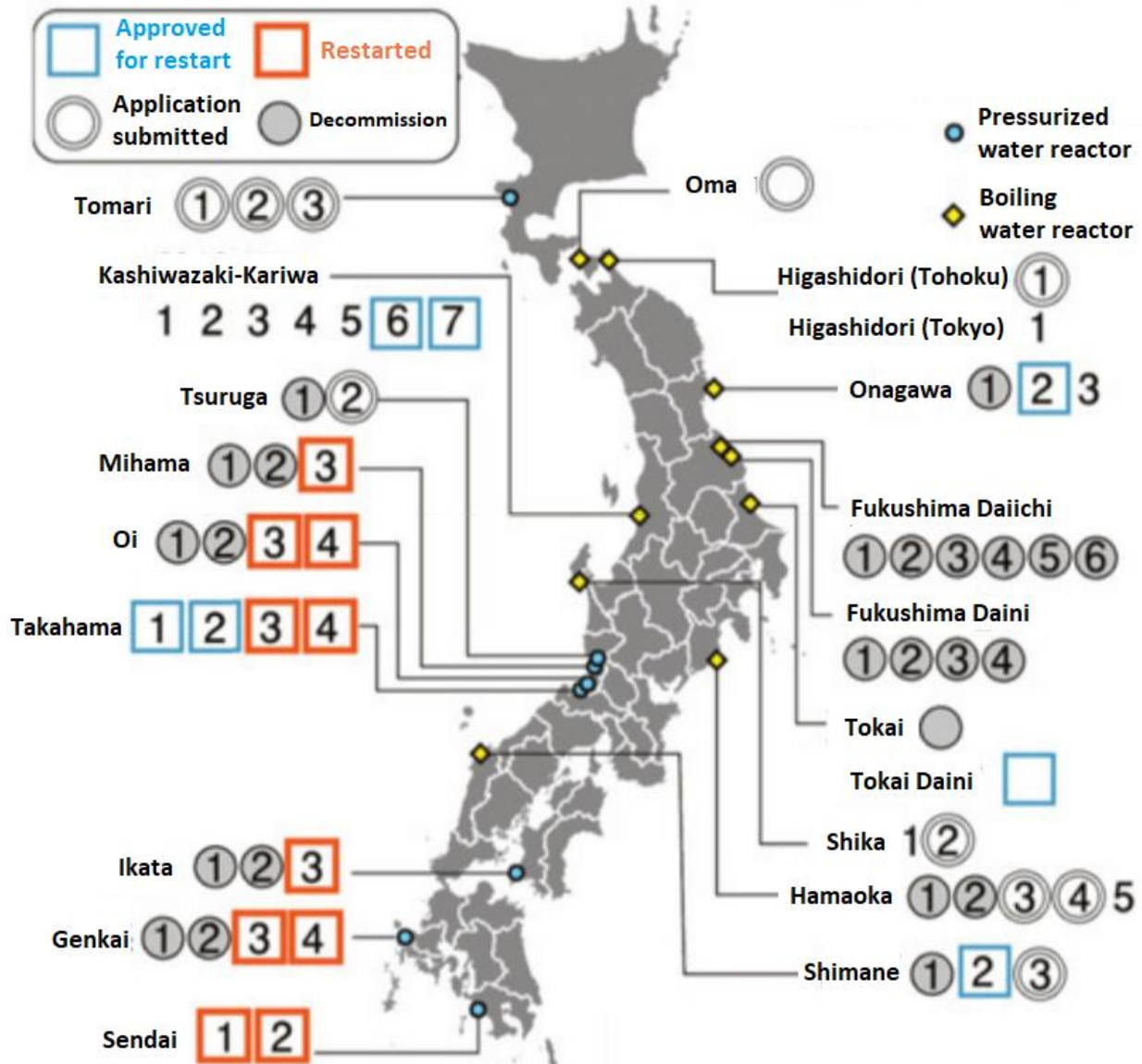
Prime Minister Kishida has promised to speed up inspections of nuclear power plants, and he is expected to implement the proposals contained in the report in order to get dormant nuclear power plants up and running again (see illustration below).

The standard administrative review process for safety inspections of nuclear power facilities by the NRA has been set at two years. This is in line with the goals of maintaining fairness and transparency in government administration called for in the Administrative Procedures Law.

As things now stand, however, the agency has been taking far longer to complete earthquake fault assessments and other inspection procedures. There is no way to estimate when it might finish these inspections. In the case of Hokkaido Electric Power Co.'s Tomari Nuclear Power Plant, inspections have been ongoing for nine years.

There is momentum now for getting Japan's nuclear power plants up and running again as soon as possible, but whether Prime Minister Kishida will be able to exercise strong leadership on this issue is an open question.

Status of nuclear power plants in Japan



Note: As of March 31, 2022. Includes plants under construction.

(Source: Sankei Shimbun)

In his highly persuasive paper, **Nishant Annu** examines the possibility of Japan opting to return to nuclear energy to reduce the use of fossil fuels that now are used to produce much of the country's electricity. Indeed, such a remedy is already being seriously discussed in Japanese political circles, and some opinion polls have shown a softening of attitudes among the population toward returning to nuclear power, despite the Fukushima accident in 2011. But Annu's analysis shows that the minuses outweigh the pluses when it comes to retrofitting old nuclear plants or building new ones based on costs, risks, and local situations. He recommends a doubling down to introduce more wind and solar power sources as a better option.

Abe Shinzo's Assassination a Tragic Loss for Japan

As this essay was being finalized, the author was shocked and saddened to hear the news flashes that former Prime Minister Abe was shot on July 8 while campaigning for the Upper House election by a deranged man who held a grudge against the former prime minister. Police arrested a 41-year-old unemployed man who had used a homemade gun for the assassination. The nation was shocked since guns are tightly controlled in Japan and political violence is a rare occurrence. Abe was pronounced dead around five and a half hours after the shooting in the city of Nara. After his leaving office, Abe remained a formidable political force in the Diet, still having a significant influence on government policy.

Notes and Acknowledgements

The contributors to this yearbook primarily conducted their research during Spring 2022. While time-sensitive statistics, such as COVID-19 cases, may no longer reflect the latest updates, the analyses included herein stand the test of time—since the COVID-19 pandemic, the war in Ukraine, rising tensions in US-China relations, and the energy crisis all remain key shocks to the international community. At the annual conference for the yearbook coming later this year, the authors will have the chance to speak on any new developments in their research areas.

This year's editors and contributors sincerely thank all the interviewees, Reischauer Visiting Fellows, mentors, and associated organizations for sharing their invaluable expertise for these articles. We also would like to express our gratitude to Professor Kent Calder, Director of the Reischauer Center, for his leadership of the center, especially amid his responsibilities as interim Dean of SAIS and then Vice Dean for Education and Academic Affairs.

Finally, this yearbook and the course of the same name succeed because of the dedication and wisdom of Professor Bill Brooks. Thank you Professor Brooks for providing us with indispensable academic and career guidance over the semester (and beyond). Additionally, we would like to recognize the hard work of Neave Denny, Manager of Research and Programming. Without her assistance and project management, this yearbook would not be possible. Special thanks to Jennifer Lee for her commitment and meticulous attention in serving as editor-in-chief of this edition.

Diplomacy Gone Viral? Comparing Approaches to COVID-19 Diplomacy among Japan, the United States, and China

Jennifer Lee

Introduction

As of May 19, 2022, more than six million people across the Earth have died from COVID-19.ⁱ Approximately two and a half years into the pandemic, cases and deaths worldwide continue to climb. While countries in possession of effective COVID-19 vaccines like the United States and Japan eventually saw their death and hospitalization rates fall, developing countries lacking cutting-edge biotechnology industries must rely on life-saving personal protective equipment (PPE) and vaccine shipments. Recognizing the importance of enhancing their image as humanitarian aid donors, Japan, the United States, and China have competed to outdo each other in COVID-19 diplomacy.

COVID-19 diplomacy is a form of global health diplomacy. The Pan American Health Organization (PAHO) summarizes global health diplomacy as “the practice by which governments and non-state actors attempt to coordinate global policy solutions to improve global health.”ⁱⁱ However, major powers like the United States, China, and Japan usually have motivations that go beyond protecting global health; global health diplomacy lies at the nexus of public health, foreign policy, and national security. Although the current pandemic provides a great example of such, these three countries have exercised such health diplomacy in the past.

This paper first explains the concept of COVID-19 diplomacy and traces it back to earlier uses of global health diplomacy. It then takes a critical look at how Japan, the United States, and China have each applied COVID-19 diplomacy, particularly vaccine diplomacy, during the ongoing pandemic, evaluating the extent of their successes through a comparative lens. Based on the results of their respective approaches to COVID-19 diplomacy, this study concludes with policy recommendations for each nation to individually or even collectively improve the states of their international relationships with each other, as well as with other parties. If these policies are implemented, they will significantly enhance health security as a vital global public good.

Defining COVID Diplomacy

What Is the Purpose of COVID-19 Diplomacy?

COVID-19 diplomacy, like all health-related diplomacy, serves to dually improve global health and the international perception of the country providing such assistance. These efforts seek to project soft power, forge economic ties, strengthen international standing, assert international leadership, and improve international image. Beijing, for example, hopes that China’s delivery of vaccines to low- and middle-income countries will extend soft power, foster goodwill, and increase its international influence.ⁱⁱⁱ

What Constitutes COVID-19 Diplomacy?

COVID-19 diplomacy can take many different forms related to vaccine and other relevant medical research, prevention of the disease, treatment of it, and patient recovery. People now tend

to think of only vaccine diplomacy, but at the start of the pandemic, medical supplies (e.g., masks and other PPE, ventilators, and other ICU equipment) featured more prominently in COVID-19 diplomacy. In addition to physical forms of aid like vaccines and masks, countries provided financial aid such as international bank loans. For the United States, USAID has committed nearly \$10 billion (all financial figures in this paper are reported in USD) through January 2022 for COVID-19 response efforts.^{iv} Donors can also direct funds towards specific research initiatives or organizations. Loans could go towards economic recovery as well. Countries can offer human capital too by sending delegations of medical providers or building the capacity of in-country staff. Information and data sharing about the virus, its treatments, and other subsequent research can count as health diplomacy. Additionally, some aid focused on detecting infections through testing kits and temperature sensing devices.

Even vaccine diplomacy itself encompasses more than donating or selling doses; the COVID-19 vaccines need to be stored at a very low temperature, so vaccine diplomacy has also involved securing the cold storage units necessary to utilize the vaccines. Some health sites even require solar-powered cold storage because they lack reliable access to electricity.^{v,vi} Once removed from extreme storage temperatures (around -94°F), Pfizer's mRNA vaccine expires within a month at normal refrigeration temperatures (35°F to 46°F),^{vii} so providers must administer the vaccine before then or the dose goes to waste. Before Pfizer extended the viability of the vaccine once thawed, the vaccine had an even tighter timeframe, only lasting in the refrigerator for five days.^{viii}

Overall, this paper views COVID-19 diplomacy as efforts by state (and non-state, though not central to this analysis) actors to improve global health outcomes from the COVID-19 pandemic while attempting to raise their international prestige—whether the former or the latter ranks as the higher priority varies. These actors can carry out COVID-19 diplomacy through multiple avenues, from PPE donations to loans. Since COVID-19 diplomacy is a specific type of health diplomacy, before looking at present approaches, this study first considers what other diplomatic actions Japan, China, and the United States have taken in the past for recent epidemics.

Past Precedents: Health Diplomacy during Epidemics

Health diplomacy like COVID-19 diplomacy is not a new phenomenon. All three of the case countries have previously engaged in global health and medical diplomacy. Looking at the past few decades, Japan and the United States, and increasingly China, employed health diplomacy during the HIV/AIDS and Ebola epidemics.^{ix}

HIV/AIDS: 1980s–Present

Viral infection with the human immunodeficiency virus (HIV) can lead to the condition known as acquired immunodeficiency syndrome (AIDS). To put HIV/AIDS into context, more than 36.3 million people have died from HIV/AIDS since the beginning of the epidemic,^x compared to around 6.3 million deaths from COVID-19.^{xi} HIV is not a respiratory virus, so its route of transmission lends it to affect fewer people (an estimated 80 million compared to Covid's over 500 million infections),^{xii,xiii} but it also has a higher mortality rate. The world currently lacks a commercial HIV vaccine, although scientists are currently pursuing the same mRNA technology used to create the COVID-19 vaccines.

Despite Japan being a leading donor of official development assistance (ODA), it initially lagged well behind the United States in HIV/AIDS response during the 1980s. For example, while the United States contributed over \$15 million in HIV/AIDS assistance in 1987, Japan provided nothing.^{xiv} Interestingly, in the same year, the US-Japan Cooperative Medical Science Program (USJCMSP)—a joint research initiative established by President Lyndon B. Johnson and Japanese Prime Minister Sato Eisaku in 1965—did create a panel to collaborate on studying AIDS.^{xv} Thus, while the Japanese public and government may not have prioritized HIV/AIDS, the scientific community understood the global importance and worked with US scientists. As Japan's perception of the threat from HIV/AIDS eventually rose,^{xvi} it used more than \$6 million from its ODA program to fight the disease in 1994 and ratcheted that up to \$209 million in 2012. It dipped down to under \$100 million in 2017.^{xvii} In terms of pathways, 93 percent of that 2017 ODA went through multilateral instruments like the Global Fund to Fight AIDS, Tuberculosis, & Malaria (Global Fund) and Unitaid.^{xviii}

The United States in comparison continued to outpace Japan throughout this period. US donations were in the billions each year through the 2010s, reaching nearly \$5.95 billion in 2017.^{xix} In fact, the United States stood out as the largest donor for LMIC HIV funding.^{xx,xxi} In contrast to Japan's multilateral approach, 90 percent of US HIV financing goes through bilateral arrangements.^{xxii} In addition, Washington launched the President's Emergency Plan for AIDS Relief (PEPFAR) in 2003. Not only does PEPFAR provide financial aid, but it also has supported antiretroviral therapy for over 19 million people worldwide and trained over three hundred thousand healthcare workers to provide HIV care.^{xxiii}

Interestingly, China—at this early point in its development—was still a recipient of ODA to combat the AIDS epidemic. For example, the Global Fund disbursed more than \$27 million to China for its AIDS response.^{xxiv} By 2014, however, China primarily funded its own domestic initiatives instead of relying on foreign aid.^{xxv}

Therefore, in response to the HIV/AIDS epidemic, Japan got a late start with its relevant ODA and took a multilateral approach, the United States demonstrated firm global health leadership and relied on bilateral channels, and China needed to focus on addressing its own domestic infections. The Americans' strong health diplomacy helped promote the United States as an authority on global health issues (even though global audiences would later question this credibility in the early stages of the COVID-19 pandemic). On the other hand, scientific communities in both Japan and the United States, from early on, made AIDS a priority area in the USJCMSP.

Ebola's Largest Outbreak: 2014–2016

Ebola is also a virus. It interferes with blood clotting and leads to hemorrhagic fever, often deadly if left untreated.^{xxvi,xxvii} Though scientists identified the first outbreak in 1976,^{xxviii} the epidemic in West Africa from 2014–2016 was the largest outbreak with more than twenty-eight thousand cases and over eleven thousand deaths.^{xxix} The US Food and Drug Administration approved a vaccine for one of the six species within the Ebolavirus genus in December 2020.^{xxx}

Japan responded more rapidly to the Ebola epidemic than to the HIV/AIDS epidemic. From April to September of 2014 alone, Japan sent over \$4 million in emergency financial aid, and by late 2015 it committed over \$100 million.^{xxxix} In September 2014, Japan co-sponsored a UN Security Council resolution to declare Ebola a ‘threat to international peace and security’^{xxxii} and to urge its signatories to come to the aid of the affected nations rather than to isolate them.^{xxxiii} Also, Japanese scientists developed a better test kit (faster, lighter, less reliant on electricity).^{xxxiv} At various stages in the outbreak, the Japanese government donated PPE, ambulances, thermography cameras, tents and hospital beds, and antiviral drugs.^{xxxv, xxxvi} Delegations of Japanese experts also traveled to various locations to help through the World Health Organization (WHO).^{xxxvii} Japan’s comprehensive response to the Ebola epidemic illustrated why it generally has a positive reputation for providing humanitarian-related ODA.

The United States once again emerged as the top donor for addressing a pandemic. It ranked highest for Ebola-related aid, making up nearly half of all foreign aid at around \$1.7 billion.^{xxxviii} It also deployed a formidable array of US officials and medical practitioners; thousands arrived in West Africa, including a Disaster Assistance Response Team (or DART) to coordinate the efforts.^{xxxix} In Liberia, the DART helped set up new treatment units, and American ODA funded distribution of 50,000 household PPE kits.^{xl} Overall, the Americans responded so resoundingly that the United States saw a dramatic increase in its funding earmarked for global health security, more than tripling its 2011–2013 levels in 2015.^{xli}

While China had mostly received aid for the HIV/AIDS epidemic, it changed roles by the time the 2014 Ebola outbreak ramped up. By November 2014, China had sent four iterations of financial assistance totaling approximately \$123 million.^{xlii, xliii} The government also sent delegations of prominent experts and medical personnel with experience dealing with avian flu and SARS outbreaks in China. More than five hundred medical staff came from China’s People’s Liberation Army (PLA).^{xliv} The PLA staff improved the Ebola-related capabilities of a general hospital in Sierra Leone and created a whole field hospital in under two weeks in Liberia.^{xlvi} Recognizing the signaling importance of health diplomacy, China broadcasted its efforts^{xlvi} and asserted that its approach to the Ebola crises represented a “new,” “fast” and “practical,” “comprehensive,” and “open” or collaborative global health response.^{xlvii} Though China did not become a global health leader in the sense of the United States and spearhead efforts, it successfully used this health diplomacy to convince global audiences it had a significant role and was able to start raising its international standing.^{xlviii}

Reflecting on the outcomes from the historic Ebola outbreak, Japan reinvigorated its health-assistance programs and reputation for global leadership, while the United States maintained its preeminence over the global health space, and China emerged as growing player in the arena. All three countries utilized health diplomacy to reinforce or enhance their international prominence. Although Japan did not pursue effective health diplomacy during the HIV/AIDS epidemic, and China could not contribute significantly to ODA from the 1980s to 2000s, by the time of the 2014–2016 Ebola epidemic, the case countries all understood the potential of health diplomacy to both fortify global health security and boost international influence. This knowledge colored the response to the COVID-19 pandemic and how global audiences received COVID-19 diplomacy.

Japan's Approach to COVID-19 Diplomacy and the Global Reactions

The Name of the Early Game: Sino-Japanese Exchanges and the Japan Model

Before the Japanese government registered COVID-19 as a threat to its domestic population, it employed PPE and medical supply diplomacy to smooth over some rough patches in the Sino-Japanese relationship. The central government and the Oita prefecture (sister city to Wuhan) donated thirty thousand masks and thousands of protective garments to Wuhan.^{xlix} Japanese companies also donated PPE and thermometers. According to the Brookings Institution, these gestures began strengthening relations between China and Japan, with China later reciprocating by sending test kits to the Princess Diamond cruise ship and providing PPE once Japan's own domestic wave hit.¹ Once COVID-19 arrived in Japan, the Japanese government temporarily turned its focus inward.

Global audiences have generally regarded Japan's response to its first wave of COVID-19 as effective, though some experts note that Japan should have acted faster to implement border control and quarantine measures given the trajectory of outbreaks in China and Europe.^{li} In contrast to the strict nature of the "China model," Abe Shinzo offered the "Japan model" for controlling COVID-19. The Japan model featured voluntary closing of close-contact businesses, voluntary social distancing, cluster-based contact tracing, early public awareness, and states of emergencies instead of strict lockdowns. According to Hori Satoshi, a professor at a Japanese university, the Japanese public shrewdly began implementing PPE, social distancing, and handwashing before the government announced any formal policies.^{lii} The cluster-based contact tracing approach also helped at the early stages of the pandemic to identify persistent sources of infection though the method began to lose efficacy by April.^{liii,liiv} Additionally, the Abe government decided in March to postpone the 2020 Olympic games, taking border control more seriously despite the economic challenges with delaying the games. On May 25, 2020, the Japanese government lifted the state of emergency, citing low hospitalizations across the country.^{liv}

With the early control of the virus, Japanese leaders espoused their Japan model as a replicable model for success. However, in order to mitigate some of the economic losses, Abe promoted a domestic travel campaign, which contributed to the rise in cases seen after May. His government also received domestic criticism for resting on its laurels and not proactively preparing for future waves, instead choosing to focus on the Tokyo Olympics.^{lvi} Apart from offering aid to China early on and proclaiming the Japan model as desirable, Japan's initial actions in the pandemic focused more on internal politics than international diplomacy.

The Latest Scene: Vaccine Diplomacy and Vaccine Skepticism

After the removal of the state of emergency and when international eyes turned to Tokyo for the Olympic Games in the summer of 2021, Japan's leaders began to think more actively about COVID-19 diplomacy. In May 2020, Japan donated \$2.7 million to help Central and South American countries through PAHO^{lvii} and \$49.8 million to the Japan-ASEAN Integration Fund.^{lviii} Through August 2021, it pledged about \$3.9 billion in total COVID-19 financial assistance, particularly with the aim of supporting universal health coverage.^{lix}

As the Tokyo Olympics approached and the decision made to keep out international spectators, Japanese leadership focused on vaccine diplomacy in earnest to further extend its

international influence. China had already embarked on its vaccine delivery campaign, making its first delivery in December 2020,^{lx} so Japan needed to catch up. According to Japan’s Ministry of Foreign Affairs, between June 2021 and April 2022, Japan has donated approximately 44 million vaccine doses.^{lxi} Approximately 56 percent of the donations occurred through bilateral agreements,^{lxii} whereas the rest of the doses went through the COVID-19 Vaccines Global Access, or COVAX, initiative (comprised of Gavi, WHO, Coalition for Epidemic Preparedness Innovations). In addition to the doses, Japan has donated \$1 billion to the COVAX mechanism and announced an additional \$500 million this April.^{lxiii}

Evaluating Japan’s vaccine diplomacy requires looking at the type of vaccine and number of doses donated, the method of donation and the recipients, and domestic attitudes towards vaccines and the current state of the pandemic in Japan. First, Japan typically donates the Oxford-AstraZeneca^{lxiv} viral vector vaccine, which offers more protection (especially against the variants) than the Chinese inactivated vaccines do but not as much protection as the mRNA vaccines (Pfizer and Moderna). Though it donates more effective vaccines than China does, Japan has only donated 44 million doses, whereas the United States and China have committed to over a billion doses. At less than 5 percent of the volume donated by the American and Chinese governments, Japan’s donations have a lower profile. Thus, the Japanese contributions globally could be dwarfed by the deliveries from its peers.

According to the MOFA, Japan donates to the following entities bilaterally: Taiwan, Vietnam, Indonesia, Malaysia, the Philippines, Thailand, and Brunei (Figure 1).^{lxv} Conversely, other Southeast Asian nations like Cambodia and Laos receive their donations through the COVAX mechanism (Figure 2).^{lxvi} It appears that Japan is focusing its bilateral efforts on entities in the Pacific that could offer Japan some partnership and have demonstrated willingness to hedge or balance China; whereas, Cambodia and Laos have ties too closely associated with China (such as when Cambodia acts as a proxy vote for China in ASEAN), hence why Japan might not pursue bilateral donations there and instead settle for COVAX. While globally packing less of a punch, Japan’s strategic use of vaccine diplomacy in some countries could foster better relations.

Figure 1. Japan’s Bilateral Vaccine Donation Recipients

Bilateral Donation

(Note) Indicating approximate number of doses (Unit: M=million)

Recipient Country / Region	Total Doses	Shipment Date (Note) Date of departure from Japan Japan
Taiwan	4.20	4 Jun to 27 Oct, 2021
Viet Nam	7.35	16 Jun 2021 to 26 Jan 2022
Indonesia	6.88	1 Jul 2021 to 19 Jul 2022
Malaysia	1.00	1 Jul 2021
The Philippines	3.08	8 Jul to 30 Oct, 2021
Thailand	2.04	9 Jul to 15 Oct, 2021
Brunei	0.1	24 Sep 2021

Total: Approx. 24.65 million doses

(Source: Japan Ministry of Foreign Affairs)

Figure 2. Recipients of Japan’s Vaccine Donations through COVAX

Donation through the COVAX Facility

(Note) Indicating approximate number of doses (Unit: M=million)

	Recipient Country / Region	Dose Volume	Shipment Date (Note) Date of departure from Japan
South-east Asia	Cambodia	1.32	23 Jul to 18 Dec 2021
	Laos	0.94	3 Aug to 21 Dec 2021
	Timor-Leste	0.17	11 Aug 2021
South-west Asia	Bangladesh	4.55	23 Jul to 20 Dec 2021
	Nepal	1.61	5 Aug to 21 Aug 2021
	Sri Lanka	1.46	31 Jul to 7 Aug 2021
	Maldives	0.11	21 Aug 2021
Central Asia	Tajikistan	0.50	19 Feb 2022
	Uzbekistan	0.20	15 Mar 2022
Oceania	Solomon Islands	0.06	24 Aug 2021
	Fiji	0.06	20 Aug 2021
	Tonga	0.05	21 Aug 2021 to 12 Feb 2022
	Kiribati	0.06	18 Aug 2021
	Samoa	0.11	17 Aug 2021
Latin America	Nicaragua	0.50	22 Aug 2021
Middle East	Iran	4.31	22 Jul 2021 to 15 Apr 2022
	Syria	0.15	24 Dec 2021
Africa	Egypt	0.70	25 to 27 Dec 2021
	Malawi	0.68	24 Feb to 6 Mar 2022
	Nigeria	0.86	22 Feb 2022
	Cameroon	0.07	19 Mar 2022
	Ghana	0.31	20 Mar 2022
	Senegal	0.30	26 Mar 2022
	Kenya	0.20	5 Apr 2022

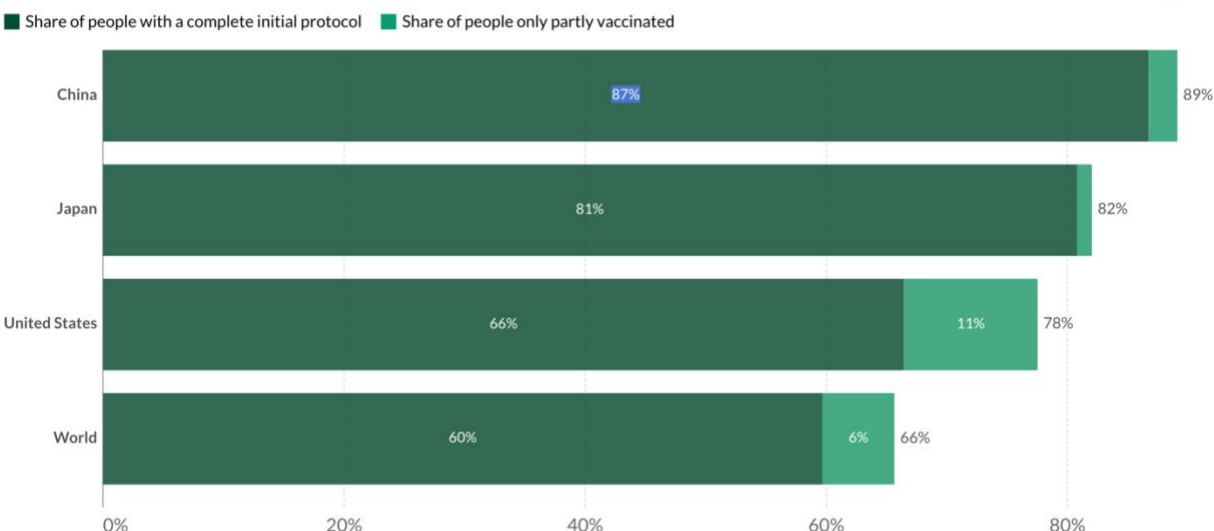
Total : Approx. 19.28 million doses

(Source: Japan Ministry of Foreign Affairs)

Finally, domestic responses to vaccines and the pandemic could mediate some of the effects of Japan’s vaccine diplomacy. Although Japan has a higher vaccination rate than both the United States and the world average (Figure 3),^{lxvii} a history of vaccine skepticism slowed the rollout in Japan. Domestic vaccination could have begun sooner in Japan if the Japanese had not insisted on running separate clinical trials of the vaccines because they wanted to specifically test them in Japanese populations.^{lxviii} This is consistent with hesitancy over other major vaccines. For example, the US Chair for the USJCSMP noted that Japan recently resumed human papilloma virus (HPV) vaccines, which are crucial to preventing cervical cancer, after nearly a decade hiatus because the health ministry felt that the vaccine reactions differed for Japanese women from other women.^{lxix} Now millions of Japanese women missed out on getting this key vaccine. One study estimated that lack of HPV vaccination between 2013 and 2019 would cause an additional 24,600–27,300 cervical cancer cases and 5,000–5,700 deaths.^{lxx}

Figure 3. COVID-19 Vaccination Rates

Share of people vaccinated against COVID-19, May 16, 2022



Source: Official data collated by Our World in Data
 Note: Alternative definitions of a full vaccination, e.g. having been infected with SARS-CoV-2 and having 1 dose of a 2-dose protocol, are ignored to maximize comparability between countries.

CC BY

(Source: Our World in Data)

About 81 percent of Japan’s population completed the initial COVID-19 two-dose protocol (see again Figure 3),^{lxxi} but only about 57 percent of the population has received a booster shot.^{lxxii} Since the booster importantly improves protection against the COVID-19 variants, Japan is still seeing a surge in cases, recording the eighth highest number of new cases over the past month (the thirty days leading up to May 19, 2022) worldwide and more weekly cases than seen in 2020 and in 2021.^{lxxiii} Failure to control domestic surges caused by the variants could weaken the soft power projected by Japan’s vaccine diplomacy efforts by questioning Japan’s public health credibility and further deteriorating the Japan model.

US Approach to COVID-19 Diplomacy and the Global Reactions

The Name of the Early Game: Withdrawing Public Health Leadership

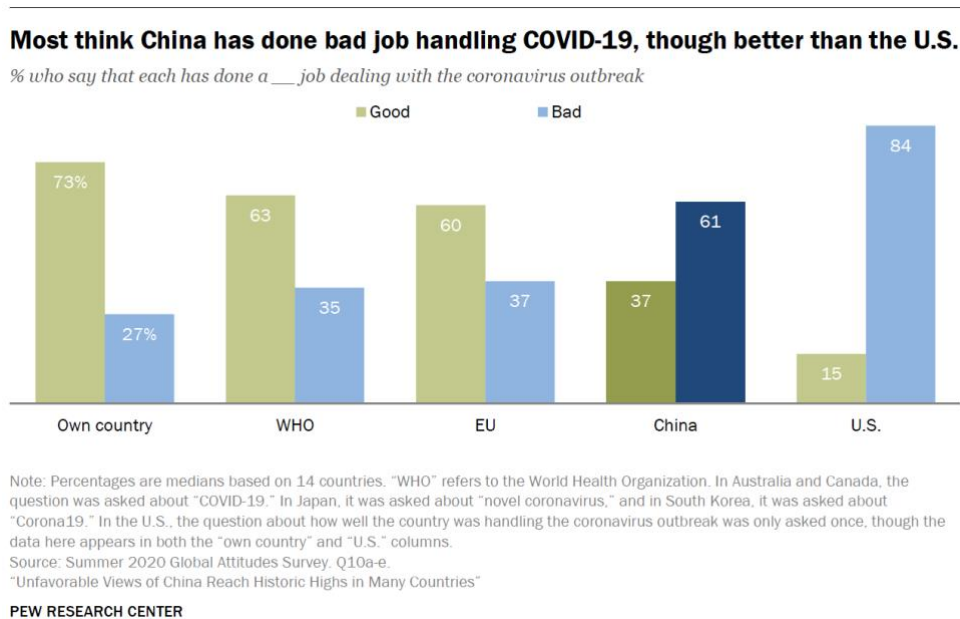
The HIV/AIDS and Ebola epidemics exemplified the United States’ penchant for global health leadership. Unfortunately, during the COVID-19 pandemic, decisions by the US government and the public have ruined the US reputation for effective public health responses. In April 2020, the Trump administration announced a freeze on American funding for the WHO. Previously, US funding comprised 15 percent of the WHO’s two-year budget.^{lxxiv} Furthermore, the US government in recent years stopped prioritizing global health spending for other organizations. For instance, the USJCMSP used to derive its funding from the US Department of State, but first the State Department decided to kick the financing over to the National Institutes of Health (NIH), and then the NIH slashed funding to the bilateral program (though it was only responsible for funding the US portion of the program).^{lxxv,lxxvi}

The Trump administration cited its criticism of how the WHO handled the outbreak of the COVID-19 pandemic as the impetus for removing financial support. Yet, the administration itself

tragically mishandled the domestic US response. A 2019 global health security report by the Nuclear Threat Initiative and the Johns Hopkins Bloomberg School of Public Health, spurred by the damages from the 2014 Ebola epidemic, ranked the United States as the most prepared country in the world to address a pandemic.^{lxxvii} Meanwhile, two hundred thousand US residents died by late September 2020.^{lxxviii} The politicization of the COVID-19 vaccines and other public health measures has caused the US death toll to continue its climb. Despite the vaccine skepticism in Japan, the United States has a worse rate of vaccination.^{lxxix} As a result of the spread of public health misinformation, on May 16, 2022, the United States hit one million deaths due to the COVID-19 virus.

By the summer of 2020, global surveys showed that audiences thought that the United States reacted even poorer to the COVID-19 pandemic than China did (Figure 4).^{lxxx} The American approach to the COVID-19 pandemic besmirched the US global health leadership record, reducing US international influence and removing a key leader at a time when strong public health leadership could have reduced delays in response to the pandemic, thereby saving lives. This void in leadership also created space for China to enter and work on expanding its international clout as a protector of the global commons in the wake of a US turn inward.

Figure 4. World Attitudes Towards COVID-19 Responses



(Source: Pew Research Center)

The Latest Scene: Vaccine Diplomacy and Attempts to Repair the Damage

With Pfizer and Moderna triumphing in making an mRNA vaccine against the COVID-19 virus, the United States “won” the global contest to make an effective vaccine^{lxxxii} with the safe and innovative emerging technology. However, that win has not translated into vaccine diplomacy success for Washington. Compared to early movers like China, the United States and its allies took a long time to begin offering the lifesaving doses to other countries in need. Many of the developed Western countries have been criticized for ‘vaccine nationalism’ and accused of hoarding vaccines.^{lxxxii} These countries stockpile so many surplus vaccines that they expire before they are

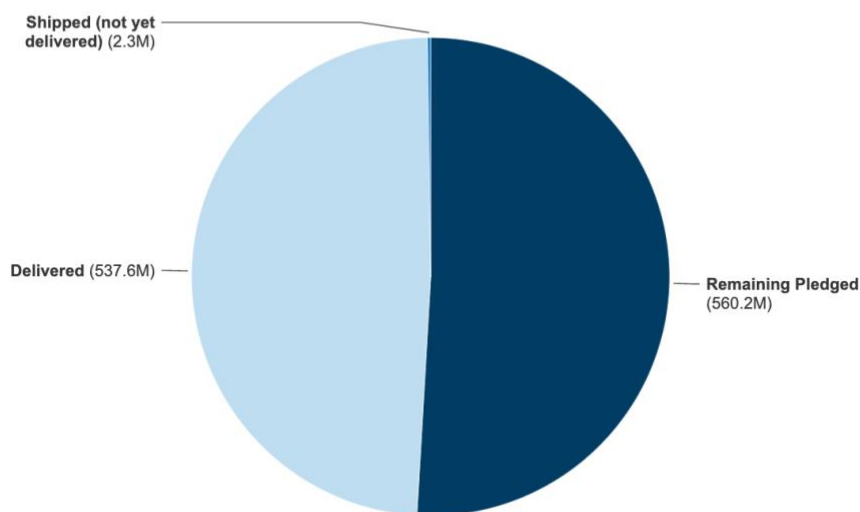
wanted, while other nations desperately await shipments to inoculate their populations and reduce the global burden and preventable deaths from the pandemic.^{lxxxiii}

Against this backdrop of inequity, US vaccine diplomacy struggles to achieve its aims. In particular, the government has not followed through on deliveries of vaccine commitments. As of May, less than half of the promised doses have actually reached their targets (Figure 5).^{lxxxiv} Failing to fulfill vaccine deliveries will further enhance the United States' reputation for hoarding the COVID-19 vaccines. Slow delivery also dampens the volume effect; while more than 537 million doses have been delivered, and this is larger than Japan's 44 million, China has delivered more than 1.5 billion doses.^{lxxxv} On the flip side, 71 percent of the vaccines that the United States has sent already are made up of the mRNA vaccines,^{lxxxvi} so, unlike with the Chinese inactivated vaccines, the people that do receive them are well protected.

Figure 5. Tracking Delivery of US Vaccine Commitments

U.S. COVID-19 Vaccine Dose Donations Pledged that Have Been Shipped and Delivered

To date, the U.S. has pledged to donate at least 1.1 billion doses.



NOTE: Data as of May 19, 2022.
SOURCE: U.S. State Department • PNG

KFF

(Source: Kaiser Family Foundation)

Interestingly, the largest recipients of US ODA^{lxxxvii,lxxxviii} are not the same as the largest recipients of US vaccine donations,^{lxxxix} although as a region sub-Saharan Africa receives the most of both.^{xc,xcii} At the same time, the top five recipients of US vaccine donations are located in South or Southeast Asia.^{xcii} This phenomenon could result from potentially two reasons. First, the US government could be using its vaccine diplomacy to work on focusing its efforts on the Pacific, a revitalization of the Pivot to Asia. Secondly, all but two of the top ten for the United States are in the top ten recipients of purchased or donated vaccines from China (Figure 6). Therefore, Washington could hope to neutralize or even overtake any diplomatic gains China made in those countries with their vaccines. Additionally, unlike with the approach to HIV/AIDS health diplomacy, only 13 percent of US donations are direct bilateral exchanges, with the rest going

through the COVAX mechanism.^{xciii} On the one hand, the use of the multilateral instrument could demonstrate the US renewed commitment to multilateral institutions and an effort to reduce inequality in line with COVAX’s mission, but on the other hand, a multilateral channel could weaken the effects on improving bilateral relations through vaccine diplomacy that would otherwise arise from direct donation. Although Washington can specify where the US doses donated to COVAX go,^{xciv} without intentional marketing, the messaging of the party providing the doses could be watered down in those countries.

Figure 6. Top Recipients of US and Chinese Vaccine Shipments

Top 10 US Donated	Top 10 China Purchased	Top 10 China Donated
Bangladesh	Indonesia	Cambodia
Pakistan	Pakistan	Egypt
Vietnam	Iran	Nepal
Indonesia	Turkey	Kenya
Philippines	Brazil	Zimbabwe
Nigeria	Egypt	Myanmar
Egypt	Bangladesh	Vietnam
Mexico	Mexico	Laos
Uganda	Chile	Bangla
Kenya	Philippines	Syria

(Sources: Data from Kaiser Family Foundation and Bridge Consulting. Table by author.)

After the Biden administration entered office, it began in earnest to re-establish the United States as a reliable partner and active member of the international community, rejoining the Paris Agreement and reinstating US involvement with the WHO. By November 2021, USAID had provided approximately \$3.68 billion in COVID-19 aid across the globe, and as of January 2022 the US government contributed roughly \$3.96 billion to the COVAX initiative.^{xcv} Yet, the United States and its developed allies’ slow and reluctant sharing of vaccines with less developed countries fighting deadly waves of the pandemic calls into question the US commitment to the protection of global health as a global public good. Washington’s fluctuating responses to the pandemic and international commitments reduce some of the potential improvement of relations that come with the government’s COVID-19 strategy.

China’s Approach to COVID-19 Diplomacy and the Global Reactions

The Name of the Early Game: PPE Diplomacy and Exporting the China Model

Prior to the COVID-19 outbreak, China already dominated the PPE market. In 2018, China exported more respirators/masks, medical goggles, and protective garments than the rest of the world combined.^{xcvi} Having the market cornered set up China to easily pursue PPE diplomacy. China in 2020 more than doubled its share of global imports of PPE from 2019, going from 21.1 percent to 42.9 percent.^{xcvii} With many nations around the world eager to purchase PPE to protect their communities, the CCP used the opportunity to neutralize some of the frustration with its handling of the virus and lack of transparency, especially with calls to investigate the origins of the virus for negligence on the part of China. For example, Beijing requested that recipient

countries issue public statements of gratitude or participate in “medical supplies handover ceremonies,” which at least sixty-nations obliged such ceremonies.^{xcviii}

Another facet of its bid to win the goodwill of global audiences, China sought to increase its role in global health leadership in the public view. When the Trump administration yanked the United States out of the WHO, China stepped in to fill the void. The US government had contributed the most to the WHO each year at \$400 million prior to its withdrawal.^{xcix} In response, by April 2020 Beijing had announced that China would donate \$50 million (\$20 million in March and \$30 million in April) to the WHO, more than half of its normal donations over the entire year for 2018–2019.^c The spokesperson for China’s Foreign Ministry at the time, Geng Shuang, stressed that the donation represented praise for the WHO’s duties and the defense of ‘the ideals and principle of multilateralism.’^{ci}

Finally, with the success of China’s control of its initial outbreak, the CCP hoped to export the “China model” of pandemic control. This model would serve as a step towards exporting the Chinese authoritarian model as a prosperous alternative to the Western democracy.^{cii} In June 2020, two health professionals reported for *Time* that the US death rate from COVID-19 was one hundred times larger than China’s at the time.^{ciii} By March 2, 2020, China reported less than a thousand cases, except for a small blip in late July, for the rest of 2020.^{civ} For the same period in 2020 (March 2 to December 28), the United States recorded up to 1.5 million cases at any one time.^{cv} With its domestic cases quickly under control relative to countries like the United States, China recovered to become the only major economy to experience positive economic growth in 2020.^{cvi} China’s use of mask diplomacy, posturing around the WHO, and accomplishment in controlling its early COVID-19 epidemic supported its diplomatic aims to reduce international backlash, assume global health leadership, and export its governance model for public health and beyond.

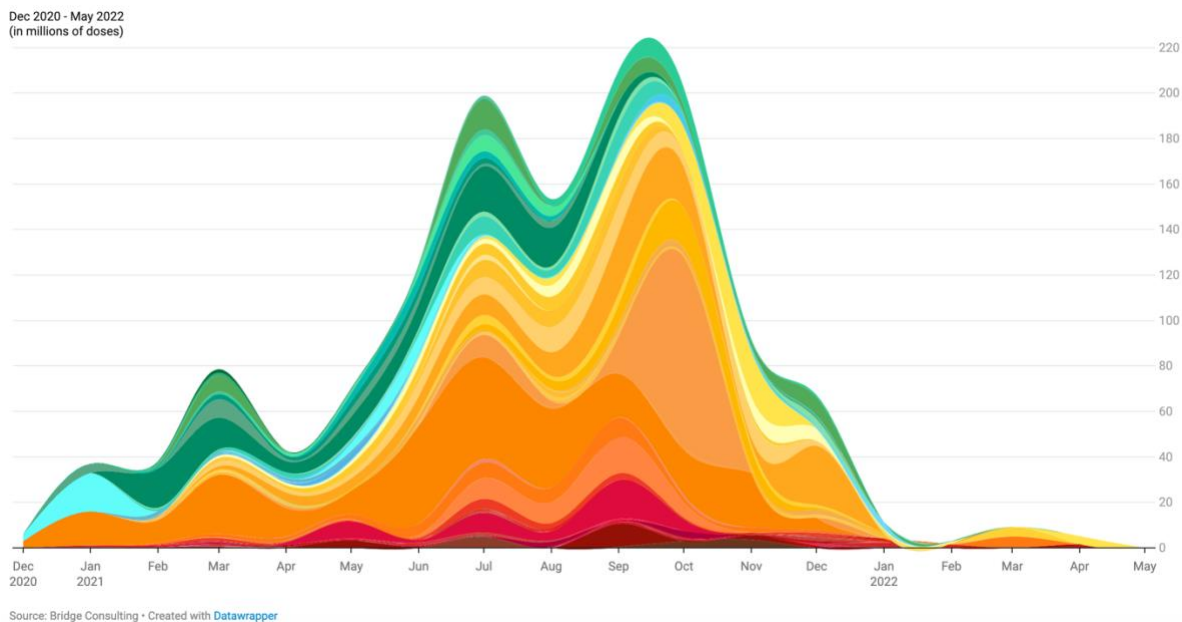
The Latest Scene: Vaccine Diplomacy and “Zero-Covid”

China started delivering vaccines to other countries in December 2020,^{cvii} much earlier than Japan and the United States; they made their first deliveries six months later in June 2021.^{cviii,cix} The CCP hoped to gain first-mover advantages and capitalize on the delays by the West and its allies. As with mask diplomacy, the CCP used vaccine diplomacy to counteract some of the negative press for how the state handled the emergence of COVID-19. It also sought to develop new economic ties, such as in the pharmaceutical industry in India.^{cx} Central among the economic and geopolitical considerations, the CCP wanted to use vaccine diplomacy to reinvigorate enthusiasm for the Belt and Road Initiative (BRI), both by directly anointing the vaccine diplomacy as part of the BRI’s ‘Health Silk Road’^{cxii} and by prioritizing vaccines for countries hosting BRI projects.^{cxii}

Initially, vaccine diplomacy delivered for the CCP; four South American countries dampened or ended diplomatic ties with Taiwan,^{cxiii,cxiv} and others issued public statements supporting Beijing on controversial issues like the treatment of Uyghurs in Xinjiang.^{cxv} China has also sold nearly two billion doses of the vaccines.^{cxvi} Additionally, compared to the United States, China has followed through better on delivery of donated and purchased vaccines. China has delivered over 83 percent of its committed doses,^{cxvii} whereas the US government has delivered less than half of its pledged amount.

However, two factors have imposed limitations on the success of China’s vaccine diplomacy: the efficacy of the Chinese vaccines and the outcomes from Beijing’s “zero-Covid” policy. The Chinese inactivated vaccines—compared to the Western vaccines developed with cutting-edge mRNA technology—offer much less protection against infection by COVID-19 variants such as the Omicron variant.^{cxviii,cxix} As variants like Omicron became the dominant strain, the Chinese vaccines lost their appeal as recipients needed to use a different vaccine for booster shots in order to confer the immunity against the COVID-19 variants. The poorer performance in conjunction with China’s preference for countries to purchase the vaccines (whereas the United States and Japan largely donate doses) explains the dramatic decline in China’s shipments of vaccines after October 2021 (Figure 7). Indeed, some states that started inoculating their populations with the Chinese inactivated vaccine switched to one of the more effective Western vaccines for the booster doses to better protect their citizens.

Figure 7. Timeline of Chinese Vaccine Purchases



(Source: Bridge Consulting)

While Beijing’s zero-Covid strategy performed well early-on in the pandemic, it now threatens China’s economy and social stability as well as global health security. Factory output and retail sales in April 2022 declined by roughly 3 percent and 11 percent, respectively, compared to the same period in 2021.^{cxx} In the same month, as strict lockdowns continued in Shanghai, the city of twenty-eight million people did not record even a single car sale.^{cxxi} Trucking has slowed as drivers get stuck in lockdown, and freight in ports goes unloaded as the ports lack the necessary staff and the transport. In addition to economic effects, the zero-Covid policy is racking up human costs. 2021 saw the mortality rate in China increase to the highest level since 2000, indicating about 160,000 more deaths than in 2020.^{cxxii} Many of the deaths arise from the logistical impacts of the zero-Covid policy; numerous accounts exist of patients seeking emergency care (e.g., for a heart attack) or lifesaving treatment for a disease (e.g., dialysis) denied access to the hospitals because of lockdown requirements.^{cxxiii,cxxiv}

The inefficacy and costliness of behavioral controls in the face of COVID-19 variants when vaccines exist drove other countries with similar models to revise their strategies and move away from zero-Covid-like methods.^{cxxv} Yet, once the CCP framed this approach within ideological legitimacy,^{cxxvi} it backed itself into a corner. Thus, unsurprisingly, Xi Jinping in a Politburo Standing Committee meeting on May 5 reiterated the importance of upholding the zero-Covid policy.^{cxxvii} As the targets of China’s vaccine diplomacy watch the dangers of zero-Covid unfold, the China response model loses its appeal.

China at first boosted its international influence through the state’s mask diplomacy, control of the virus at an earlier stage, early vaccine diplomacy, and image as a nation willing to share with the developing world (as a foil to the vaccine hoarding of the United States and its Western allies). Now, the poor performance of its domestic vaccines and the fallout from sticking to zero-Covid as it becomes ineffective and incurs deadly costs have begun to overturn those gains. The CCP’s inflexibility on this specific policy has unraveled China’s COVID-19 diplomacy strategy.

Policy Recommendations for Improving Relations and Providing Global Security

“You look at this pandemic, the response is very chaotic, state-centric, uncoordinated—that does not give us any signs that next time we are going to do better job.”

– Huang Yanzhong^{cxxviii}

Japan, the United States, and China all have flaws in their COVID-19 diplomacy that weaken their strategic gains. Additionally, and more importantly, none of the governments appear to prioritize improving global health through their diplomatic efforts; rather, they each favor domestic gains and outcomes in their actions, not realizing that reducing the pandemic worldwide will help even their populations with superior protection from the COVID-19 vaccines. The follow recommendations could help both improve international relations as well as bolster global health security:

Recommendations for Japan

- Develop a public relations strategy to better broadcast Japan’s vaccine contributions to capitalize on improvements in bilateral relationships
- Create a domestic campaign to improve uptake of booster doses, thereby reducing domestic caseloads and enhancing international health reputation
- Revise domestic vaccine guidelines to permit international clinical trials in order to expedite approval of foreign vaccines, especially for future infectious disease outbreaks

Recommendations for the United States

- Dramatically scale up shipping of promised vaccines and work with allies to commit more vaccine doses to developing countries to reduce global infections and recover from the reputation of vaccine hoarding
- Fortify involvement in international organizations to protect against fluctuations in global leadership based on administration changes

- Market vaccines donated through COVAX to clarify they come from the United States in order to strengthen bilateral relations with recipient countries

Recommendations for China

- Strategize a plan for ending the zero-Covid policy as well as introducing some of the Western-designed vaccines in order to better protect the Chinese population from the virus
- Switch vaccine diplomacy strategy from purchasing domestic Chinese vaccines to an increased percentage of donated vaccines that are domestically produced but foreign designed in order to maximize vaccine diplomacy with recipient countries
- Continue demonstrating interest in global health leadership by providing financial support to key organizations
- Work to reform health and science practices to enable transparent sharing of data in order to protect domestic and international populations from devastation by future pandemics and foster trust with the international community

Recommendations for All

- Urgently advocate for ramping up sharing of effective COVID-19 vaccines with the developing world to reduce the emergence of variants
- Develop more sustained funding streams for global health to prevent future costly pandemics and avoid the “Ebola effect”^{cxxxix} of temporary funding
- Strengthen the USJCMSP and develop other mechanisms that foster both cultural exchange (improving international relations) and scientific exchange (improving global health security)
- Work with the WHO to create formal global health information sharing and data sharing channels, since China refused to share samples of the virus that would help medical professionals better understand the origins of the virus^{cxxx} and how to help people infected with the virus

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Japan's Response to COVID-19 in International Comparison

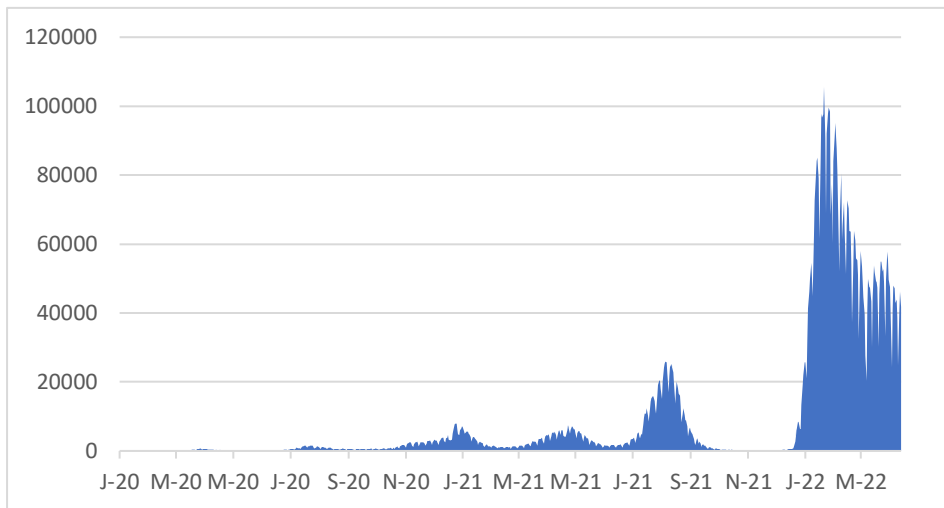
Yoriko Maruyama

Introduction

The first case of COVID-19 was detected in Japan in January 2020. Four months later, the Government of Japan declared a state of emergency as it struggled to contain the virus. Now, two years into the pandemic, we can see that Japan has been implementing containment policies quite different from those of other countries, including a lengthy closure of its borders to all foreign travelers. This paper evaluates the various policies and tools the government has used, and it compares their efficacies and weaknesses to those used by other governments. It also examines the domestic impact of the pandemic. It is hoped that these evaluations will be helpful for better handling any such virus with which we have to coexist in the future.

The Summary of the Struggles with COVID-19 in Japan

Figure 1. The Number of New Cases



(Source: NHK)

As of this writing in May 2022, there have been six infection waves in Japan. The first wave lasted from March to May 2020, when the government declared the first state of emergency. By this declaration based on a coronavirus special measures law, the government “requested” the people to stay at home and restaurants to shorten their business hours. Although the request was not legally binding—there being no emergency clause in this law to enforce lockdowns—a significant number of people responded positively, partly due to the custom of obedience to authority. The second wave arrived two months later, lasting from July to August. At this time, not fully being aware of the seriousness of the situation, the government launched an ill-advised campaign to encourage domestic travel to recover the tourism industry by providing subsidies to tourists, which eventually contributed to the rise in virus cases. The third wave came during the

holiday season from November to December, when the government declared a second state of emergency. The fourth wave lasted from March to April 2021, with the spread of the alpha variant. The government attempted to contain the variant by announcing a third state of emergency. It was only then that vaccinations were provided in large quantities.

The fifth wave lasted from July to September, when the delta variant became dominant. During that time, specifically from the end of July to early August, the Olympics were held, even though the government had just announced a fourth state of emergency. The contradictory policy of accepting nine thousand foreign athletes and staff without requiring any quarantine while continuing to restrict movements of the general public caused sharp domestic criticism and public discontent. Starting in January 2022, the sixth wave arrived, propelled by a surge of the Omicron variant. Japan at the time of this writing is still struggling to contain spikes in new cases all over the country.

As a major effort to contain the virus, the Japanese government implemented a strong border policy. Responding to the Omicron variant, the government imposed an entry ban on new foreign arrivals starting in late November 2021. This lasted until the beginning of March 2022, when it was slightly eased. The measure required fourteen days of quarantine even for fully vaccinated Japanese returning from abroad. Additionally, from January 2022 to the end of March, the government imposed strong movement and business restrictions. There is little convincing evidence that such measures did much to slow the domestic spread of the disease. Moreover, strong border policy and movement and business restrictions contrasted with the global trend, as most countries changed their stance towards COVID-19 from containment to symbiosis. For example, Britain, which had the experience of implementing lockdowns three times, decided to abolish all the regulations as of February 2022. As another example, the same month, Australia finally reopened its borders to those vaccinated, the first time in nearly two years.

Evaluation

Containment

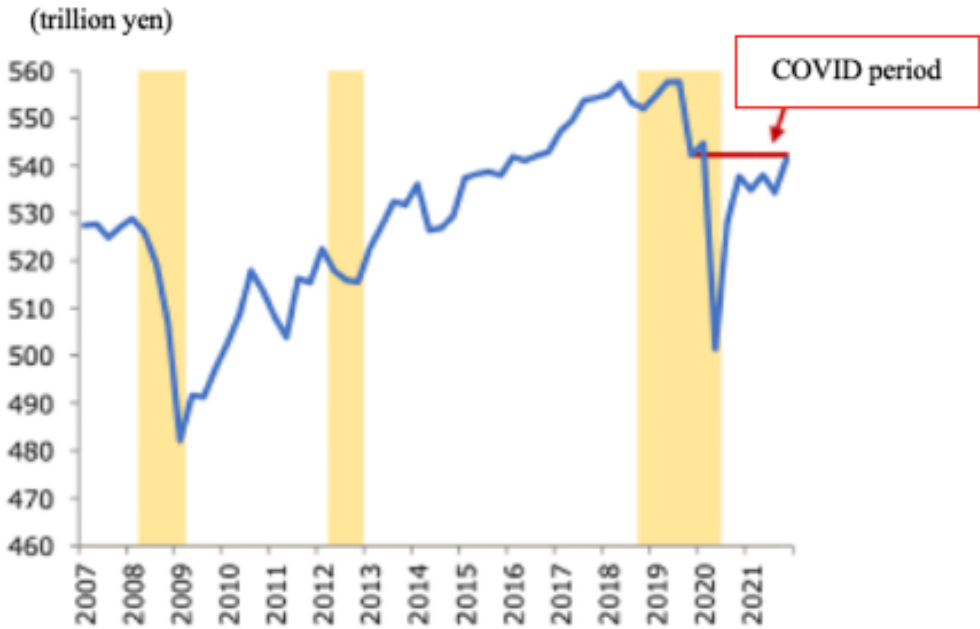
Given the series of outbreaks in Japan characterized by the six waves, it can be concluded that the border policy and other restrictions have failed to contain the virus. Since the virus spreads instantaneously throughout a community once it enters the country, the strong border policy ended up just lagging the timing of the outbreak. Moreover, especially regarding the Omicron variant, given its relatively low severity rate and the remarkable progress in the vaccination rate (in November 2021, Japan marked the highest record among G7 countries at of 75.5 percent),ⁱ the border policy and movement and business restrictions have become disproportionate to the economic loss incurred by those policies. Although the entry ban on foreign nationals was partially lifted at the beginning of March 2022, there remain several restrictions to be reviewed. First, Japan still does not accept foreign tourists unlike other major countries that are moving towards the pre-COVID period. Second, there are still movement restrictions on the Japanese people that have contributed to prolonging the stagnation of the economy. For example, for those who infected with the Omicron variant, ten days of quarantine is mandatory. In addition, seven days of quarantine is required for those who had close contact with them within two days. Such rules are much stricter than that of the United States, which requires five days of quarantine for those infected and no quarantine for those who had close contact as long as they are vaccinated.

The difference in the directions of policies between Japan and the global trend can partly be attributed to the difference in their infection status. While a large proportion—ranging from 20 percent to 50 percent—has been infected in Western countries,ⁱⁱ only 4 percent of the population has been infected in Japan (as of February 25, 2022).ⁱⁱⁱ As a result of the relatively smaller infection rate, the Japanese population has not come to accept coexistence with the virus. Concurrently, such public opinion has driven the government to take defensive measures: the government prefers excessive regulations because officials fear that they would suffer from the backlash if an outbreak occurs after loosening regulations.

However, given the fact that COVID-19 cannot be completely eradicated soon, the government should courageously change its stance, shifting from containment to coexistence. Specifically, the government should aim at normalizing social activities, while accepting the risk of the rise in new cases. In other words, it should focus more on the reduction in mortality and severity rates, rather than completely containing the virus. To achieve this goal, increasing the booster rates—still 59.1 percent as of May 30, 2022—and the number of hospital beds would be crucially important.

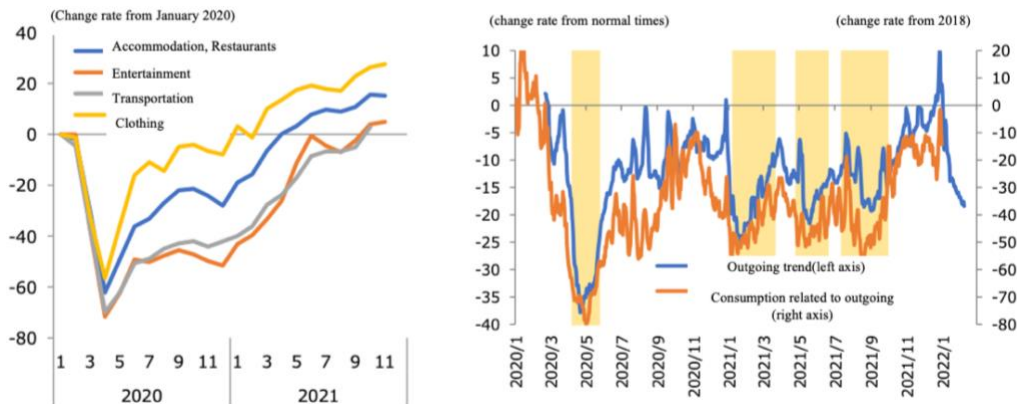
Impact on the Economy

Figure 2. Real GDP of Japan



(Source: Mitsubishi Research Institute, Inc. (MRI))

Figure 3. Consumption Trend in the US (left) and Japan (right)



(Source: MRI)

It is also important to consider the effect of the pandemic on the economy. Given the huge economic loss that COVID-19 and subsequent regulations have brought about—the economic loss that can be attributed to the spread of the Omicron variant alone is estimated to be 1.2 trillion yen^{iv}—balancing virus control and economic performance will be key for future policies.

At the beginning of the outbreak, COVID-19 impacted the supply side by disrupting supply chains from China. The lockdowns in several cities in China that began in Wuhan in January 2020 brought a sudden halt of production and stagnation of logistics. As a result, imports from China in February 2020 plunged 47 percent,^v especially due to the decline in the imports of intermediate materials for industrial products. Concurrently, manufacturing in Japan that imported certain integral parts from China, such as the automobile and housing industries, was forced to halt production. Although China recovered its production capability quickly—the business resumption rate by April 2020 was 99.1 percent^{vi}—the supply chain crisis has underlined the potential risk of dependence on imports from a single country and the importance of increased domestic production. In addition, the shortage of the stock of masks, 80 percent of which were imported from China, has also revealed the risk of being dependent on such basic-needs imports.

In addition to the supply-side shock, the pandemic has brought significant and long-lasting impacts on the demand side. Since January 2020, consumption related to outings, including dining out and travelling, has continued to decrease, unlike the trend in the United States.^{vii} Although the government attempted to stimulate demand by providing a flat payment of 100,000 yen to all citizens in early 2020, several think tanks calculated that it increased consumption only by 20–30 percent^{viii} because many people saved the money instead of consuming it. Moreover, even when the COVID-19 situation is settled, demand is unlikely to return to original levels. The reasons are due to the change in lifestyles in which people continue to work remotely and are going out less frequently, as well as increased anxiety towards future income. It is expected that people will continue to constrain consumption.^{ix}

Although economic activities overall have recovered to the original level before the pandemic—the real GDP growth rate of the last quarter of 2021 recovered to 99.8 percent of that

of 2019^x—the recovery level varies by type of business. Especially, due to the decreased demand from movement restrictions, the incomes of hotels^{xi} and restaurants^{xii} in the service industries sharply decreased, and many cases of bankruptcies were recorded.^{xiii} The employment situation in these industries has been severe. During the fourth quarter of 2021, the number of employees in these businesses decreased by 700,000, compared with the number two years ago. Moreover, in those firms that maintained full employment, nearly 20 percent of them have a sense of over-employment,^{xiv} which might trigger mass firing in the near future. The government has supported these affected businesses, mainly by offering loans with favorable conditions (firms with more than 5–20 percent reduction in sales are eligible to acquire free or low interest loan from Japan Finance Corporation)^{xv} and employment adjustment subsidies (firms with more than 5 percent reduction in sales or production can basically receive from 2/3 to 4/5 of temporarily absent employers' basic incomes to maintain their employment).^{xvi}

While reducing the damage on the economy incurred by the pandemic through these financial supports is helpful, the change in the consumption trend should also be taken into account to achieve full recovery. Specifically, the industries can take the advantage of the change in consumption trend: while the consumption related to outside activities remains at a relatively low level, online consumption has dramatically increased.^{xvii} Thus, changing the business model and incorporating such new demand, such as restaurants that offer food delivery services and travel agencies that organize virtual tours, could be a step forward. Also, the government should support those initiatives, instead of just providing stopgap measures.

International Impacts

International Cooperation on Vaccine Distribution

By December 2020, vaccinations began in the United States and Britain. Other major countries soon followed. While the various effective vaccines urgently developed were expected to be a game changer and eventually were, it took months for the drugs to be delivered to the many countries that did not have the capability to produce them domestically. In other words, “vaccine nationalism” took hold among those countries with their own supplies, and vaccinating citizens became the top priority, despite the global shortage of the medication. As a result, Japan, which has no domestic pharmaceutical companies capable of developing a vaccine, had to wait until shipments from overseas arrived in May.

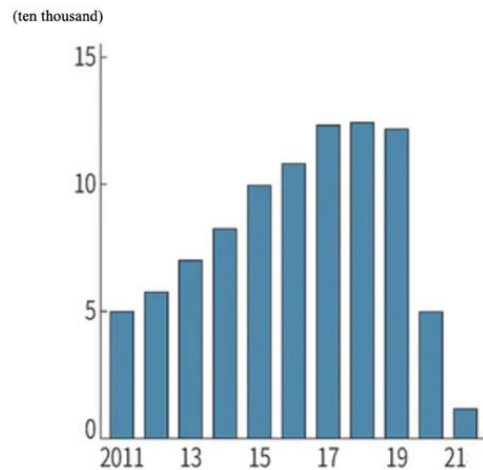
Still, once the vaccination programs were well underway, vaccine-rich countries started to distribute surplus vaccine doses to the rest of the world. China stood out initially for its vaccine diplomacy, combining vaccine distribution with Belt and Road Initiative (BRI) projects. Through the Health Silk Road (HSR), China used BRI transportation networks—railroads, ports, airports, and logistics hubs—to provide medical and health care assistance to partner countries and assert China's leadership in global health. China attempted to recover its reputation that had been lost since the coronavirus was discovered in Wuhan. It also sought to increase its influence over developing countries that were out of the reach of Western countries. Although the vaccines were appreciated first, concern about the safety and the effectiveness of those made in China grew in recipient countries when cases continued to rise despite the rate of vaccination.

Such growing concern in turn has underscored the Japanese role in distributing effective vaccines to developing countries. One of the prompt measures that Japan took was to support

global distribution of vaccines through COVAX, which CEPI, Gavi and the WHO had launched to ensure equitable access to the COVID-19 vaccine. Thus far, Japan has donated \$1 billion to COVAX Facility and has pledged to provide additional \$500 million.^{xviii} Such support through that multilateral framework will contribute not only to fair global distribution of vaccine but also to limitation of other countries' exercise of monopoly power.

Another measure that Japan could take immediately would be to increase the weight of the healthcare sector in its ODA programs. Thus far, most projects have been implemented in the infrastructure or energy sector, while only 5.4 percent have been in the healthcare sector. However, the pandemic has revealed the importance of increasing investment in the healthcare sector, which requires enhanced international cooperation. Indeed, according to an opinion poll conducted in Japan in 2022, 72.2 percent of the respondents agreed with the idea of increasing the number of ODA projects in the healthcare sector.^{xix} This survey demonstrates that most Japanese now consider investment in the healthcare sector as not just for the recipient countries but also for the benefit of the international community.

Although it will take considerable amount of time, it is essential for Japan to develop the capability to produce domestic vaccines. This will require structural reform in the pharmaceutical industry. While the need to produce domestic vaccines is obvious, not only for international cooperation but also for early containment of a virus in Japan, the government and pharmaceutical companies have not made much effort in that direction. There are three possible reasons. First, there is a strong skepticism among the Japanese toward vaccines in general because of the harmful effects that several defective vaccines brought in the past. Second, in Japan's rapidly aging society, there has been more demand for curative drugs, rather than for vaccines. Third, since pharmaceutical companies in Japan are relatively small compared to global ones, they devote fewer resources to research and development. To overcome such structural issues, vaccine development should be positioned as the essential part of risk management in Japan's national strategy. Additionally, the government should provide sufficient support to foster that industry during normal times.

Figure 4. Number of New Entry of Foreign Students

(Source: Nikkei)

As the COVID-19 pandemic spread across the Japan, government officials initiated border restrictions that significantly impacted the number of foreign students coming to Japan. The country was essentially closed to foreign students after April 2020. As a result, there was a backlog by October 2021 of more than 152,000 foreign students waiting to enter the country, even though they had already obtained residency status. Although the restriction on these students was finally lifted at the beginning of March 2022, it will still take some time to process all those awaiting entry due to limitations on the number admitted into the country per day.

Such overly strict entry restrictions have imposed hardships on the students awaiting entry. They already had devoted considerable amount of time and cost to realize their dream to study in Japan. These restrictions have frustrated and disappointed them, making them feel that they have not been welcomed. Moreover, not being able to foresee the future, many of them were forced to give up their plans to study in Japan or change their destination to somewhere else, such as the ROK where foreign students have been warmly welcomed.^{xx}

The damage done as a result of shutting down the country to foreign students should be taken seriously. First, it is recognized that diversifying the mix of students in Japan is crucially important to improve the quality of Japanese education. Diversity in student body helps students widen their perspectives through exposure to different cultures and values, attributes that are necessary to survive in today's globalized world. Moreover, by shutting out foreign students, Japan has lost valuable human resources over the long term. Foreign students who acquire Japanese language skills and enter a career in a specialized field are exactly those highly skilled people that Japan has aspired for in order to overcome the stagnation occurring in Japan's aging society. Furthermore, Japan has lost its credibility in the international community, where access to international universities is taken for granted. Japan is the only country among G7 countries that has not accepted foreign students for such a long period. There is no rationale for shutting out long-term international students because they have little possibility of spreading the virus once they

entered Japan as long as vaccinated and regularly tested. Thus, fully accepting foreign students as soon as possible will be the key to improve education quality, maintain the country's economic vitality, and restore Japan's international credibility.

Impact on the Government

Policy Decision-Making Process

In January 2020, a task force on COVID-19^{xxi} was established in Cabinet Secretariat. It is chaired by the Prime Minister and composed of all Cabinet members. This task force is to be held when the government makes important decisions, such as the declaration of state of emergency and the release of new economic stimulus package. In addition, in February 2020, in order to provide professional advice from a medical perspective, a committee of public health experts was organized.^{xxii}

The government's task force and the expert committee at first had a good relationship. For example, they held joint press conference to explain the latest situation surrounding COVID-19. However, the two sides gradually fell out over disagreements. In particular, the government's task force decided to implement a closed-border policy in the response to the spread of the Omicron variant, despite the expert committee's opposition. Such disregard for the experts' views highlights the importance of establishing a permanent organization that would have more of a voice. Installing a CDC would be a good idea. Establishing such an organization responsible for infectious disease control would also help being better prepared for future pandemics. Given that other Asian countries, such as China, ROK, and Thailand, have already established such centralized organizations after experiencing multiple infectious diseases like SARS, MERS and bird flu, Japan should immediately realize this concept.

Collapse of Medical System

The Japanese healthcare system is well-developed, known for quality, accessibility, and low out-of-pocket costs. Moreover, Japan has the largest number of hospital beds per person among OECD member countries: thirteen per every one thousand people. In comparison, Germany has eight and the UK only 2.5. Yet, Japan's medical system was unable to handle the COVID-19 case load, despite the relatively much smaller number of infected people and death toll. There was strong concern early on that the system would collapse.

There are three possible reasons for that health-care crisis. First, Japanese hospitals generally are not economically strong. According to the hospital management survey conducted by Ministry of Health, Labor and Welfare, 53.8 percent of hospitals ran a deficit in 2018. Thus, even in normal times, hospitals are running their business on the edge. Moreover, the management of hospitals are greatly influenced by the universal healthcare insurance system and reimbursement system. This often results in hospitals seeking increased reimbursement, instead of responding to the needs of patients. Such a tendency has accelerated during the pandemic. Furthermore, private hospitals were not cooperative. In Japan, 81 percent of the hospitals are private, in contrast to EU countries, where 66 percent of the hospitals are public. Despite the apparent need for the cooperation of private hospitals, many of them refused to accept COVID-19 patients. Especially, when the hospital beds were in short supply during the fourth and fifth wave, only 26.3 percent private hospitals accepted COVID-19 patients. Certainly, some of them refused for legitimate

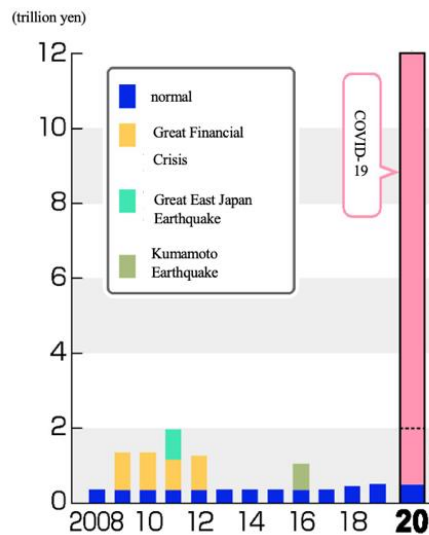
reasons; for example, small hospitals could not accept COVID-19 patients due to their limited capacity. Indeed, 53.3 percent of private hospitals have fewer than two hundred beds.

Still, the current healthcare system needs to be changed to deal with pandemics, since the burden has been concentrated on public hospitals and a handful of private ones with a high sense of mission. Thus, the government should encourage private hospitals to cooperate, for example by giving financial incentives or ultimately strengthening the power of the government to direct private hospitals to do so through a revision of the legal system.

Immense Fiscal Mobilization

In 2021, the Japanese government set up a 12 trillion yen contingency fund for COVID-19. While in principle the usage of the national budget needs to be approved by the Diet one year before its actual use, contingency funds are set aside for emergencies without deciding its usage. The fiscal 2021 contingency fund was immense, compared to previous instances, such as one for the 2008 financial crisis (1 trillion yen) and the one for the 2011 Great East Japan Earthquake (800 billion yen).

Figure 5. The Amount of Contingency Funds



(Source: JIJI Press LTD.)

It is true that flexibility and the speed of fiscal mobilization through the use of a contingency fund are important in responding to an emergency such as COVID-19 because it is difficult to anticipate a year ahead how much budget is needed for what purpose. However, there is concern from the perspective of fiscal integrity on excessively relying on contingency funds that do not require the approval of the Diet. Thus, the government should consider these four points. First, if it turns out that there is less actual need for the budget than expected, the government should flexibly respond by suspending its use or changing the usage. Secondly, it should closely review whether the fund injection was effective. For instance, the injection to stimulate the economy would be excessive if it ended up contributing to the extension of life of inefficient firms by preventing their bankruptcy. Third, it should consider whether the allocation of the budget is

concentrated on some specific social groups. Although it tends to provide its support for those who are directly damaged by the spread of the pandemic, there are many who are impacted as well but failed to receive such support. Lastly, it should start the discussion of the financing scheme under the assumption that the use of the contingency fund is exceptional and cannot last forever.

Just as the government should keep in mind that it should not overuse the contingency fund, the same argument holds true for the normal budget that is allocated to each ministry. Indeed, as the volume of normal budget has rapidly expanded during the COVID-19 pandemic, many ministries have had difficulty in making full use of it.

Conflict with Local Governments

There have been conflicts between the central and local governments in the response to COVID-19, especially in the timing of movement and business restrictions. There have been both political and legal reasons behind these conflicts. First, the governors of Tokyo and Osaka, who belong to parties other than the LDP, have taken adversarial stances against the central government because of their political motivations. Secondly, there was an ambiguity in the coronavirus special measures law on the division of roles that the central and local governments would play in determining the timing of movements and business restrictions and the extent of the compensation for such business suspensions. This ambiguity has resulted in pointing the blame to each other in decision-making, causing useless confusion.

To better respond to COVID-19, it is essential to enhance cooperation between the two sides by clarifying or reviewing legal authority. For example, clarification of the central government's authority to force private hospitals to provide hospital beds would contribute to preventing the collapse of the medical system. Additionally, enhancing the local governments' autonomy in the usage of the local grants paid from the contingency fund, which now requires the prior approval of the central government, will be helpful for promptly responding to the pandemic.

Conclusion

This paper's evaluations of Japan's COVID-19-related policies have revealed the need for dynamic course changes in many areas, both domestic and external. Especially, the comparison between Japan's approaches and global trends have underscored the overly conservative nature of policies in Japan that have served to prolong the pandemic's damage. Additionally, this study has disclosed that even in an emergency such as a pandemic, Japan has relied heavily on non-binding requests, especially to restrict movements and business activities and to ask for cooperation of private hospitals. People are not mandated but are asked to voluntarily cooperate. In order to maximize the policy effect under the limited fiscal resources, it would be more effective to clearly lay out restrictions through legislation.

Although this paper's evaluations suggest points for improvement, it is natural that the struggle to cope with the current unprecedented virus involves trials and errors. What is important is to look back over the past and use those lessons for the future. The struggle with COVID-19 still continues at this writing. And another pandemic creating a crisis involving numerous casualties might hit the world in the future. The Japanese government, as well as the international community, should begin to prepare for that possibility, reflecting on the lessons learned in the past two years.

ENDNOTES

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Realism Takes Hold: Japan's Responses to Russia's Two Invasions of Ukraine

Elliot Seckler

Introduction

This paper seeks to answer a fundamental question: why were Japan's responses to Russia's invasions of Ukraine in 2014 and 2022 markedly different? The central argument of this paper is that the underlying conditions within which Japan engages the world have shifted, creating flexibility for Japan to shift its own response. Russia's invasion of Ukraine in 2022 is unmistakably a full-scale war and an easily identifiable, unambiguous violation of the post-1945 international system. In contrast, Russia's 2014 invasion and annexation of Crimea was a more limited intervention and did not bring about a high level of international outrage. At that time, while Japan indeed did view Russia's advance into Crimea as an assault on the norms of the post-1945 international system, its response was muted for a number of reasons, including Prime Minister Abe Shinzo's courting of Russian President Vladimir Putin in an effort to resolve a territorial dispute and elicit a peace treaty denied to Japan after World War II.

It is therefore insufficient to claim that Japan's response was stronger in 2022 than it was in 2014 simply on the basis that Russia's invasion was more shocking to the world and a threat to the international liberal order. Without recent underlying shifts in diplomatic, security, military, and economic domains, it is unlikely that Japan would have been as willing today to take a substantially stronger, quicker, and more coordinated response in lockstep with the United States, Europe, and other aligned countries against Russia. Japan's current sanctions, for example, are tougher and more meaningful than the ones it somewhat grudgingly imposed on Russia in 2014. Had the same conditions been present in 2014 when Russia first made its incursion into Ukraine, Japan would have likely responded much more forcefully at that time.

This paper illustrates its argument in a few key respects. It describes how the relationship between Japan and Russia changed over time in diplomatic and economic context, each tied to energy and post-World War II considerations. It also illustrates how the strengthening of Japan's alliance with the United States has contributed to an expanding latitude for a more closely aligned response to Russia. Russia's militarization of the Sea of Okhotsk is also a factor. The paper also analyzes how China's increasingly assertive actions in the East and South China Seas, not to mention North Korea's nuclear weapons and missile programs aimed at Japan, have seriously heightened Japan's perceptions of threats to its national security. In such contexts, the paper discusses the ways that Japan has steadily adopted a different framework for understanding and conceptualizing its diplomatic and security engagements in the region. Analysis of the emergence of the Free and Open Indo-Pacific initiative and the Quadrilateral Security Dialogue (the Quad), and Japan's embrace of such multilateral forums, is key to explaining the transformation of conditions enabling Japan's different response to Russia's current invasion of Ukraine.

Japan's changing security posture is as much psychological in origin as it is structural and tangible. It is as much about shifting perceptions and concerns as it is about physical manifestations of the changing international environment. It is also important to highlight that this paper advances its argument and findings by drawing upon primary and secondary sources, such as peer-reviewed

journal articles, government documents, news stories, and scholarly literature. This research incorporates interviews conducted over three months with academic and other experts offering different perspectives across the security, economic, and diplomatic fields. It is important to acknowledge that these conditions overlap in many ways, but by attempting to treat each separately helps to isolate and more comprehensively understand Japan's different responses to the two Russian invasions.

Purpose and Implications

This paper's argument might appear simplistic, as it describes the evolution of Japan's response to consecutive historical events. While that has some merit, this does not mean that the argument fails to have utility in elucidating changes over time. The purpose of this case study is to shed light on the current critical state of the world order and how it has got to this point. This is a research paper at heart, yet there are significant implications for what this all represents. In the case of Japan, it documents how a country's decision-making and actions are bound by the conditions within which they find themselves operating. This is true, despite the fact that a country's leadership may see a possible decision outside of these bounds that it wants to pursue, as was the case with Japan in 2014.

In another respect, this paper is meant to illuminate the fact that the underlying shifts that have enabled Japan's markedly different responses were likely to continue irrespective of the full-scale invasion. Effectively, Russia's invasion of Ukraine in 2022 did not prompt the strengthening of Japan's military relationship with the United States, nor did it lead to Japan's souring of diplomatic relations with Russia over issues of the Northern Territories. A central purpose of this paper is to demonstrate, through various examples, that Russia's invasion of Ukraine in 2022 and Japan's response to it has accelerated the underlying conditions already in motion. Here, Japan's response to Russia's invasion in 2022 has been a catalyst for the new order's emergence, as a physical manifestation of the trends pointing to the fact that the world has been in a revolutionary situation for the past decade.

2014 and 2022: Difference in Responses

Before a discussion of the shifts in underlying conditions, it is important to describe the differences in how Japan responded to Russia's invasions of Ukraine in 2014 and 2022. Not only were the physical actions and measures taken fundamentally different, but the timing in which these measures were taken indicates to a certain degree what Japan's relationships and priorities were at the time.

It is important to note that the overall response by the United States and NATO was much more limited in 2014 than it was in 2022.ⁱ Regardless, Japan had an even more limited response than the "West" and did so at a much less coordinated and slower pace than in 2022. Most of Japan's response in 2014 was in the form of sanctions. In 2022, the response ranged from economic sanctions, deployment of military-related equipment, greater humanitarian aid, and even military exercises with the United States. In contrast, Japan's actions in 2014 were largely symbolic.ⁱⁱ In 2014, Japan's responses were done in an effort to tow a line between its security relationship with

Washington and maintaining close ties with Putin’s Russia for reasons that will be discussed below.

In 2014, Japan deployed targeted sanctions on individuals in Russia by banning the issuance of visas and freezing assets of organizations, as well as implementing an arms embargo. While these were similar sanctions to what the United States and Europe imposed, they were limited in scope. For example, Japan banned visas for twenty-three individuals and froze the assets of sixty-six people and sixteen organizations. The United States restricted visas and froze assets for 104 people and fifty-five organizations. Moreover, the EU restricted visas and froze assets for 147 individuals and thirty-seven organizations. While Japan did follow US and EU targeted sanctions, though in a more limited manner, it did not follow their lead in disclosing the list of who was targeted. The three phases of Japan’s response in 2014 is illustrated well in the chart below.

Table 2. Three rounds of US, EU, and Japanese sanctions against Russia

	1st Phase	2nd Phase	3rd Phase: Sectoral Sanctions
	Restrictions relating to diplomacy and cooperation	Travel ban and asset freeze	Trade and finance restrictions, asset freeze
US	(From March 3, 2014) • Suspension of intergovernmental cooperation in trade and the economic sphere, and military cooperation	(From March 16, 2014) • Visa restrictions and asset freeze targeting 104 individuals and 55 organizations	(From July 16, 2014) • Ban on involvement of six leading banks and one defense company in new debt transactions for periods exceeding 30 days and in the issuance of new shares • Ban on provision of technology relating to development and production of deep-sea and arctic oil and exploration for shale oil to five energy companies • Ban on involvement of four energy companies in new debt transactions for periods exceeding 90 days and in the issuance of new shares • Arms embargo
EU	(From March 3, 2014) • Suspension of government-level cooperation (suspension of visas and talks) • Suspension of EU-Russia summit meetings	(From March 17, 2014) • Visa restrictions and asset freeze targeting 146 individuals and 37 organizations	(From July 30, 2014) • Ban on involvement of five leading banks, three defense companies, and three energy companies in new debt transactions for periods exceeding 30 days and in the issuance of new shares • Ban on export of dual-use goods and technology intended for military use or a military end user • Ban on provision of technology relating to development and production of deep-sea and arctic oil and exploration for shale oil • Arms embargo
Japan	(From March 18, 2014) • Suspension of discussions on easing visa requirements • Freezing of commencement of negotiations on agreements relating to investment, space cooperation, and the prevention of dangerous military activities	(From April 29, 2014) • Ban on issuance of visas to 23 individuals • Asset freeze targeting 66 individuals and 16 organizations	(From September 24, 2014) • Introduction of a permission system for the issuance or offering of securities by five leading banks and a permission system for the provision of services • Arms embargo

Source: Prepared by MGSSI based on announcements by the countries concerned

(Source: MGSSI Monthly Report 2016)ⁱⁱⁱ

Moreover, the sanctions were mainly only imposed after the United States placed some pressure on Japan to follow suit with its measures. For example, Japan imposed its targeted sanctions two full weeks after the United States and the EU imposed theirs in March 2014. Japan continued to take much longer to impose the next phase of sanctions as time progressed, waiting two months to deploy its arms embargo on Russia after the United States and EU announced their embargoes in July 2014.

In 2022, the timing of Japan’s response was well coordinated, announced alongside, and done simultaneously with the United States and the EU. In almost every regard, Japan has

demonstrated as strong of a response to those of Washington and the EU. A main exception to this has to do with Japan continuing its Sakhalin oil and gas contracts with Russia (why this occurred is explained in the section on Russia). Regardless, Japan joined the United States and the EU in imposing restrictions on Russia's central and commercial banks access to the SWIFT international banking system.^{iv} It also banned a total of three hundred products from export to Russia, including semiconductors.^v In fact, Japan revoked Russia's most favored nation status (MFN), which represents a substantially stronger economic and trade response than in 2014.

In both 2014 and 2022, Japan offered substantial aid to Ukraine, roughly \$1.5 billion in 2014.^{vi} In 2022, Japan committed a \$100 million loan and \$100 million emergency humanitarian assistance. It also is sending protective suits against chemical weapons, drones, and masks.^{vii} In what was previously a taboo practice, the Japanese government is now accepting Ukrainian refugees as part of its response to Russia's invasion; this is an action that not even the United States has taken in 2022.^{viii}

Similar Rhetoric Begets Different Outcomes

Despite the drastically different responses to Russia's invasion of Ukraine in 2014 and 2022, it is particularly interesting that the formal statements coming from Japan were markedly similar. In 2014, the Japanese Ministry of Defense released a statement on what Russia's invasion of Ukraine meant to its own national interests: "Japan deplores that Russia has recognized independence of the Autonomous Republic of Crimea which infringes on unity, sovereignty and territorial integrity of Ukraine. Japan can never overlook an attempt to change the status quo with force in the background."^{ix} In 2022, the Japanese Foreign Minister, Hayashi Yoshimasa, released the following statement: "[Russia's military actions in Ukraine] clearly infringe upon Ukraine's sovereignty and territorial integrity and constitute a serious violation of international law prohibiting the use of force. Any unilateral change of the status quo by force is utterly unacceptable."^x

What this indicates is hard to fully determine, but there is some credence to the rhetoric mirroring how Japan perceived the threat of Russia's invasions. In fact, it might help to understand how, despite similar rhetoric, Japan was more constrained in 2014 by its diplomatic priorities and less concerned by security issues when compared to 2022. In this light, the similar questions about what Russia's invasions into Ukraine meant to Japan's conception of threats and interests were not enough to override the underlying conditions within which its government made the ultimate decisions of how to respond.

Taking each statement as a snapshot in time reflects the gravity of the situation and that the Japanese government was deeply concerned about both invasions into Ukraine. This is evident regardless of the fact that 2022 was considered a full-scale invasion and 2014 was a more limited annexation of territory. Both statements also highlight that Japan viewed both events as challenges and deliberate threats to the international order that has served its country and people well since 1945. The usage of words such as territorial integrity, sovereignty, and the unilateral change in status through force is a great example of this.

Japan viewed both invasions as threatening to the international system and, by way of that, to its own national interests. However, the problem here is that Japan did not respond in similar ways and as forceful as it did in 2022. To account for this, a description of how Japan began to process and manage these threats to the international system after 2014 becomes increasingly important, as the next section illustrates.

The Power of Frameworks

In order to understand why responses in 2014 and 2022 were so different, it is critical to pay attention to the shifts in how Japan began to frame its position diplomatically, economically, and militarily. In this light, the geographic reorientation of Japan's understanding of its place within the region plays a key role. The formal introduction of the "Free and Open Indo-Pacific" (FOIP) concept by Japan is a great example of this. Although, there were precursors to FOIP in the first Abe Shinzo administration from 2006 to 2007, the concept was fully adopted and fleshed out in strategic documents and statements in 2016 which Prime Minister Abe, during his second time in office, unveiled it in a keynote address during the Sixth Tokyo International Conference on African Development (TICAD) in Kenya.^{xi}

The formal introduction of the FOIP initiative as a priority policy goal enabled two things. First, the new framework enabled a foundation from which Japan could justify actions and relationship-building in various ways to allies and partners and, perhaps more importantly, to its domestic population. By 2019, the United States had itself formally integrated the FOIP concept into its foreign policy framing.^{xii}

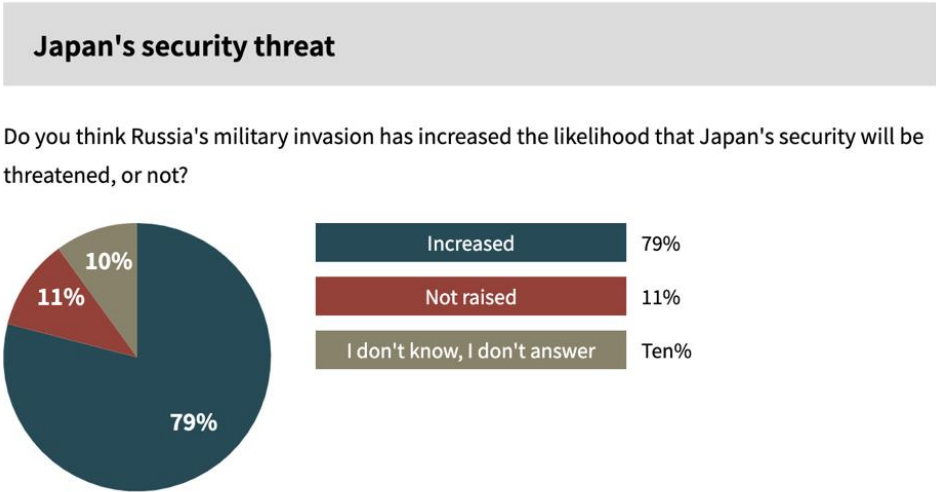
Since this framing was not present in 2014 when Japan was responding to Russia's first invasion into Ukraine, it underscores the power of frameworks as an underlying condition that shifted the range of options that Japan could now pursue. This is especially the case as this framework helped to strengthen the coordination and military relationships between the United States and India as maritime powers. As a result, Japan was in a substantially different position in 2022 to respond to Russia's second invasion of Ukraine given the expanded latitude or foundations within which it could act.

The second aspect of the FOIP is notable for how shifts in frameworks changed Japan's latitude to respond more forcefully and in lockstep with the United States in 2022. Once the FOIP concept was formally adopted and became the center of gravity for Japan's foreign policy framing, it would have been difficult for Japan to not have taken the type of actions or stand against Russia's invasion. Stated another way, not responding as forcefully as Japan did in 2022 would have undermined and weakened the entire premise of the framework. For example, Japan's messaging of the FOIP to China in regard to its concerns about Taiwan and aggressive actions to address historical claims to the South China Sea would be adversely affected. To a certain degree, the framework's concept of promoting and establishing "rule of law, freedom of navigation and free trade, etc.," as well as a "commitment to peace and stability" in the Indo-Pacific created a more binding foreign policy that increased Japan's necessity to respond forcefully to the breakdown of this concept in Europe.^{xiii}

Another major shift in framing pertains to Japan’s outlook on concerns to its national security and how its leadership interpreted the linkage of Ukraine in 2014 as opposed to 2022. In 2014, Japan’s primary security concern linked to Ukraine was related to the Senkaku/Diaoyu Islands. At that time, China was beginning to be more aggressive towards claims over the islands, where a high degree of tension peaked in 2012 when Japan nationalized three of the islands.^{xiv} It is important to underscore that China had really just began its more assertive movements in the East and South China Seas at this point, so Japan was largely just beginning to shift its security posture towards China and the People’s Liberation Army (PLA).

Fast forward to 2022, Japan’s primary national concern is placed on Taiwan and China’s increasingly belligerent actions to intimidate or possibly to prepare to invade the island. According to Hideshi Tokuchi, a non-resident fellow at Sasakawa Peace Foundation USA, this is highly relevant because Japan now views Russia’s invasion of Ukraine through the lens of China’s potential invasion of Taiwan.^{xv} Taiwan has become much more crucial to Japan’s national and economic security than concerns over the Senkaku Islands ever were.^{xvi} Therefore, the level of response in light of Russia’s invasion in 2022 is justified politically internationally and, particularly, domestically within a different, yet heightened lens.

In a recent public opinion poll, 79 percent of the respondents in Japan over the age of 18 believe Russia’s invasion of Ukraine threatens Japan’s national security.^{xvii} In another public opinion poll conducted in late March 2022, 77 percent of the respondents believed that Russia’s invasion of Ukraine affects the possibility of China’s use of force against Taiwan.^{xviii} This simply was not the case back in 2014, for Japan did not have the similar level of linkage to its national security to the Senkaku’s.



(Source: TV- Asahi, March 2022)^{xix}

In both cases, Russia’s invasion of Ukraine was linked to considerations within the Japanese government about whether the US security guarantee was in question.^{xx} This was the case, despite the fact that Japan was concerned in 2014 about what the failure of the 1994 Budapest Memorandum—the agreement in which Ukraine gave up nuclear weapons in exchange for US

security assurances—meant to its own security guarantees from the United States. However, the disparity in how Washington also views China’s potential invasion of Taiwan as compared to the lesser commitment by the United States to protect the Senkaku Islands strengthened Japan’s assurances that the security guarantee still was intact. All of this provided Japan with a much higher degree of latitude to respond forcefully and alongside the US actions against Russia.

Political & Economic Relations with Russia

Another key underlying condition that shifted over the course of 2014 to 2022 was the political and economic relations between Japan and Russia. The degree to which this shift played a role in affecting the ability of Japan to mount a stronger response to Russia’s invasion of Ukraine in 2022 is hard to quantify. Nonetheless, the souring of the relationship did remove a major barrier to Japan’s considerations for how it should respond.

During his second term (2012–2020), Prime Minister Abe placed high priority in his grand strategy on improving relations with Russia, focusing on personal ties with Putin. The aim was to finally resolve the post-World War II dispute with Russia over which country owns the Northern Territories, a group of four islands (also called the Kuril Islands) that Russia seized at the end of the war. Resolution of the territorial issue has blocked the two countries from formally signing a peace treaty after the war. Resolving the islands issue is politically critical for Japan, despite failed attempts throughout the decades by Japanese leaders.

This was especially true throughout Abe’s second time as prime minister. He focused on repeated attempts to woo Putin and build better relations in the hope of making a breakthrough. Despite Putin’s elusive response, Abe remained optimistic and believed that “a hint of a chance” to resolve the issue and reach a peace settlement was possible.^{xxi} In November 2014, roughly nine months after the invasion of Crimea, both met to repair frayed ties resulting from Japan’s initial response to the Ukrainian situation. They even pledged to resume talks on reaching a peace settlement.^{xxii} As a result, Japan was hamstrung in imposing the full suite of sanctions and responding to the same extent that the United States and the EU did in 2014. If Japan had gone that far, it was highly likely that all the possibility of reaching a deal with Russia, even if it remained illusory, would be dead.

By 2022, however, most of the illusions about Japan’s hopes to reach a peace settlement or at least a resolution of the territorial issue had subsided. Putin was simply not budging at all. Statements coming out of the Kremlin since 2019 indicated that the islands were Russian and not negotiable. By the time the Kishida Fumio became Prime Minister in 2021, the negotiations had lapsed. Kishida himself did not believe that Russia was operating in good faith nor wanted to commit to addressing the northern island issue. He abandoned the strategy of dangling economic carrots to improve relations with Russia. He basically had given up on Abe’s strategy. It is precisely this shift from trying to resolve the issue to lowering it on the list of priorities that provided Japan with a much higher degree of latitude to respond to Russia’s invasion.

Placing tough sanctions on Russia was now a viable option. The series of sanctions announced in 2022 basically mirrored those imposed by NATO countries. As a result, Russia terminated future prospects of peace treaty talks, which effectively includes any possibility of

resolving the northern islands dispute. Russia's Foreign Ministry also ended visa-free visits to the islands by Japanese families who used to live there before the war.^{xxiii}

Economic incentives also were terminated in 2022. In a 2016 meeting with Putin in Sochi, Abe had proposed Japanese cooperation on energy projects, development of the Russian Far East, and other economic matters. Abe's eight-point economic cooperation proposal included building liquefied natural gas plants as well as ports, airports, hospitals, and other infrastructure, mainly in the Russian Far East. This cooperation was predicated on progress in making headway toward a deal on the Northern Territories. That economic proposal has now been taken off the table. Japan's stronger response led to Russia ending its joint economic activities on the South Kuril Islands and blocking Japan's partnership in the Organization of Black Sea Economic Cooperation.^{xxiv}

As part of this, it is important to note that Japan's energy partnerships with Russia have decreased, as well. In 2014, Russia accounted for approximately 7 percent of Japan's crude oil imports and 10 percent of its liquified natural gas (LNG) imports.^{xxv} By 2022, Russia accounts for roughly 3.6 percent of Japanese crude oil imports and 8.8 percent of its LNG imports.^{xxvi} While this might seem insignificant, the reduction of Japan's energy reliance on Russia plays a part in explaining how Japan was able to mount a stronger response in 2022. It is likely to drop even more. But in 2014, reliance on resource-rich Russia played a big part in Abe's foreign policy, and the linkage to energy partnerships as a cornerstone of improving relations with Russia meant that sanctioning Russia's energy sector strongly in 2014 would have simultaneously hurt Japan's economy and ability to resolve the territorial issue.

Japan continues its oil and gas partnership with Russia today, although Prime Minister Kishida formally pledged on May 11, 2022 that Japan intends to further cooperate with the EU and reduce its imports from Russia.^{xxvii} This is the one major area where Japan has not been in lockstep with the US response. Different from 2014 when Japan was using these economic partnerships to better Russian relations, Japan now justifies maintaining these partnerships on a geopolitical basis. According to a senior politician in the Liberal Democratic Party (LDP), ending the Sakhalin LNG projects would allow China to fill that void. This effectively would reduce the overall strength of US, EU, and Japanese responses up to this point and bring Russia closer to China.^{xxviii} Here, Japan's justification is an illustration of how the underlying shifts in conditions have affected its relationships with the United States and the rest of Europe. Therefore, the reality of Russia closing off economic partnerships in relation to resolving the Kuril Islands dispute was not as significant for Japan in weighing the risks to responding much stronger in 2022.

Another important consideration here in terms of economic partnerships with Russia was the different positions of bureaucratic interests and the Japanese prime minister in charge.^{xxix} In 2014, the Ministry of Foreign Affairs (MOFA) did not advocate focusing on strengthening economic ties with Russia; it wanted Prime Minister Abe to instead focus more on the normative national security challenges that Russia posed. This position was at odds with the Ministry of Economy, Trade, and Industry (METI), which was more aligned with Abe's approach. It is important to note that Kishida was then the Foreign Minister. He was not keen on the economic approach. It seems logical to conclude thus that after Kishida became prime minister, he retained the same tendency he had before. He now has more latitude to act in ways that he believed were

always better to deal with Russia and which provided a greater degree of freedom to respond forcefully to the invasion of Ukraine in 2022.

National Security Challenges

One of the main underlying conditions that has shifted since 2014 and affected Japan's degree of response to the current war in Ukraine has been China's increasingly assertive actions in the Indo-Pacific region and its growing ties with Russia. The CCP de facto supports Russia's military actions against Ukraine in the United Nations. As was mentioned in the earlier section on shifting frameworks, Japan's concern over Taiwan's security illustrates the change in China's approach to its foreign policy in geographic areas near Japan. In fact, it was only in 2014 when China began building its infamous artificial military islands in the South China Sea. At that point, it was not fully clear from Japan's perspective if these were military islands because the Chinese government formally renounced the charge that military facilities were the purpose for building the islands.

By 2018, it was evidently clearer in Japan that China was housing anti-ship cruise missiles and long-range surface-to-air missiles on these islands.^{xxx} It is important to note that in 2014, although Abe compared Russia's invasion of Crimea to China's actions in the East and South China Seas, it was then difficult to discern China's true intentions.^{xxxi} As a result, garnering domestic public support for a more forceful response to Russia's invasion of Ukraine in 2014 as linked to the national security threat posed by China was tougher to achieve than in 2022.

Another major underlying condition that has shifted significantly has been the relationship between Russia and China. The extent to which this dynamic has strengthened between both countries has increased concerns in Japan related to national security issues. The February 2022 communiqué described a "new era" in the world order, where their "friendship between the two States has no limits" and "no 'forbidden' areas of cooperation."^{xxxii} This significant change in attitude underscores Japan's realization that Russia and China are forging a security relationship against the West. Joint drills by naval vessels of Russia and China in waters near Japan are the latest manifestation of that reality.

Given its growing security concerns about the individual and joint actions of those two countries, Japan has no other option now than to move closer to and cooperate with the United States and the EU in dealing with the Ukrainian crisis. In March 2022, Russia conducted military drills on the Kuril Islands after Japan imposed its sanctions. These exercises included three thousand troops and were meant to practice repelling amphibious warfare and operating fire control systems of anti-tank guided missiles.^{xxxiii} In addition, the "strategic partnership" between Russia and China has involved close military coordination. In the past couple of years, Russia and China have been engaging in joint naval exercises in the past couple of years, some of in the Sea of Japan.^{xxxiv} In November 2021, Japanese Defense Minister Kishi Nobuo warned that China and Russia's military exercises and growing coordination are being perceived as a "demonstrative action toward Japan."^{xxxv}

As a result, Russia is likely to be considered a national security threat in Japan's forthcoming 2022 national security and defense strategies.^{xxxvi} This is a particularly relevant shift

in Japan's assessment of its national security policies. As described, the threat perception posed by Russia militarily was simply not to the same degree back in 2014, as evidenced by the fact that Japan's core strategic interest was to continue finding ways to strengthen economic and diplomatic relations with Russia.

In light of these escalating threats to Japan's national security from 2014 to 2022, the country has stated its intentions to enhance its military posture. Abe in 2014 ushered in a reinterpretation of the Constitution to allow limited collective self-defense. This was included in updated security legislation passed in 2015.^{xxxvii} Recently, debate has started in Japan regarding whether the country should pursue a counter-strike capability against an enemy like North Korea.^{xxxviii}

As it upgrades its defense capabilities, Japan has been steadily increasing its defense budget since 2014. In December 2021, Prime Minister Kishida approved a record defense budget for fiscal year 2022, which represents an increase of 1.1 percent.^{xxxix} In the wake of Russia's invasion of Ukraine in 2022, and in view of the growing security threat in the Indo-Pacific, the ruling Liberal Democratic Party (LDP) is now calling for an increase of the defense budget from 1 percent of GDP to 2 percent over time.^{xl}

Strengthening the US-Japan Alliance

Perhaps the greatest shift in underlying conditions enabling Japan to respond more forcefully and in lockstep with the West in 2022 has been the strengthening of overall relations with the United States in recent years. The Alliance has never been stronger. Despite the withdrawal of the United States by President Trump from the Trans-Pacific Partnership and Japan's inability to convince the Biden administration to consider rejoining the mega-trade deal, bilateral economic relations remain fairly strong. Japan joined the Biden administration's new Indo-Pacific Economic Framework (IPEF).

The strengthening of the US-Japan Alliance is in great part a direct result of North Korea's existential threat to Japan and China's aggressive actions in the East and South China Seas. As part of the security reforms under the Abe administration, for example, the Alliance Coordination Mechanism (ACM) was established so that Japan and the US can now closely share information, establish a common understanding of the security situation, and carry out "seamless" responses from peacetime to contingencies. It is unlikely that had this trend—towards more coordination between Washington and Tokyo on national security issues—not taken place since 2014 that Japan would be in the position it was in by 2022 with the latitude to respond. Here again, this underlying shift is inextricably linked to the other underlying conditions that have been described up to this point, such as the shifts in framing and deteriorating relations with Russia. Without these other conditions changing as well, it is not clear to what extent Japan would have swiftly aligned itself with the United States and NATO over Russia's invasion in 2022.

When Russia invaded Crimea in 2014, Japan became increasingly concerned about US collective security guarantees tied to the nuclear umbrella (extended deterrence). Despite US assurances, Japanese leaders sought to strengthen military-to-military ties and commitments. Some Japanese leaders even debated whether Japan should develop its own nuclear weapons or

host US ones.^{xli} Even though nothing has changed regarding tangible moves for Japan to develop or host nuclear weapons, the very fact that such acute conversations were occurring demonstrate Japan's state of mind in recent years. China remains a nuclear threat as well, with an estimated 250 weapons. Such a reality leaves Japan with little option but to go all-in with the United States and its nuclear security guarantee, regardless of the desire of a small group of Japanese politicians wanting to consider developing a self-sufficient nuclear capability.

Even with Russia's invasion of Ukraine in 2022, there was a renewed concern in Japanese political circles about the US security guarantee and even whether the country should change its nuclear posture. In February 2022, former Prime Minister Abe stated that Japan should at least consider allowing US deployed nuclear weapons into Japanese territory in a similar manner to NATO members.^{xlii} Kishida quickly shot this recommendation down and reaffirmed that Japan will maintain its principles of neither "producing, possessing, or permitting the introduction of nuclear arms on its territory."^{xliii} Despite this, senior leaders in the LDP believe that Russia's invasion of Ukraine in 2022 has "prompted a historic shift in thinking" and that "the old way of thinking about things is dying out. Japan is becoming more pragmatic about the security debate."^{xliiv} They thought that the Japanese public would need some time to share this sentiment. Whether that sea-change in public opinion will ever happen is an open question, however.

Still, the invasion of Ukraine in 2022 has served as a catalyst for a political conversation in Japan about the previously taboo subject of nuclear weapons. So far, the United States has not shared that policy interest; extended deterrence remains the US crown jewel for regional defense. That is not to say that Japan has pushed the envelope on conventional weaponry. It has already been developing long-range anti-ship missiles (LRASMs) and joint air-to-surface standoff missiles-extended range (JASSM-ERs). Developing such a capability for the Japan Air Self-Defense Forces (JASDF) was deemed constitutional by a 2017 report sponsored by the LDP and again in 2020 by then Defense Minister Kono Taro.^{xlv}

Part of why the United States and Japan have strengthened their military relationship has to do with their alignment of perceptions on respective national security threats from Russia and China. The steady increase in coordination on military issues is evident by the fact that Washington has placed a premium on improving its relations with allies in the Indo-Pacific region for a decade. However, this concentration on alliances and the military component really deepened with the 2017 National Security and Defense Strategies and carried through the 2022 National Defense Strategy.^{xlvi} This refocusing by the US military and foreign policy community on its military relationship with Japan was neither as present nor as effective in 2014 to the degree that it has exponentially shifted by 2022. This is a significant variable in explaining the improved relationship between the two militaries.

For example, alignment on the importance of deterrence against China and Russia is now a central feature of military coordination between both countries, which was simply not the case in 2014. The emphasis by the United States is evident by the fact that the Marine Corps is developing a new fighting force through its Force Design 2030, which effectively is meant to have a force capable of amphibious island-hopping operations in the Indo-Pacific.^{xlvii} This shift is exponentially more relevant when it is understood within the context of the increasing cooperation between the US Marine Corps and the equivalent Japanese force. According to unnamed Japanese

government officials, the US and Japanese militaries have already drafted a joint operation plan for a Taiwan contingency. Here, the US Marines would mount the amphibious invasion and Japanese forces would provide logistical support with ammunition and fuel supplies.^{xlviii} The important point in this is that this draft plan was reportedly done in December 2021 before Russia's invasion of Ukraine. This indicates the already high degree of intentions and actions to integrate both militaries and improve interoperability for deterrence and warfighting missions. In the lead-up to Russia's 2014 invasion, this type of coordination on war plans between US and Japanese militaries was unthinkable, and it illustrates how much the security environment and regional order has changed.

Since 2014, the US and Japanese militaries have steadily increased their joint exercises. This has been the case, to the point that each successive exercise or drill appears publicized as the largest to date. For example, in December 2021, the US Marine Corps and the Japan Ground Self-Defense Force held their largest ever bilateral field training exercise in Japan.^{xlix} In March 2022, only a few weeks after Russia invaded Ukraine, the US Marines conducted their first airborne landing and combat training exercises with Japan to both strengthen military cooperation and interoperability; this was a three-week long exercise with four thousand Japanese Amphibious Rapid Deployment Brigade and six hundred Marines deployed from Okinawa.^l Both militaries are now considering hosting the largest-ever joint military drill in Hokkaido this Fall 2022.^{li}

While joint military drills occurred before 2014, they have steadily picked up frequency and strength in the past few years. As a result, this shift likely affected Japan's perception that its greater military alignment with the United States meant that its diplomatic and economic relations also ought to be closer. Hence, when Russia did invade Ukraine in 2022, the foundational perceptions necessary for Japan to respond in concert with the United States was much more easily executed than it could have been in 2014.

Considerations Moving Forward

A key consideration moving forward involves Japan's evolving relationship with India. On the surface, there has not been that much change as to explain Japan's markedly different response to Russia's invasions in 2014 and 2022. What has happened, though, is Japan's shift toward multilateralism in its broad-based defense strategy, as seen in its strategic partnership with India and embrace of the Quad, which includes the United States, Australia, India, and Japan. The Quad is further linked to the evolving US-Japan regional initiative—FOIP or the Free and Open Indo-Pacific. FOIP is further proof of the shifting framework of Japanese foreign policy.

As an illustration of this, PM Kishida met with India's Prime Minister Narendra Modi in March 2022 to discuss Russia's invasion of Ukraine. Each shared their sentiment that "any unilateral change to the status quo by force cannot be forgiven in any region."^{lii} While Kishida was careful to not mention Ukraine, the purpose and timing of the meeting indicate how far Japan has moved in alignment to the US and EU position, to the point that Japan is now acting as the driver of bringing India along in closer alignment to the West's response to Russia's invasion.

Japan might utilize this foundation with the West as a result of Ukraine and the shifts enabling Japan's different responses in 2014 and 2022 as a means to facilitate India's stronger

alignment. This is a potential policy recommendation for Japan in the next few months or at least as long as the Ukraine war continues.

Conclusion

This paper has analyzed the various conditions that have shifted in ways that have enabled Japan to have a much more forceful response to Russia's invasion of Ukraine in 2022 than it did in 2014. In doing so, the paper has highlighted the argument that Russia's invasion of Ukraine did not prompt any of these shifts in underlying conditions since 2014. However, it did represent a catalyst that enabled Japan to act in ways that tangibly show how these underlying conditions have affected Japan's ability to respond more forcefully in alignment with the West. Without the invasion in 2022, it is unlikely that Japan would have been so closely aligned to the United States and the EU with the speed and manner in which the relationships are now unfolding. As a result, Japan's markedly different response in 2014 and 2022 is a case study of just how much the international and regional order has itself changed. By illustrating this linkage, the paper represents an attempt to track the shifts in Japan's response to Ukraine and what it represents for world order. With this more complete analysis, policymakers in Japan can utilize the various underlying conditions as levers to pull for achieving future foreign policy goals.

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Quandary of the Quad: Analyzing the Past, Present, and Future of an Essential Relationship

Joseph McGrath

Introduction

The Quadrilateral Security Dialogue, or the QUAD, is a multilateral partnership between the United States, Japan, Australia, and India. In its first iteration, the relationship began in support of humanitarian efforts in the Indian Ocean and morphed into a broader regional strategy focused on security issues that affected both the Pacific and the Indian Ocean regions. Faced with harsh criticism by China over combined military exercises, the relationship quickly declined as several member nations did not want to be seen as strongly countering a rising regional power to which they were economically tied.

As China has continued to grow economically and militarily, its bellicose actions have indicated an intent for something other than a peaceful rise, driving the Quad nations back together. Though its second iteration touts a focus on developmental and security issues existing primarily outside of defense, the underlying basis for the partnership is to counter the shifting balance of power in Asia. The People's Republic of China (PRC) has criticized it as an unnecessarily destabilizing force to the region and as an escalatory military quasi-alliance that has geographically surrounded China. At the same time, scholars from within the Quad have either criticized the relationship as being too unstructured, too broad in its intentions or lacking enough definition to be effective.ⁱ

This paper argues an alternative viewpoint—that the ambiguity of the Quad's explicit goals but framework of shared values allows for the necessary flexibility to respond quickly to various security issues, development initiatives, and humanitarian needs. A positive agenda for the Quad also keeps partner countries engaged and prevents rhetorical escalation, while allowing the four members to privately discuss the underlying defense issues that lie at the core of their shared interest. The organization could still benefit from some more structured measures that encourage solid communication and cooperation habits in the long term.

History of the Quad

Quad 1.0

The earliest iteration of cooperation between the United States, Japan, India, and Australia was an improvised and shared response to what became known as the “Boxing Day tsunami” in 2004. It was a result of the third-largest earthquake ever recorded and had a devastating impact across the Indian Ocean and in parts of India. Later described as cooperation “born in crisis,”ⁱⁱ the rapid humanitarian response of the four nations led to the formation of a “core group” to deliver aid to the region quickly.ⁱⁱⁱ

It took a few years before the group came together again outside of the emergency, but the partnership was a success, and its participants did not come together purely by happenstance. The United States had been a treaty ally to both Japan and Australia since 1951 (under separate

agreements^{iv, v}) and enjoyed robust bilateral relations with both countries. The burgeoning Trilateral Security Dialogue (TSD) between the United States, Japan, and Australia^{vi} coincided with a deepening diplomatic and economic relationship between Japan and India in the years leading up to the disaster, so it was a natural group of leaders to come together in aiding the affected countries.

In 2007 Japanese Prime Minister Abe Shinzo traveled to India and delivered an historic speech commemorating a “strategic global partnership” between Japan and India that also marked what would become a significant shift in the lexicon of security professionals by including India in the evolution of “broader Asia” at the confluence of the Indian and Pacific Oceans. This invoked the idea that there were significant shared security concerns in what had been thought about as geographically distinct regions. The concept had been circulating in Australian think tanks,^{vii} but this speech is seen by many as the birth of an important conventionalization on the world stage. It also expanded on the concept of an “Arc of Freedom and Prosperity” proposed by Abe during his candidacy, wherein the southern rim of Eurasia would be linked together to span the two oceans in a network of democratically-minded states with shared values.^{viii} This was not only a foundationally important concept to the future Quad but highlighted the importance to many outside of Asia of the shared security concerns on both “sides” of what would eventually be called the Indo-Pacific.^{ix}

The initial meeting of what would subsequently be called the Quad, hereon referred to as Quad 1.0, happened in May 2007 on the sidelines of the ASEAN Regional Forum (ARF) at the assistant-secretary level.^x The “informal grouping” reportedly met to further discuss humanitarian assistance and disaster relief (HADR), as well as other issues of common interest.^{xi} Only four months later, the new partnership was solidified in action as the Navies of all four countries came together alongside Singapore for an expanded iteration of Malabar, an annual US-India exercise in the Bay of Bengal. An otherwise routine engagement outside of its membership, Malabar 2007 was the first and only military exercise associated with the Quad and a nail in the coffin for its first iteration. Quad 1.0 had already received significant diplomatic backlash from countries with interests in both regions. The PRC was a significant and influential critic, accusing the countries of forming a military alliance focused on containing China and eventually filing official demarches with all four countries. Though China had not been mentioned as a focal point for Quad 1.0, the geographic encirclement of China and military overture by the four partners was enough to spark a strong response from Beijing. South Korea also expressed its hesitation about the potential of being “forced to choose” between a security treaty ally and a growing economic partner.^{xii}

The growing speculation across Asia seemed largely a result of the unspecified nature of the partnership. China’s heavy protest and each country’s unique relationship with Beijing, especially Australia and India, led to additional wariness and even more reluctance by the Quad to clarify. As Chinese rhetoric intensified claims that the Quad was an “Asian NATO,”^{xiii} there was pressure to formulate a response. Canberra is largely credited with dealing the first fatal blow to Quad 1.0, though subsequent officials would later resent carrying this distinction.^{xiv} In response to China’s objections, Australia quickly backpedaled its commitment to the partnership and denied any shared motives for balancing against China. The defense minister made several statements that the Quad was not, in fact, a relationship focused on security and characterized it as only aspirational. India also began to retrace its steps, and after protests over the Malabar broke out, the

Prime Minister reaffirmed their longstanding doctrine of non-alignment^{xv} by denying the implications of a security relationship. The final nail in the coffin of Quad 1.0 was when Abe abruptly resigned as prime minister during his first term for health reasons, and the relationship had lost its mastermind leader and biggest supporter.^{xvi}

By the beginning of 2008, both India and the new Australian government had announced they did not plan to participate in future Quad meetings, and it was clear the four nations were not in agreement. The diplomatic pressure had worked, and the Quad's first iteration was over before it had time to form fully, but the conceptual seed of a framework had been successfully planted. The idea of a "broader Asia" continued to be discussed, and although the Indo-Pacific concept was not entirely accepted by either the United States or India right away,^{xvii} it was clear there were concrete issues that were now shared security concerns across both oceans.

Japan's role as the interlocutor that brought the four nations together is an important aspect of Quad 1.0, especially as relates to encouraging India conceptually and diplomatically to enter into the fold. Although Australia links the two oceans geographically, the Quad could not carry legitimacy in South Asia without India's participation. The US-Japan-India trilateral agreement was rooted in discussions on nuclear issues, so when the United States and India signed an important civil nuclear agreement in 2005, this was an important pre-courser. But it was the Japan-India relationship that brought India closer to the United States and Australia, and it was in Japan that Prime Minister Singh announced India was ready to begin a dialogue with other "like-minded countries in the Asia-Pacific region" in 2006.^{xviii}

Intermission

The historical context of the Quad is essential to understanding the nuances of its resurgence in 2017 and the implications for its future. In part, this is because the roughly ten years between Quad 1.0 and Quad 2.0 were defined by growing bilateral and trilateral relationships among the four countries. At the center of this, once again, was the relationship between Japan and India, who signed a civil nuclear agreement in 2017, and who both participated together in separate trilaterals with the United States and Australia in 2011 and 2015 respectively. Australia supported India's unsuccessful bid to become a permanent member of the UN security council, and the two retreating powers signed a security cooperation agreement and increased their trade of nuclear material.^{xix} The United States and India also significantly deepened ties during the interim period, developing a communications agreement (COMCASA) and high-level 2+2 meetings which strengthened the defense and security cooperation relationship.^{xx}

Military relationships also strengthened bilaterally and trilaterally alongside the same lines. Japan became a recurring participant in annual military exercises that the United States conducted separately with Australia and India. The Australian Navy committed larger and more capable assets to their bilateral exercises with India, and the Indian Armed Forces developed a key fighter exercise to be conducted with the Japanese Self Defense Force. The heightened level of importance placed on these exercises during this period was crucial in building trust among the nations and developing interoperability, but the exercises also established important lines of communication between them that could be quickly recalled if they eventually fell nascent.^{xxi}

This was also an important time for Chinese engagement in the region, which played a role in driving the four countries closer together yet again. India and China faced off in a tense dispute over road construction on their shared border in Doklam. Australia began to decouple from China after deep connections between politicians and members of the Chinese Communist Party (CCP) were revealed. Japan faced increasingly aggressive behavior in the East China Sea around the disputed Senkaku Islands, and all four nations watched with great concern as China began land reclamation and militarization of islands in the South China Sea that were disputed by some ASEAN members in Southeast Asia. The shared security concerns of “broader Asia” were beginning to become clearer to all four nations, and unsurprisingly, talks to re-form the relationship as a dialogue began to emerge.^{xxii}

Quad 2.0

Much like its first iteration, the return of the Quad was driven largely by the strong meshing power of Japan. Abe Shinzo’s return to power in 2012 for his second time as prime minister was followed closely by a defining call for needing a “democratic security diamond”^{xxiii} to push back against China’s destabilizing behavior and reaffirming a strong US-Japan defense relationship. This vivid reference to the geographic encirclement of China by the four Quad countries did not sit well right away, but it began to be better received in the following years for reasons already mentioned. Soon after, Japan then proposed the concept of a “Free and Open Indo-Pacific” (FOIP) as an expansion on the confluence of the two seas, which called for the promotion of a rules-based system across both sub regions, rooted in democracy.^{xxiv} The FOIP concept was further fleshed out as the new US strategy and responsible for the rebranding of the US military headquarters for the region to include the Indo- prefix.

The top diplomats from Japan and the United States proposed the resumption of the Quad in 2017, and high-level officials from all four countries met again on the sidelines of an ASEAN meeting in Manila, with FOIP reportedly as one of the cornerstones of their discussion. Though they discussed North Korean denuclearization as a concern, the other topics could be seen primarily as a reaction to China’s behavior: freedom of navigation and overflight, network infrastructure, and maritime security. Renewed Chinese criticism focused once again on the defense aspects of the relationship as attempts at containment of China’s peaceful rise and highlighted it as playing a destabilizing role in other regional institutions like ASEAN. Despite the rhetoric, the Quad countries continued to meet, and agreed upon a “senior official” meeting every two years.^{xxv}

In November 2019, Quad 2.0 held its first meeting at the ministerial level. The statements from the United States and India both indicated continued focus on language that underlines the FOIP strategy. Potentially in response to China’s claims about a lack of focus on Southeast Asia, the group also focused on several issues that are prominent in the subregion such as counterterrorism, development finance, maritime security, and High Availability Disaster Recovery (HADR). Cyber issues were also discussed, marking a foray into more advanced security issues that the Quad had previously not pursued.^{xxvi}

The onset of COVID-19 the following year presented major challenges to the world, but also marked an opportunity for the Quad to come together and use its framework to produce a tangible outcome. Though the four countries were primarily focused on domestic issues related to

the pandemic for much of 2020, they did join together for a reprisal of the Malabar naval exercise, marking the first time all four had participated in more than a decade.

In March 2021, the leaders of each nation convened for a virtual meeting, another first in the history of the Quad. The outcome was a joint statement released by the President and Prime Ministers that announced working groups on COVID-19 vaccines, climate change, technical innovation, and supply chain resilience. It announced a shared vision for a “region that is free, open, inclusive, healthy, anchored by democratic values, and unconstrained by coercion,” but did not specify China or mention any defense issues outright. The cohesive message and announcement of working groups marked an important shift in the Quad’s unified voice and beginnings of structure. The shift to a more positive message in the external portrayal of the Quad is also significant, choosing a call for cooperation over the condemnation of bad security practices.^{xxvii}

An in-person summit in the fall of 2021 with each of the same leaders was yet another first for the Quad. Additional working groups were announced, and outer space was added to the growing list of topics that continued to prioritize COVID, infrastructure, climate, and technology.^{xxviii} In the spring of 2022, the four leaders again met virtually, this time in response to the Russian invasion of Ukraine.^{xxix} The outcome was focused on setting up a mechanism for HADR to Ukraine, even though all four countries have not had the same reaction to the war; India, a large purchaser of Russian defense equipment, chose to abstain from voting in the UN to condemn Russia for its aggression.

The four leaders met again most recently in the summer of 2022 in Tokyo, where they announced initiatives under the existing framework that addressed shared aspects of security, health, climate, and technology. Significantly, the leaders’ summit announced the Indo-Pacific Partnership for Maritime Domain Awareness (IPMDA), a commitment among the countries to invest in maritime domain awareness in the Pacific Islands, Southeast Asia, and the Indian Ocean region for partner countries to better track maritime activity in their waters and economic zones. A Quad Fellowship was also established to expand access for American, Japanese, Australian, and Indian students to pursue graduate degrees in science, technology, engineering, and mathematics (STEM) fields. The fact that this many leaders’ summits have taken place under Quad 2.0 represents the strong emphasis placed on the dialogue by all four heads of state.^{xxx}

Regional Perspectives

United States

Quad 2.0 is an extremely beneficial relationship for the United States to leverage in the current security climate. The United States has taken a strong leadership role in the Quad’s resurgence, playing host to the first in-person meeting attended by the top leader of each country, and initiating much of the reformed messaging. The increased attention to the relationship given during the Biden Administration has even led some to further distinguish it as Quad 2.5.^{xxxi} A primary focus of the United States has been the promotion of the fact that all four countries are democracies, an inherent jab at the destabilizing nature of authoritarianism.

For the United States, the Quad has the makings of a powerful balancing coalition that can counter Chinese aggressive behaviors and predatory practices, even without explicit statements that it is doing so. This is evidenced by the continued discussion surrounding the tenants of FOIP by all participants, not just the United States and Japan. The US perspective on the Quad is an extremely positive one, and each sequential meeting is beneficial to advancing US security interests in the Indo-Pacific, regardless of whether defense is a point of discussion.^{xxxii}

Japan

Without Japan, the Quad may never have come to fruition in either iteration. The entire framework of the Quad as a linkage between two geo-strategic areas, and the promotion of maritime freedoms and democratic values show that each iterative advance in Japanese foreign policy serves to also advance the Quad.

The Japan perspective on the Quad is also extremely positive. Japan and the United States have a lot of shared interests in both defense and foreign policy, and the Quad is likely to be a key enabler moving forward. Notably, the Quad enjoys strong public support in Japan in its current iteration, and while Japan will continue to support any military component of the Quad, it is more likely to prefer to advance any defense-based relationships outside the Quad framework.^{xxxiii}

It is clear that China has played a large contributing role in Japan's alignment toward the Quad, even when the rhetoric is more focused toward humanitarian efforts. The PRC poses a threat to Japanese interests in the East China Sea, and as a rival Asian economy, and Japan's participation in the Quad will continue to lead the group to stay centered on China as the basis for the other lines of efforts it pursues.^{xxxiv}

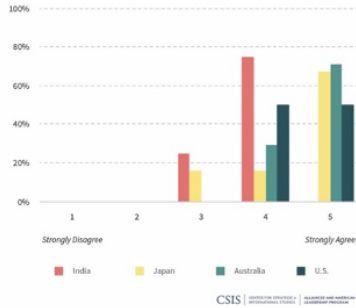
India

Though India is the most disparate partner in the relationship, its participation is also largely driven by China. Despite a policy of strong non-alignment that would prevent India from entering into a formal alliance, it sees China's coercive behavior in the region as a "major challenge to a free, open, and rules-based order in the Indo-Pacific."^{xxxv}

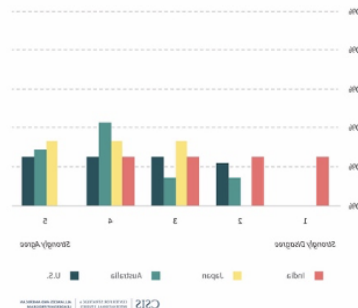
A study conducted by CSIS shows that while Indian views vary more from the rest of the group more than any other one country, they are still generally in alignment on key issues. While India is most likely to prefer non-defense issues as the primary focus of the Quad, all four countries broadly agree that some of the newer focus areas as a better area to weight their collective attention.^{xxxvi}

Figure 1. Opinion Polling of Quad Partners on Key Issues

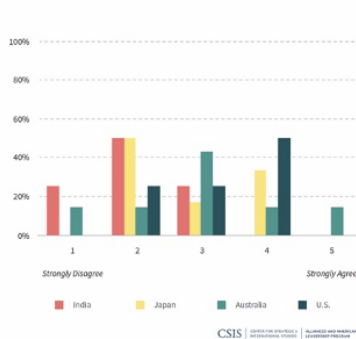
Question 1: To what extent would you support a standing annual meeting of the heads of government of the four Quad partners (including regular ministerial level sessions)?



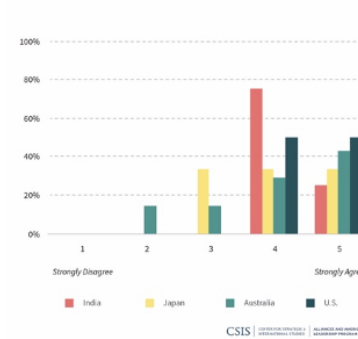
Question 2: To what extent would you support the creation of a permanent Quad secretariat, with chairmanship rotating every three years among the members?



Question 3: To what extent would you support the creation of a standing military task force comprised of the four members under the direction of a joint command?



Question 4: To what extent would you support the Quad undertaking a coordinating role in regional economic and developmental assistance, including loans, technical development, and human rights promotion throughout the Indo-Pacific?



(Source: CSIS, 2019)

In a personal interview, Captain Joshua Taylor described incremental steps as the best way to make headway with India as a partner to the Quad. Because the framework can really only move as fast as Indians are willing, the messaging is important so that any actions are seen as having shared interest and not specifically done as an act of defiance to China. Reframing the regional efforts to be “pro-quad” versus “anti-China” can go a long way in ensuring India’s government remains engaged.^{xxxvii}

Australia

Despite having been a prominent force in the dissolution of Quad 1.0, Australian support for Quad 2.0 is extremely strong. Their views on regional security have shifted dramatically in the last decade, and they are probably more closely aligned to those of the United States than any other Quad partner. The Australian and Chinese economies are not nearly as strongly linked now as they were then either. One of the major bilateral success stories to come out of Quad 2.0 is a strong linkage between US and Australian defense equipment and security cooperation. In 2021, the

United States announced it had reached an agreement with Australia to share nuclear submarine technology with them that it also shares with the United Kingdom. This caused a strong reaction from China, but it serves to strengthen the combined submarine capability in the Indo-Pacific, something military commanders have described as the largest asymmetric military advantage over strategic adversaries. Large investments have also been made by Australia in their maritime strike equipment.

Upcoming elections in Australia have left some to speculate whether a change in government could lead to another exit from the Quad, but Dr. Charles Edel thinks this is extremely unlikely. The Australian perspective on the Quad is also extremely positive and enjoys support from both political parties, especially as it pertains to the support it could provide to countries in Southeast Asia. Though Australia and the United States are not entirely in lockstep on every aspect of Indo-Pacific security, they are largely in agreement on the need for regional democracies to come together on difficult issues, and they see the Quad as an ideal mechanism to do so.^{xxxviii}

Benefits of a Framework over an Alliance

Despite no direct reference to China in the 2021 joint statement or a *Washington Post* op-ed from all four Quad leaders, it is undeniable that the two subjects are inextricably linked. While it is not an “Asian NATO” or a defined security alliance, it clearly is a network of like-minded states with shared interests. This network cannot be completely unstructured if it is to be effective, but it also cannot be too rigid that it excludes partners on the fringe or limits the group’s collective ability to respond to crisis. The Quad’s current framework in its second iteration is positioned well to become exactly that kind of network, if ushered into its next iteration correctly.^{xxxix}

The threat posed by China extends far beyond just its military might, and security issues extend well past only those of defense. The PRC’s programs like the Belt and Road Initiative make China a major investor in regional infrastructure. China’s rapid economic rise has paved the way for the country to be a leader in technology development and in combatting public health crises like COVID-19 through the development and distribution of vaccines. Although China is a significant energy consumer, it has also been heavily involved in climate change conversations as well.^{xl}

In order to provide an alternative future for Asian countries to engage with powerful economies on those same issues, the Quad must also be flexible in its framework to be able to be at the forefront of the issues and to respond effectively when needed. The proliferation of working groups that were established in 2021 are a clear attempt to engage on regional areas of concern that may be more security adjacent than defense associated. The focus on COVID-19 vaccine distribution was a success story for the Quad, but additional weight of effort will be needed as it pertains to sustainable development and infrastructure building, as well as building resilience and redundancy in global supply chains so they are not overly dependent on China.^{xli}

Maintaining a certain level of ambiguity over the entire purpose of the Quad keeps the relationship from being restrained to only specific issues, and it allows for effective balancing in a positive affirming manner without having to emphasize the coalition’s focus on China. This not only allows it to be seen as a force for good externally, but also keeps India from facing criticism

about having “chosen a side.” In this way, the Quad provides a powerful status quo that promotes a democratic and rules-based order, and it pushes back against a revisionist world order under China with Marxist-Leninist characteristics.

Improving the Framework and Building toward a Quad 3.0

Quad 2.0 is not without areas that could be improved though. In a personal interview, Dr. Charles Edel defined three primary areas that the Quad could improve on in this iteration or as it moves toward a more established future. First, it ought to produce more concrete deliverables from the established working groups. In order to gain increased credibility as the preferred regional framework, the Quad has to show it can deliver, especially as it relates to infrastructure, an area that China has been very active and successful. Second, the Quad can focus on getting more private sector buy-in to its initiatives. The PRC can force its state-owned enterprises to take positions that benefit China’s foreign relations, and if the Quad is going to convince other countries that the model of liberal capitalism is better, there needs to be more involvement with industry. Finally, it needs to more finely tune the existing conversations about defense and security as it pertains to specific contingencies. This is not to say assurances under specified circumstances like in an alliance, but rather discussions of reasonable expectations of how each partner would respond in the case of a PRC invasion of Taiwan, for example. The best way to do this, he says, is through incremental increases over time that do not risk alienating partners and build up “long term habits of cooperation.” The reaction in a contingency then becomes a matter of routine and known expectations, instead of haphazard cooperation.^{xliii}

Conclusion

In exploring the history of the Quad and its evolution into its current framework, it is easy to see that its formation is actually a natural progression for its partners in executing individual strategies with shared concerns, because of their common democratic values. Japan played the most formative role in developing the strategy that all four countries are now effectively pursuing and bringing all four countries together in seeing their circumstances as linked.

While the loose framework provides the agility and flexibility necessary to respond to the issues that matter most to the region, there are a few aspects that can be improved upon to tighten the internal relationships between Quad partners and external relationships with concerned institutions like ASEAN. The key to moving Quad 2.0 forward is moving slowly forward together, keeping pace with any hesitations while balancing against the primary threat.

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Same Problem, Different Wavelengths: Recalibrating US-Japan Economic Security in the Indo-Pacific

Ariqa Herrera

Economic security is increasingly becoming an important tool for countries to consider when developing their national security postures. The need for comprehensive economic security became increasingly necessary given supply chain disruptions during the COVID-19 pandemic. Discussions surrounding the development of economic security predate the pandemic, although it has accelerated those discussions into tangible security policies.

The most recurring aspect surrounding economic security is the need for supply chain resiliency especially in a world that is becoming increasingly interconnected. Concerns about supply chain disruptions either due to natural disasters like a pandemic or through economic coercion by rival states has shone a light on the importance of having alternative supply chains to supplement the existing system. Economic coercion has especially become a heightened concern with China dominating many critical supply chains across the globe.

Despite the growing importance of economic security, there is a vacuum of leadership in the Indo-Pacific. Currently, the three largest economies—the United States, China, and Japan—are failing to meet the needs of the region, while Japan and the United States, despite being close partners and allies, are prioritizing different things in the region. Therefore, this paper seeks to explore the question of how the United States and Japan can better align their economic security policies in the Indo-Pacific while mitigating potentially negative reactions from China. To do so, it will be divided into four sections: the current problems that exist in the Indo-Pacific, how the Japanese government is approaching the problem of economic security in contrast to the United States, policy recommendations for each country to better align their policies, and how China might react to such measures.

Terminology

Economic security is still a relatively new dimension of a country's security posture. Thus, there are different definitions and understandings of key words that are necessary to define for cohesion's sake. Economic security is the overarching strategy of a country while economic statecraft is the tools it uses to achieve its security. Economic statecraft, as defined by Mireya Solis, is "the purposive state action linking closely economic and security goals and leveraging material wealth to achieve influence abroad."ⁱ There are two types of economic statecraft: defensive and offensive. Defensive economic statecraft are actions undertaken by a state to protect its economic security while offensive statecraft is the act of leveraging a country's economic might against another country.ⁱⁱ

Discussions of economic security largely surround supply chains and developing its resiliency. Supply chains are the sequence of processes a product undergoes from development, production, and distribution; it includes the procurement of raw materials which may happen in one country, the development of the product which may happen in one or more countries, and the distribution of the product in the final country. There are often several different countries involved

in a supply chain, and products move from one country to another through shipping lanes and ground transportation. When countries talk about supply chain resiliency, they are referring to the need for avoiding supply chain disruptions through natural or political means, preventing chokepoints from disrupting production, avoiding over-reliance on other countries, and having an alternative supply chain should disruptions occur.ⁱⁱⁱ Over-reliance is mainly targeted towards China as it has been referred to as “the factory of the world” and has employed successful economic coercion to achieve its political goals.^{iv}

Chokepoints are another important factor that countries have been concerned about mitigating in recent years. Chokepoints are points along the supply chain where, should disruptions occur, it would breakdown the entire supply chain and back up production.^v These points are particularly dangerous because they can be leveraged by countries to achieve political goals—once again tying back to the threat of Chinese dominance of global supply chains.

Background

Economic security became a serious issue for the United States due to supply chain disruptions caused by the COVID-19 pandemic, but for Japan, concerns about economic security predated the pandemic. The flashpoint was the US-China trade war where the United States employed offensive economic statecraft against China to mitigate its competition and rivalry with the country, prompting China to respond in kind, which ultimately resulted in the trade dispute escalating to a war.^{vi} Japan, meanwhile, was caught in the crosshairs—having to balance its business and economic interests with China against its alliance with the United States.^{vii} The Trump administration began imposing tariffs on Chinese products in early 2018 that escalated in the summer of that year, and even Japan was subject to tariffs levied on steel in March 2018.^{viii} It became evident to Japan that it was important to secure its own economic interests if even an ally like the United States was willing to deploy offensive economic statecraft against them.

Economic openness and connectivity in the Indo-Pacific are going to be key aspects in developing a competitive region. However, to usher in this connectivity, it will be necessary to have leadership that will shape the system, as global partnership is vital for “economic preeminence.”^{ix} Unfortunately, the usual leader in the region, the United States, does not appear to be interested in taking up the mantle of ushering in this new era. Coming off the Trump administration, the United States is in a less engaged role on the international stage and has not been able to fully shed the isolationism of the Trump years. It has ceded some of its responsibilities as a global superpower to focus on domestic policies, although the Russian invasion of Ukraine has forced Washington to reassess and work closely with NATO and other countries like Japan to impose sanctions on Russia and assist Ukraine with weapons and humanitarian aid. China has proven in the past that it too is uninterested in taking on the responsibility that comes with being a leader in the region—preferring to have market access to other countries while making no changes to its own economic posture.^x Japan, meanwhile, appears to be the most well-positioned to take on the leadership role, though it may not have the political capital to take it on by itself.

Outside observers hoped that with the election of Biden, the United States might return to the Obama administration’s posture toward the Indo-Pacific especially vis-à-vis free trade, but the Biden administration has largely stayed the course on some foreign policy initiatives undertaken

by the previous administration.^{xi} Even the tariff rollbacks have failed to meet expectations with many of the tariffs and quotas imposed on China staying unchanged.^{xii} However, it has rolled back tariffs towards Japan and other allies like the European Union.^{xiii} Unfortunately, despite some moves in the right direction, the United States under the Biden Administration appears to be continuing to foster a protectionist environment with its Buy America focus and unwillingness to include market access as part of the economic initiatives it is taking in the region.^{xiv} The United States is also extremely unlikely to rejoin the Comprehensive and Progressive Trans-Pacific Partnership (CPTPP) under the Biden administration and has proposed an amorphous multilateral concept that falls far short on free-trade aspects. It appears to be more interested in bilateral or mini-lateral initiatives in the region.^{xv} Instead, domestic issues are dominating the Biden agenda. Its focus has been on infrastructure and voting rights, but it is faced with a Congress deeply divided and unable to pass key legislation. Thus, it is clear that domestic politics will continue to be a priority for the United States, with new foreign policy initiatives taking a backseat.

Similarly, China has also been preoccupied with internal issues, such as the current lockdown due to the pandemic, and, despite its Belt-and-Road Initiative (BRI), it is not seen as taking a leadership role in the Indo-Pacific as the BRI is largely criticized as a self-serving project. However, unlike the United States, China is making moves to join the mega-trade deals dominating the Indo-Pacific. It is already a member of the Regional Comprehensive Economic Partnership (RCEP), and in September 2021, it formally submitted its petition to join the CPTPP.^{xvi} China's bid to join the CPTPP is a two-prong effort: first, accession into the trade deal will give it greater market access to countries in the Indo-Pacific and secondly, being a member of both trade deals will allow it to shape the rules of engagement from within the trade deals while excluding the United States from being part of those discussions.^{xvii} However, despite how sincere China's bid is to join the CPTPP, its trade and business practices are still woefully below the high standards that the trade pact requires and will likely seek flexibility in the rules so Beijing will not have to change its policy of heavily subsidizing state-owned enterprises and its industrial policy model.^{xviii}

Of the three economies, Japan is the most poised to take up leadership in the region where the United States and China are failing. Starting in 2015, Japan has been in the lead on creating and forging an economic rules-based order: in 2015, the Abe administration announced a “quality infrastructure initiative” aimed to counter the Belt and Road Initiative (BRI); in 2017, after the United States pulled out of the TPP, Japan continued negotiating to create the CPTPP; in 2019, Abe announced the development of rules for the digital economy; and in 2021, Tokyo began developing its economic security legislation.^{xix}

However, there are still some obstacles that prevent Japan from reaching its full leadership potential. One of the biggest obstacles is attracting and retaining human capital. As a result of the pandemic, Japan basically closed its borders to foreigners for two years, severely limiting the number of foreign workers and students wishing to enter the country—something that could hinder its digital transformation.^{xx} Further threatening this transformation, Japan greatly lags behind the United States and other developed countries in terms of senior managers with international experience and personnel with digital skills.^{xxi} Thus, it is vital for the United States and Japan to work together to close the gaps that each country currently has in order to create a comprehensive and cohesive economic security rules-based system in the Indo-Pacific.

Japanese Approach

Economic security was a key point for Kishida Fumio when he ran for the premiership in the fall of 2021, and a key bill was recently passed by the Diet. The economic security bill passed the Lower House in April and the Upper House in May.^{xxii} There are five pillars to the legislation including: developing a national policy, securing supply chains of critical sectors, securitizing critical infrastructure, promoting public/private cooperation for cutting edge technologies like AI and outer space, and innovating.^{xxiii} There are some lingering criticisms and questions about what the bill will entail despite its passage. One major criticism is that the Japanese government should have developed a broader national security legislation first and then built the economic security piece within that. One big concern is that Japanese companies are unclear as to how the law will impact their operations.^{xxiv}

The legislation will give the government greater oversight over the private sector. It will allow the government to have oversight in the installation of computer systems in critical sectors to guard against cyberattacks, and companies that fall within fourteen identified sectors—such as electric power, finance, and railways—will need to submit installation plans to the government to ensure that no vulnerabilities exist.^{xxv}

In January 2022, the Asia Pacific Initiative (API) released a report on Economic Security that surveyed one hundred Japanese companies. It found that the majority of those firms view the rivalry between the United States and China as the number one source of geo-economic tension in the region and are increasingly concerned with US policy toward China.^{xxvi} At the time of the survey, the details of the economic legislation were still being hammered out, and companies indicated that they hoped the legislation would address these concerns and keep corporate profits in mind.^{xxvii} However, it does seem that those concerns were not properly addressed in the bill and may cause a rift between the private and public sector that will need to be smoothed over to effectively implement the policy.

Beyond the economic security legislation, Japan has also become a champion of mega-trade deals. It was largely responsible for the Trans-Pacific Partnership (TPP) not falling completely apart when the United States exited the deal under the Trump administration and navigated restructuring and rebranding the deal into the existing CPTPP.^{xxviii} It is extremely eager to help facilitate the United States' return to the trade deal—however unlikely that may be. Additionally, it is an existing member of RCEP, which makes up one-third of global GDP.^{xxix} Increased globalization and market-access is clearly a very important priority for Japan in the region.

Prime Minister Kishida is also focusing on revitalizing the Japanese economy. He has been touting a “new capitalism” policy that looks similar to redistributive economics and emphasizes wage growth.^{xxx} The Japanese economy, like most countries, has been stymied by high inflation, and the yen-to-dollar exchange rate has been plummeting with the yen weakening drastically against the dollar.^{xxxi} Earlier in the summer of this year, one complicating factor to Kishida's plans was former Prime Minister Abe Shinzo—who had wanted to continue to exert influence on legislative policy that might move the country away from his key policy of Abenomics.^{xxxii} Abe was the leader of the largest faction within the Liberal Democratic Party, but following his abrupt

assassination on July 8, 2022, there is no clear successor to the faction and is slated to remain so until after Abe's state funeral on September 27, 2022.^{xxxiii} Given the uncertainty of that faction and whether another LDP politician will take up defending Abenomics, it is unclear if there will be any large domestic opposition to Kishida's economic plans as of writing.

US Approach

In October 2021, President Biden announced the Indo-Pacific Economic Framework (IPEF) as the centerpiece to his economic policy in the region. Since then, there has been little specifics on the contents of the framework. However, during his first visit to Asia on May 23, Biden announced the launch of the IPEF, which at the time of the launch included twelve countries (Fiji joined a few days after the announcement) and is designed to provide a counterweight to Chinese economic clout in the region.^{xxxiv} IPEF is comprised of four pillars: supply chain resilience; clean energy, decarbonization, and infrastructure; taxation and anti-corruption; and fair and resilient trade.^{xxxv} However, market access or tariff reduction provisions are missing from the framework and are trade incentives that countries in the region desire.^{xxxvi} Ambassador Katherine Tai, the US Trade Representative, reiterated that those issues are not being considered at this time—much to the disappointment of allies and partners.^{xxxvii} IPEF will be a series of agreements on these pillars wherein countries can opt in or out of with countries needing to only express commitment to one of the pillars and not all of them.^{xxxviii} Experts on US-Japan economic security believe that the IPEF will act as a way for the Biden administration to knit together its existing framework and initiatives.^{xxxix}

The United States will need Japan's support in "selling" IPEF to other partners in the region, but the lack of market access is an annoyance to both Japan and other partners that had hoped IPEF would be the US answer to its unwillingness to join the CPTPP. At this stage, it is already seen as a poor substitute, which may make achieving success through the IPEF more difficult.^{xl} Furthermore, the United States has hurt its own trade credibility with policies like "Made in America" that only expand protectionism for its industries.^{xli}

Political wrangling in the US Congress that has stalled the Biden policy agenda is also undermining the reputation of the United States in the global community. The Trump administration's abrupt pulling out of international agreements like the Paris Agreement and CPTPP began to raise concerns among US allies that anything done by one administration could be undone by another one at any point.^{xlii} Still, Biden has reinstated US membership in the WHO and the climate change agreement in an attempt to rebuild some confidence in its international partners. For domestic political reasons, however, Biden has ruled out joining the CPTPP.

The future does not look promising for the Biden administration, politically. It is likely that the Democratic Party will lose control of one or both chambers of the Congress to the Republican Party in the November 2022 election. Biden's low popularity in the polls is indicative of how the Democrats will fare in the election. Bipartisanship is at a low with the ideological divide between the two parties continuing to grow and having few issues that both parties can agree on how to approach. Political stalemates over policy goals are likely to continue, making the United States seem like an unreliable partner in the Indo-Pacific region. Thus, it is critical for the Biden

administration to grapple with that reality in its foreign policy and continue to rebuild trust with allies and partners in the Indo-Pacific.

Policy Recommendations

Predicting what the future will bring in near term global history is difficult, particularly now that the full-fledged war going on between Russia and Ukraine is impacting global security and the economy. In that context, the United States should not treat China as the next threat after Russia. What should be a priority goal for economic security instead is to keep China within the system of global supply chains and international economic spaces. To decouple China would not only be a completely unrealistic goal—China is the major trading partner for over one hundred countries—but even attempting to do so would disrupt the global economy, making production weaker, supplies scarcer, and prices higher. In the global commons, China is a valuable partner and should be included in international initiatives, such as fighting climate change and cooperating against global health threats like the COVID-19 pandemic. The economic security goal instead should be to diversify sources for supplies but not shut off China. It would be folly to put China in a position that would allow it to deploy offensive economic statecraft that would threaten the national security of the United States, Japan, and other major democratic powers. The following recommendations therefore cover both domestic and foreign policy initiatives the United States and Japan might commence in order to strengthen economic security.

Domestic Recommendations

With the United States and Japan both becoming service-oriented economies, the need to develop better social safety nets is critical. People in the United States are particularly worried about inflation and the future of the economy. Rhetoric in America is about “bringing jobs back” in the manufacturing sector, but unfortunately, even if some of those jobs do return it will not be enough to revitalize the Rust Belt, especially with automation continuing to replace manufacturing jobs. Washington should focus on measures to support and mitigate the impact of inflation and the weakening social safety net within the country.^{xliii} Japan is already facing such issues, and Prime Minister Kishida is trying to respond to the problem with his proposal to create a “new capitalism” that would be similar to redistributive economics with an emphasis on wage growth. It is seen as a direct contrast to Abenomics.^{xliv} Depending on the success of this undertaking, the Biden administration should stay focused on similar policies to promote the welfare of low-paid US workers and their families.

In the United States, another bottleneck is a serious lack of labor in the transportation sector. Wages have not risen to be competitive, despite a mass exodus from trucking to warehousing.^{xlv} Washington therefore should stay focused on better supporting transportation by raising wages for truckers and use infrastructure money in recent funding legislation to upgrade ports and airports to make them efficient and more user friendly.^{xlvi}

One important aspect of supply chains that were highlighted as a result of the pandemic disruptions was the need to rethink the just-in time production technique. Just-in time manufacturing was popularized by Toyota in the 1970s and became the tactic most manufacturers later employed. Its goal was to order just enough components necessary in time for production and cutting down expenses in excess ordering and warehousing the inventory.^{xlvii} The trouble with that

strategy nowadays is that disruptions to the supply chain end up bottlenecking the production and causes supply shortages for consumers and profit loss for producers.^{xlvi} Thus, it is imperative that companies consider moving away from that model and begin keeping excess parts on hand to allow resiliency. Doing so may cut into short-run profits but will be recaptured over the long run.

Japan and the United States should be pursuing other shoring options away from China if such products are overly dependent on it. With so much manufacturing based in China, Japan and the United States need to mitigate economic dependence by promoting resiliency in supply chains. One way would be to incentivize manufacturers to re-shore to such low-cost production countries in Southeast Asia like Vietnam and Thailand. In fact, starting in 2020, the Japanese government began to pay companies to re-shore to Southeast Asia^{xlix}. The United States should consider a similar policy either reshoring to Southeast Asia or nearshoring to Mexico, which would shorten the supply chain.^l Japan should continue expanding these early incentives to promote a larger diversification of its supply chains.

Lastly, when developing economic security measures, both governments should include the private sector to tap ideas and proposals since they will need the business and other private organizations to support those policies when enacted. Too much government overreach could impede the economy and decrease productivity.^{li} Governments and private companies may have different ideas on what economic security looks like, so it will be important for Japan to work closely with business organizations like the Keidanren and for the United States to work with the US Chamber of Commerce to help develop policies that will encounter little resistance from businesses. One thing that the countries will need to be cognizant of when consulting with private sectors will be striking the balance between creating an environment to foster domestic growth and not going too far and creating a protectionist environment.^{lii}

Foreign Policy Recommendations

Japan must be willing to accept the reality that the United States will not join the CPTPP under the Biden administration and is unlikely to change that position with subsequent administrations. The political will simply does not exist within the United States at the moment with both sides of the Congressional aisle treating free trade like an anathema, believing that it threatens American jobs. This myth has become a virtual reality in the minds of too many politicians. When discussing economic security in the region, Japanese pundits and officials always mention the need for the United States to return to the trade agreement, which belies a larger problem; it presumes that the Japanese government may be willing to wait for the United States to return to the trade deal for as long as it takes. This is simply not a viable option, and both countries need to agree and understand each other's priorities to promote the economic security necessary for the region.

Meanwhile, the United States and Japan should be coordinating economic strategies so their defensive and offensive statecraft tools match. On the defensive side, they should coordinate on export controls, investment restrictions, and intelligence sharing to prevent shell or proxy actors from interfering in their economic environments.^{liii} However, both countries will need to be cognizant that each private sector may have different goals and priorities, and they will need to balance protecting domestic interests and deepening international cooperation.^{liv} On the offensive side, they should coordinate on pooling resources for 5G, telecommunications, open access, and

aligning sanctions responses.^{lv} Japan surprised many when it responded swiftly to the coordinated sanctions against Russia for its invasion of Ukraine; Tokyo thus indicated that it is taking the need to be coordinated in such efforts seriously (in 2014, when Russia invaded and subsequently annexed Crimea, Japan was slow to respond and did not join coordinated sanctions).^{lvi} This is an important departure from previous policies as it shows a stronger drive to employ offensive statecraft where necessary should other threats arise.

Japan and the United States have announced several joint economic initiatives in recent years. Among them are the US-Japan Competitiveness and Resiliency Partnership (CoRe), US-Japan Commercial and Industrial Partnership (JUCIP), and US-Japan Partnership on Trade.^{lvii} In January 2022, President Biden and Prime Minister Kishida met virtually and announced the establishment of the Economic 2+2 Talks that will “track and drive economic cooperation and . . . strengthen the rules-based economic order in the Indo-Pacific region.”^{lviii} The development and existence of these many economic initiatives show that both sides are committed to prioritizing economic security in the region. At the same time, however, having so many different initiatives under the purview of different offices makes it difficult to develop a cohesive and comprehensive policy. Therefore, the White House and the Kantei (the Prime Minister’s Office) should play a role in coordinating such policies internally and with each other.^{lix} Doing so will ensure that the policies line up with each other and are powerful.

Japan and the United States are working to deepen their engagement with partners in the region. The Quad has been particularly active recently in supporting supply chain resiliency.^{lx} With the Quad gaining more interest from other countries, it will be another avenue for the United States and Japan to deepen engagement with partners in the region.

On the security front, one initiative that like-minded countries in the region might consider to mitigate Chinese economic coercion is a collective self-defense mechanism similar to NATO’s Article 5, which stipulates that an attack on one is an attack on all. Under such a mechanism, partners could opt into a similar arrangement for economic “attacks.” If a rival country decides to employ offensive economic statecraft to one state—e.g., Chinese economic coercion toward South Korea due to the installation of a US defense system—countries should be able to trigger a response that would allow them greater leeway in reducing tariffs or increasing quotas to the targeted country while putting economic pressure on the rival country. The goal behind such a response would be to act collectively against the rival state to lessen the burden on ally states and potentially deter such offensive economic statecraft.^{lxi} This is one of the loftiest goals as many countries do not have the necessary tools or legislation to trigger such a response, and it could be difficult to assess when economic coercion has been deployed and what the appropriate response should be.^{lxii} Nevertheless, the difficulty in implementing should not be seen as a barrier to developing this type of policy response.

Potential Chinese Reactions

In the short-run, such economic-security measures undertaken by the United States and Japan are unlikely to provoke China into deploying offensive economic statecraft. It is in China’s best interest to prevent the decoupling from its markets. At present, even though there are growing calls for reshoring, ally-shoring, nearshoring, and the like, such moves are happening much slower

than affected countries may have anticipated and thus are unlikely to be a cause for concern for China.^{lxiii} Economic dependence on China is one of its most important tools in achieving political goals and gives legitimacy to CPP rule within the country.^{lxiv} IPEF, too, is unlikely to be cause for concern though it has been blasted by Chinese Foreign Minister Wang Yi as being doomed to fail.^{lxv}

Since China's skyrocketing economic development and military prowess, there have been doomsday predictions about its economy eventually crashing—and by extension the global economy with it. However, despite such dire predictions, China's economy has stayed relatively stable with continued growth and growing dominance on the world stage. Given current economic trends and President Xi's goals of dealing with income and wealth inequality within China, it is much more likely that China's economy will face a stagnation with slowed growth than an all-out collapse.^{lxvi} Early this year, the CCP set a goal for 5.5 percent economic growth, but economists are skeptical of China hitting that target.^{lxvii} China's lockdown of parts of the economy in order to achieve zero COVID has hurt economic growth. The strategy, which seems to have worked for the time being, has seen costly shutdowns of major port cities like Shanghai.^{lxviii}

The greater danger to drawing Chinese ire than the restructuring of economic security policies by the United States and Japan is their Taiwan policies. Taiwan is without a doubt one of the most inflammatory points for China, and increased cooperation from either the United States or Japan to defend Taiwan's independence, even indirectly, is most likely to provoke China's backlash.^{lxix} One of the greatest concerns surrounding Taiwan right now is its application to join the CPTPP; having both China and Taiwan apply to join at the same time puts members of the CPTPP in a tough position, but Mireya Solis argues that in this case, political issues should be set aside and members should look at the foundation of the agreement that states any entity willing to meet the high standards of the trade agreement should be allowed in.^{lxx} This would suggest that Taiwan would be able to join sooner than China as it has been eliminating trade barriers to meet the standards of the agreement while China is more likely to seek exemptions on some of the standards.^{lxxi} It is difficult to predict how China would react to Taiwan joining the trade deal before it because part of China's goal in getting into the trade deal first would be to exclude it from the CPTPP to increase Taiwan's economic reliance on China.

Therefore, Chinese backlash may be limited to the Taiwan issue regarding economic security. This will be especially important for both the United States and Japan to navigate as they deepen ties with Taiwan in the semiconductor sector, with Taiwan Semiconductor Manufacturing Company building fab labs in both countries.^{lxxii} Washington may be taking the threat of Chinese reaction seriously as Taiwan was excluded from the IPEF—despite Taiwan indicating a desire to join. It seems that the Biden administration may be prioritizing its TIFA talks with Taiwan instead with Ambassador Tai praising them as an underutilized tool.^{lxxiii}

It is more likely that should joint US-Japan economic security continue to strengthen and be successful in the region, China will feel the squeeze in the long-run. Economic slowdown is also something that will threaten China's economic security, and they should be prepared for both offensive and defensive economic statecraft to be employed by China at that point.

Conclusion

Although there is a disturbing trend affecting the United States toward isolationism and away from globalization, the option of decoupling from free trade and economic connectivity is simply unrealistic. Protectionist policies also tend to hurt consumers and suppliers alike in the long-run despite short-run gains. Japan on the other hand has been moving in the other direction, embracing free-trade regimes and multilateral cooperation.

The United States' Indo-Pacific Economic Framework and Japan's Economic Security bill are both works in progress, but the outcome of both initiatives could change the course for economic security in the region. The recommendations in this paper are a starting point based on the current understanding of each policy. However, those two policy courses are just a part of the larger picture necessary to address economic security in the Indo-Pacific.

Both countries need to also focus on passing robust domestic policies that will help the countries meet the demands of the region and secure their own economic interests. They will also need to coordinate better and with greater frequency in order to align their policies to prevent loopholes and other market failures that could threaten the country's national security.

There is much work to be done in the securitization of supply chains and development of viable economic-security policies, but as shown in this paper, the United States and Japan are moving steadily towards closing the gaps in them. The biggest challenge in moving forward will be for them to agree on the best path forward and execute it in a much timelier manner than is currently being pursued. A convergence of economic security interests similar to that of national security interests should be an achievable goal.

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US-Japan Semiconductor Alliance: A Path to Stable Semiconductor Supply

Moriya Koketsu

Introduction

As the demand for semiconductors increases due to the rising growth of high-tech industries, the importance of these essential components in high-tech equipment increases as well. During World War I, French Prime Minister Clemenceau famously said, “A drop of oil is worth a drop of blood,” emphasizing the importance of oil as a strategic resource.ⁱ Today, some analysts refer to semiconductors as the new oil.ⁱⁱ The strategic importance of semiconductors extends from the military to their daily usage in people’s lives. The rise of new Unmanned Autonomous Vehicles (UAVs) indicates that the military equipment will generally require more processing power, meaning that semiconductor demand will increase. Thus, the semiconductor is a vital strategical resource militarily, similar to oil. For the usage in consumer goods, it is also an essential component of the increasing use of Internet of Things (IoT) goods. Electric Vehicles, the trend of Digital Transformation (DX), and the growing Meta movement all contribute to the increasing demand for semiconductors.

Amid these significant trends, the United States has not stabilized the supply of semiconductors, meanwhile China began its initiative toward domesticating semiconductor manufacturing in 2014. It established a National Semiconductor Fundraising of \$35 billion in 2014 and another \$21 billion in 2019.ⁱⁱⁱ Including the investments from the local governments, it totalled \$81 billion, just considering published amounts. On the other hand, the United States finally started a similar initiative under the Biden administration, which announced the CHIPS Act with \$50 billion in 2021. The US semiconductor industry is far from self-sufficient, with most of the chip production still concentrated in Asia. According to the Boston Consulting Group, the share of domestic semiconductor production has dropped to 12 percent today, down from a 37 percent share in 1990, and materials production also dropped to 12 percent.^{iv} To keep it short, it is currently impossible for the United States to cover semiconductor manufacturing comprehensively by relying solely on domestic companies.

With growing security concerns in Asia, supply disruptions are possible under many scenarios, including effects from the COVID-19 pandemic, armed conflict, or export restrictions. China mines more than 60 percent of the world’s silicon production, an essential material for semiconductors.^v If China halts supplying rare earths or disrupts the sea lanes in the Indo-Pacific, the economic damage is incalculable. In 2021, GM reported that its third-quarter revenue plummeted by 30 percent due to the semiconductor shortage.^{vi} Even with today’s level of disruption, the financial losses are substantial, indicating further disruption would be critical for the economy. Thus, due to the characteristics of the issues, the US government needs to cooperate with countries in East Asia like Japan to overcome this dependency on Chinese manufacturing. It is also important to point out that Japanese interest also lies in stabilizing semiconductor supplies. About 50 percent of the Tokyo stock exchange’s First Listing (now called Prime Market) is occupied by the manufacturing sector, where semiconductors are essential components.^{vii} Needless to say, auto companies like Toyota, Honda, and Nissan require a significant number of automotive semiconductors.

The paper will focus on a possible cooperative framework between the United States and Japan to enhance resilience in the semiconductor sector. The paper will cover the topic in eight sections: (1) US-Japan relations and the semiconductor issue; (2) defining economic statecraft with a recent case study focusing on China; (3) reviewing the current status of the semiconductor industry both from the supply and demand sides; (4) reviewing country-specific semiconductor manufacturing capacity, focusing on processes, which should show the strengths and weaknesses; (5) examining the significance of the US-China semiconductor dispute; (6) establishing a possible framework for cooperation between Japan and the United States in this sector; (7) implementation of this framework; and (8) conclusions reached from this study. Economic statecraft can be weaponized, and such cases occur more frequently than one might think. Over the last decade, just considering China, multiple incidents of such use of economic statecraft can be found. At present, it is difficult to say that the United States and Japan are well prepared to use their relationship to prepare for this security threat. Let us thus first discuss the current US-Japan economic security relationship in this context.

The US-Japan Relationship

It is fair to say that the friction with China over the past decade or so has incentivized the current round of US-Japan cooperation in the security sphere. The Trump and Abe administrations agreed on the need to focus on China as a strategic rival. The Biden administration in 2021 restated that China and the United States are in strategic rivalry.^{viii} In 2022, the Japanese ruling party, Liberal Democratic Party (LDP), recommended mentioning China as a national security threat in three key defense documents.^{ix} Japan's Indo-Pacific Strategy clearly targets China. However, it is difficult to say that the economic cooperation of the United States and Japan is functioning as well. Washington's withdrawal from the Trans-Pacific Partnership in 2017 is a worrisome example of the United States' lack of effort to integrate itself into the Indo-Pacific region to the detriment of the US-Japan relationship.^x The United States also did not participate in efforts by Japan, India, and Australia in 2021 and 2022 to build supply chain resilience.^{xi}

Instead, Washington has been focusing on promoting a relatively independent economic security policy. The series of financial restrictions towards Iran exemplified by the ban on importing Iranian oil showcases the incompatibility between the United States and Japan on economic security. Iran has long been a major supplier of oil to Japan. The Trump administration's decision in May 2018 to withdraw from the Iran nuclear deal led to the imposition of economic sanctions again. That forced Japan to curtail oil imports from Iran. At that time, Japan depended on Iran for oil—as Japan's sixth largest supplier of that commodity.^{xii} Considering that Japan had to ask for a waiver from the United States to import Iranian oil until 2019, it is clear that Washington did not grant Japan enough time to prepare for the policy shift.

Economic security collaboration between Japan and the United States during the Trump administration hardly functioned, if at all. It is safe to assume that the situation has not changed dramatically under the Biden administration due to its focus on the Ukraine crisis and domestic economic issues. While defense cooperation between Japan and the United States has been robust due to the deteriorating regional security environment, economic cooperation has lagged, particularly since the United States seems to have little interest in the notion. At present, that is not

particularly problematic, but it could become a serious issue in the future. This paper then focuses on the need for such cooperation, given the emerging threat of economic statecraft in the realm of the semiconductor industry.

Economic Statecraft

The concept of economic statecraft has long been around to describe the use of economic tools to achieve foreign policy goals. It can be used defensively to protect a country's economy or weaponized against rival economies. It could even be used to destroy other economies. The tools include export restrictions varying from strategic resources to consumer goods. The history of the use of economic statecraft dates back at least to the Peloponnesian Wars (431–404 BC), when Athens imposed trade sanctions against Sparta and escalated their conflict.^{xiii} During World War II, the US embargo of petroleum shipments to Japan partially pushed that country to launch the Pacific War to gain access to such commodities in Southeast Asia.

Without oil, Japan was virtually threatened with its survival since the lack of petroleum meant that the Japanese military's mobility was stripped away. In this way, the United States used economic statecraft against Japan, which was vulnerable in the realm of petroleum. Japan had other vulnerabilities, including iron and other metals. The lesson from the case of Japan is that the countries need to decrease their sole overseas dependency by domestically producing more and diversifying the origin of key resources.

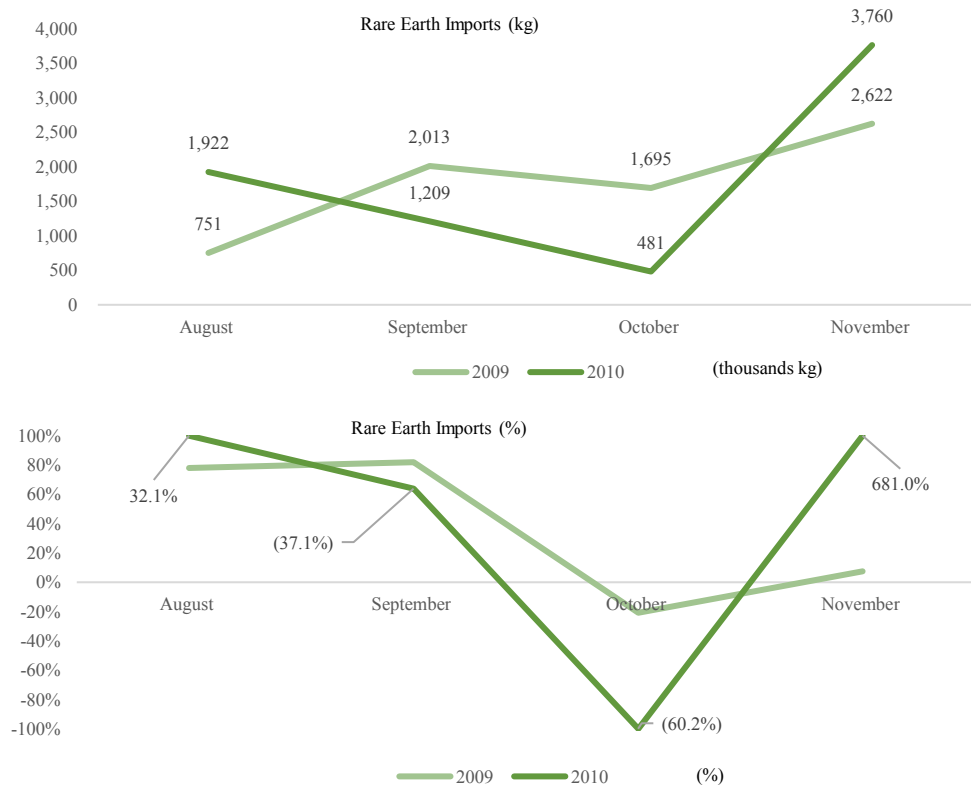
In the modern era, the concept of economic statecraft became important as the world economy began to intertwine through globalization and as the need to recognize the risks associated with economic statecraft increased. Following the normalization of the Sino-US relationship, China joined the World Trade Organization (WTO) and other institutions, established its own development bank, the AIIB, and created Special Economic Zones (SEZs). In short, it became vital to the global economy, with the United States and Japan becoming major trading and investment partners. The amount of trade between the United States and China is now \$615.2 billion.^{xiv} The number well emphasizes the essentiality of China to the US economy. Talk of decoupling from China in the United States remains just talk. China is an economic trading partner for many countries in its vicinity, including Japan, South Korea, and Australia. However, over the last decade especially, China's assertiveness in the East and South China Seas, growing friction with Japan over its claim to the Senkaku Islands incident in 2010, a dispute with South Korea over a missile defense system, and trade and political frictions with Australia are examples of the deteriorating political and security environment in the region. This paper will briefly review several incidents to showcase China's threat potential. It is essential to note since the Chinese use of economic statecraft suggests that there is the possibility that China will mobilize the same tactic against the semiconductor industry.

Japan—2010 Rare Metal Restriction

In 2010, Japanese authorities arrested the captain of a Chinese fishing boat operating near the disputed territory of Senkaku Islands after he had rammed two Japanese Coast Guard vessels. The arrest created a huge political row between China and Japan. China demanded the immediate release of the captain, to which Japan initially refused. It later released the captain who returned to China to be hailed as a hero. But the damage had already been done, for China reacted by

restricting the export of rare earths to Japan, which is an essential material for many products including semiconductors.^{xv} Figure 1 shows the sudden drop in rare earth imports from China. Such imports fell in 2010 by 60.2 percent, creating a huge shortage of the commodity in Japan. Rare earth imports from China counted for around 90 percent of the total used in Japanese manufacturing.^{xvi} Japan successfully avoided the crisis by switching sources from China to Australia, but the lesson learned was that China will weaponize its strategic resources.^{xvii}

Figure 1. Japanese Rare Earth Imports from China between China and Japan

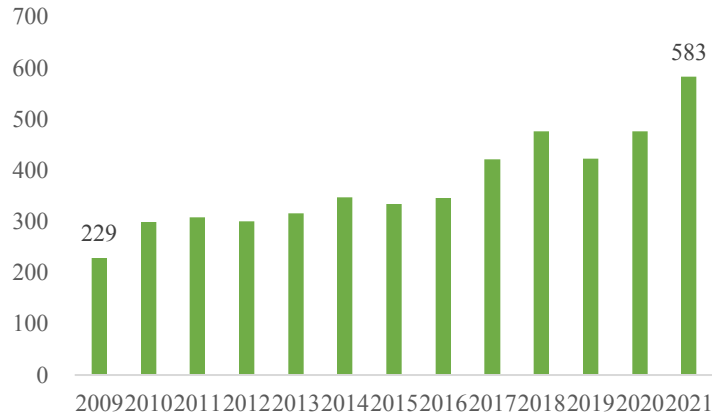


(Source: from Ministry of Finance of Japan Trade Data)

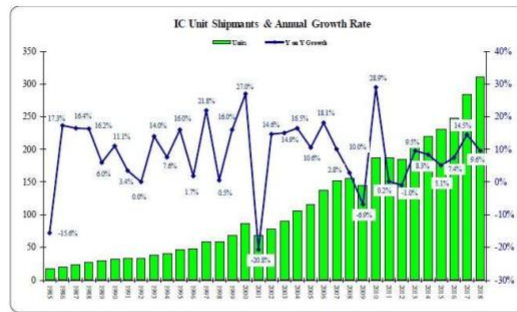
The Semiconductor Industry Market

The global semiconductor market size was \$452.25 billion in 2021, more than double its global revenue in 2009. The market is projected to grow from \$483.00 billion in 2022 to \$893.10 billion by 2029. The 2021 global market grew at a compounded annual growth (CAGR) of 8 percent.^{xviii} Amid such dramatic growth, the leading players changed rapidly. The new leading companies include Taiwan Semiconductor Manufacturing Company (TSMC), Samsung, and other recent entrees like ASML. The rise of new companies caused dynamic market shifts, including changes in geographic locations. The changes have challenged the dominance of US semiconductor manufacturers. Before going into the specific players, the paper will go through the basic semiconductor manufacturing processes.

Figure 2. Semiconductor Market Size by Billion USD and Unit



Unit Growth Rate History – 1985-2018



- ◆ 2019 IC Unit Growth -8%, Down From +9.6% in 2018
- ◆ Memory Bubble & Inventory Overbuild (China Tariffs) Perfect Storm
- ◆ Negative Unit Growth Very Rare (4 Times In Past 34 Years)
- ◆ Bounce-Back Always Immediate & Strong, Good Omen For 2020?



(Source: Statista and Future Horizons)

Semiconductor manufacturing typically has six processes: ^{xx} (1) raw material manufacturing (wafer production); (2) design of chips; (3) semiconductor machinery manufacturing and sales; (4) front-end fabrication; (5) back-end assembly testing and packaging; and (6) electronic product manufacturing. ^{xxi} Raw material manufacturing refers to manufacturing of wafers—circle-shaped sliced silicon ingots. A manufacturer slices the silicon ingot, polishes it, and then cleans the surface. The semiconductor will be designed by a specialized company, such as Arm. Semiconductor machinery is produced for the front-end fabrication and back-end assembly, in which the wafers are etched, photolithographed, and cut out as a chip. Lastly, semiconductors are incorporated into electronic products. ^{xxii} It is also important to note that there are multiple types of chips, and this paper uses Counterpoint’s summary below:

Microprocessors and logic devices

Logic devices are often used for the Central Processing Unit (CPU), sometimes referred to as the computer's brain. It is also used for digital signal processors (DSP). About 42 percent of semiconductor revenues come from logic. The dominant players include Qualcomm, MediaTek, Apple, UNISOC, and Samsung.^{xxiii} They are mostly located in the United States and Asia.

Memory devices

Memory devices such as dynamic random-access memory (DRAM) and NOT-AND flash memory (NAND) are used to store data within the devices. About 25 percent of semiconductor revenues come from memory. The strong market players are Samsung, Sky Hynix, and Kioxia (old-Toshiba Memory Chips), mostly located in Asia since the manufacturing of memory chips used to be relatively cheap.

Analogue devices

Analogue devices are used for audio devices, lights, and the like. They account for about 13 percent of chip sales. Dominant analogue-device suppliers are located mainly in the United States and Europe (except the Japanese company Renesas).^{xxiv}

Optoelectronics

Optoelectronics sensors are used for Compact Disc (CD) technology, Optical Fiber, and certain other sensor-related products.

The above list of types of semiconductors is helpful to understand because supply disruptions will impact the procurement of just about every kind of semiconductor. Historically, memory devices were once treated as a cheap commodity, so the production capacities were concentrated in Asia, where costs were much cheaper than in North America. Over time, the importance of memory chips increased dramatically due to the need for data analyses, which require massive data storage. But manufacturing of such chips was not brought back to the United States. There is need now to bring home the entire supply chain listed above and preferably have all kinds of chips able to be domestically produced.

Figure 3. The Share of the Semiconductor Processes by Country

(billion USD)	Market Size	US	Taiwan	Europe	Japan	China	Korea
The Final Production	471	51%	6%	10%	10%	5%	18%
Design Soft	10	96%	N/A	N/A	N/A	N/A	N/A
Circuit License	4	52%	N/A	43%	N/A	2%	N/A
Semiconductor Mach	77	46%	N/A	22%	31%	N/A	N/A
Foundary	64	10%	71%	N/A	N/A	7%	9%
Font-End Assembly	29	19%	54%	N/A	N/A	24%	0%
Wafer Production	11	N/A	17%	13%	57%	N/A	12%

(Source: 2030 半導体の地政学 戦略物資を支配するのはだれか:
Geopolitics of Semiconductor Who dominate the strategic resources)

The United States and Japanese Semiconductor Industries

As seen above, even though the United States has the strongest semiconductor industry globally, it is at risk of supply disruption because so many of its components are manufactured overseas. Companies like Intel, Lam Research, Texas Instrument, Applied Materials are investing large amounts of money into domestic manufacturing facilities. It is not drawn in the diagram above, but the shares of chip-making machinery produced by US companies account for 47 percent of the world share. Their technology, too, is essential for the semiconductor industry.^{xxv} The entire US semiconductor industry's market share counts for about 50 percent of the annual global market, and R&D expenditures (compounded annual growth rate from 2000 to 2020) account for 7.2 percent.^{xxvi} Recently, the US Congress passed the CHIPS Act, which the White House announced will invest \$50 billion in the domestic semiconductor market. The problem is not just chips; the US semiconductor market lacks some processes domestically, namely foundry, front-end assembly, and wafer production.

Convening a Semiconductor Summit with nineteen CEOs, President Biden showed a US-made wafer to the media. The wafer manufacturer is SkyWater Technologies, a relatively new player in the market. From those who were invited to the conference and the announced documents, it is obvious that chip-making investment will mainly boost domestic players. The situation is serious because the supply and demand situation is already tight. The risk of economic statecraft taking advantage of such a thin supply and demand situation is high. Onshoring the processes of the semiconductor industry is preferred, but the Biden administration must realize that it would take more time to develop a new domestic manufacturing base than it would to subsidize foreign companies to build factories within the United States. It did so for TSMC and is still in talks with Samsung to build an advanced foundry. However, the United States still lacks wafer-production capacity—it needs to solve the issue of importing silicon. Here is where Japan could be incorporated into this framework.

Japan used to be a key player in the semiconductor industry going back to the 1980s. By 1982, it accounted for 35 percent of world chip production, and by 1989, Japan overtook the United States to reach 51 percent of the world's share.^{xxvii} The leading players—namely Fujitsu, Hitachi, Mitsubishi Corporation, NEC, and Toshiba Memory (today's Kioxia)—played an important role.^{xxviii} However, just like with trade friction over Japan's auto and textile industries, the US loss of market shares resulted in protectionist pressure among Americans against Japan's semiconductor imports that were flooding the US market. In 1986, under the US-Japan semiconductor agreement, Japan agreed to limit its exports of semiconductors to the United States. The agreement also mandated Japan to import US semiconductors for at least 20 percent of its domestic demand.^{xxix} This agreement became a turning point for the Japanese semiconductor industry, which became significantly weaker and lost market share. In addition, the rise of even cheaper Taiwan and Korean semiconductors ate away at Japan's global share.

Japan still has an advanced wafer-manufacturing capacity. The two Japanese wafer manufacturers, Shinetsu-Chemical and SUMCO, count for more than 50 percent of the world's wafer production.^{xxx} Their technology is the most advanced globally, which resulted in their supplying such components to TSMC. However, the two companies have overseas factories in Taiwan, not in the United States. The reason behind the hesitation to advance into the United States is due to the fact that the manufacturing cost in North America is very expensive compared to that in Taiwan or even Japan. TSMC was able to advance into the United States only with massive

subsidies provided by the state of Arizona and the federal government, but the wafer manufacturer faces the same high-cost problem. The US market share in wafer manufacturing virtually does not exist, which means that there is room for Japanese companies to set up factories in the United States in a meaningful way. If the trend of TSMC Arizona maintains, then there is a likelihood that investment into domestic wafer production would make sense, which suggests that there is room here for industrial cooperation between Japan and the United States.

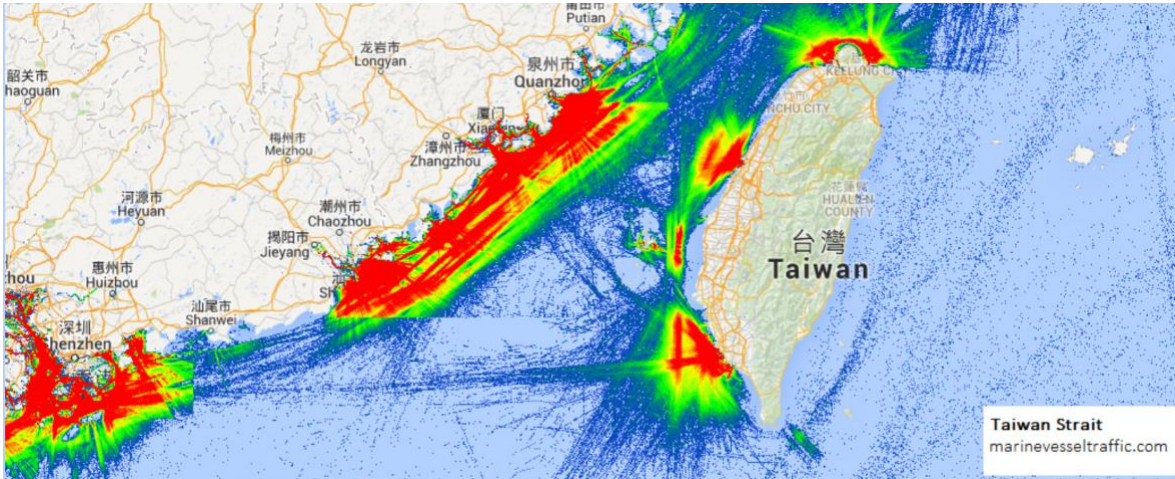
China-US “Semiconductor War” Scenarios

The paper here turns to the main reason why the United States has been resorting to the above measures to domestically produce chips: competition with China. Since the supply chain for semiconductor manufacturing is heavily concentrated in Asia, anything that disrupts that supply chain in that region can affect global semiconductor manufacturing. In the case of China, there are several ways that it can impact the chip manufacturing process: physically disrupting the entire supply chain; restricting the exporting of basic semiconductor raw materials, such as silicon; and nationalizing semiconductor factories located within China. The most likely expected disruption would arise from sea lane blockage by China. This could include: a blockade of the Pacific sea lanes by naval vessels, a Taiwan conflict, and/or trade restrictions and corresponding trade disruptions similar to the COVID-19 impact.

The first scenario would be China imposing an embargo similar to the one Washington placed on Japan prior to World War II. China’s People’s Liberation Army could use naval power to block the shipment of key materials used to manufacture semiconductors. Currently, most of the shipping from Taiwan goes through the Taiwan Strait, as Figure 4 shows, with most of the ports located on the mainland China side. Blocking the Strait would be easier than enforcing the embargo from the Pacific side.

The second scenario would involve a possible Taiwan conflict, which some analysts say is likely. In October 2021, China’s President Xi Jinping gave a speech in which he said that “reunification” with Taiwan must be fulfilled.^{xxx1} In 2019, Xi said that China would take military action against Taiwan if necessary.^{xxxii} Thus, conflict with Taiwan and a corresponding sea lane disruption is a possibility. As mentioned above, Taiwan possesses the largest foundry company, TSMC. In addition, there are many clusters of semiconductor factories in Taiwan. Including five currently being built, there are thirteen clusters of semiconductor factories. Much of Taiwan’s semiconductor industry is located in Hsinchu Science Park.^{xxxiii} Thus, any form of conflict with mainland China would cause a massive manufacturing disturbance in the global semiconductor market. For instance, even the kind of standoff that occurred in the 1996 Taiwan Strait crisis could tie up the sea lanes. It is conceivable today, as Reuters’ David League points out, that China might impose a customs quarantine on Taiwan to cut all shipping entering and exiting Taiwan.^{xxxiv}

Figure 4. Taiwan Marine Traffic Heatmap



(Source: ShipTraffic)

Figure 5. David League, Customs Quarantine Scenario



(Source: Reuters Investigates)

Lastly, the COVID-19 pandemic showed that lockdowns in China that shut factories could cause a massive supply chain disruption, even though it did not target semiconductor parts. China's presence in the supply chain is so significant that if ships could not enter or leave ports due to the lockdown, a reorganization of the entire supply chain would be required. Excluding China from the current shipment system would require a complete reorganization of it. This would indefinitely influence the existing supply chain and impact semiconductor manufacturing.

As stated above, China could weaponize its raw materials by stopping shipments to a country like Japan, immediately disrupting the entire supply chain. Currently, most wafer manufacturers use silicon as an input. The issue lies in China's share of silicon exports. China manufactured around 6 million metric tons of silicon in 2021—about ten times larger than the second-largest silicon manufacturer, Russia (which has a fundamental issue as a reliable trading partner). China's share of world silicon marked a surprising 70 percent in 2021, whereas the US share is only about 4 percent.^{xxxv} Thus, if China stopped silicon exports, the world's wafer supply would drop by more than 30 percent. Should economic conflict between China and the United States intensify, including a scenario in which Washington imposes sanctions on China, then China might nationalize foreign factories. Other socialist countries have nationalized private companies upon decoupling. The recent Russian case and the nationalization of oil companies in the Middle East are examples of such a risk. Companies such as TSMC still have their bases in China. At this point, such a risk is low, but it does exist, and the semiconductor industry should prepare for it.

China Moving toward Semiconductor Independence

In 2014, Xi Jinping began to promote a “Made in China” policy to domestically produce essential technologies, including semiconductors, by 2025. China, however, is far from being independent. Major US companies get 25 percent of their revenue from the domestic Chinese market. Still, China's back-end manufacturing sector has nearly doubled in size since 2015. The Semiconductor Industry Association expects China's share of global chip sales to surpass Taiwan in three years, assuming it maintains current growth.^{xxxvi} So, while the growth of the semiconductor industry is still lagging, it can be expected to achieve higher independence in the coming years.

The Policy Framework

Against that backdrop, how can the United States and Japan collaborate to increase resilience in the semiconductor industry? It should be recalled from above that the United States is weak in the three processes of semiconductor manufacturing: foundry, front-end assembly, and wafer production. Japan would be able to fill the gap in the third process, wafer production. In addition, Japanese companies could help the United States obtain a stable supply of NAND (type of memory chips). Obviously, these relevant corporations are private, not state-owned enterprises. Thus, the government cannot simply command them to cooperate with its plan. However, the government could establish a program to incentivize companies to relocate their manufacturing hubs, in this case to the United States. One way would be to introduce a scheme such as the Ministry of Economy, Trade, and Industry or METI-sponsored Program for Strengthening Overseas Supply Chains. The program aims to diversify supply chains currently concentrated highly in certain regions (especially China). The regions to move factories would be flexible, and the funding sources could vary. Under such a scheme, Washington might support Japanese semiconductor companies to relocate their manufacturing hubs to the United States or to some location where both Japan and the United States could benefit by having a stable supply of semiconductors.

On April 2022, METI announced its “Fifth Semiconductor Digital Industry Strategy Conference.” The Ministry aims to make the Japanese-led semiconductor supply chain resilient

with those of allies and friendly countries. METI would achieve these goals in two ways: increasing manufacturing productivity by enhancing capital investment and introducing recycling mechanisms.^{xxxvii} Since May, the administrations of Prime Minister Kishida and President Biden have been promoting the acceleration of US-Japan semiconductor cooperation. In early May, METI Minister Hagiuda Koichi visited Albany, New York, and DC. During the visit to Albany, Minister Hagiuda went to the R&D facility for next-generation semiconductors and discussed the US-Japan semiconductor cooperation. On May 14, Kyodo reported that “Japan and the United States will agree to commit to improved research and production of semiconductors at leaders’ summit set for May 23.”^{xxxviii} While a trend of cooperation among advanced economies like the United States and Japan on semiconductors is accelerating, it is important to note that the framework needs to comprehensively cover the whole process and bring about a dramatic structural shift to make the supply of semiconductors stable. Thus, the risk of the whole process needs to be as low as possible, reflecting the essentiality of semiconductors. It could directly mean relocating semiconductor facilities out of Taiwan to risk-free countries, including the pacific side of Japan or the United States.

Conclusion

In conclusion, the semiconductor is an essential component for most of today’s manufacturing goods. For example, with technology advances such as big data-analysis, data storage became important, which dramatically increased the need for semiconductor chips. From military to private sector use, the semiconductor has become indispensable, so it is fair to say that semiconductors are the twenty-first century’s new petroleum. Thus, semiconductors became goods that can be influenced by geopolitics. It also means that semiconductor production and sales can be weaponized to influence another country’s economic activities. When Washington embargoed Huawei for its connection with China’s military, it forced the Taiwan company TSMC to sever its relationship with that company, something it was reluctant to do. But the action also caused Huawei to drastically lower the quality of its goods. However, the United States needs to be aware that China could do the same due to their geographical advantage of hosting hubs for semiconductor manufacturing. As shown above, most end-processes of semiconductors are located in Asia, especially in Taiwan. China’s lever for weaponizing this advantage, however, is weakening every year due to its massive investment to domestically produce most manufactured goods. Thus, advanced economies like the United States and Japan need to stabilize their semiconductor supplies.

As a US ally and a manufacturer of semiconductors, Japan could aim to collaborate with the United States to stabilize these processes by establishing a framework that would be a win-win for both countries. For example, METI is already proposing a plan to fund the relocation of the factories out of China. The relocation could also target factories operating in Taiwan for relocation elsewhere. If such factories were relocated to the United States, it would be responsible for the funding. The governments need to find the equilibrium point that the companies are willing to support in relocating their facilities out of an increasingly risky environment. Indeed, as this paper was being researched, the two governments in May suddenly pushed for such cooperation. How these talks will develop is worthy of further research pursuit.

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What Role Can Sino-Japanese Relations Play in the Taiwan Strait?

Haoting Luo

Introduction

A report by the British journal *The Economist* called the Taiwan Strait “the most dangerous place on Earth.”ⁱ That might be an exaggeration, but it is true that those waters in recent years have been catching increasing attention due to fear that China might at some point attempt to take over Taiwan by force. Since the Democratic Progressive Party (DPP) came into power in Taiwan in 2016, cross-strait relations have seriously deteriorated. Official communications between the two governments are completely suspended because of the rejection of the 1992 Consensus by the Tsai Ing-wen administration. Mainland China has responded by ramping up air intrusions around the island to an unprecedented degree. Beijing has amplified its diplomatic efforts to isolate Taiwan internationally. The United States and its allies blame Beijing for being irresponsibly aggressive toward Taiwan and upsetting the peaceful status quo in the Strait. Experts even warn that Beijing might use military force to take over the island in the near future.

As direct stakeholders in a crisis situation, the United States and Japan have increased support for Taiwan, with Washington offering military aid. The stated aim is to deter China from any precipitous action against the island. Beijing has taken a tough stance in response. The situation is becoming worrisome as tensions escalate. What can be done diplomatically to head off eventual conflict? To answer this question, this paper probes the possibility of whether the still stable and mutually beneficial Sino-Japanese relationship can be utilized in order to lower the temperature across the Strait. Relations between Washington and Beijing make the matter more complicated.

Since the Trump administration mounted a trade war with China, Japan has been caught in the crossfire between the two countries. The Biden administration has done little to lower the temperature. So what can Japan do? The United States is Japan’s main ally, while China is a close economic partner. Having such a special position affords Japan a unique opportunity to seek to stabilize the situation. The paper will discuss that possibility. The first part will offer a detailed analysis of whether Beijing is actually seeking a radical solution to the Taiwan issue, as claimed by many Western analysts. The second part introduces Taiwan’s perspective. The third part focuses on why Japan is so worried about conflict in the Taiwan Strait. The fourth part offers policy recommendations and the main takeaways from this study.

Is China Going to Launch a Cross-Strait War?

China’s Fundamental Taiwan Policies

The main contents of the Chinese Communist Party’s (CCP) fundamental Taiwan policies include: 1) ensure the mainland’s own development while dealing with the Taiwan issue, since a prosperous and powerful China has been the key driver for reunification; 2) try the utmost to achieve unification peacefully, but do not renounce the usage of force; 3) strive for peaceful unification under “one country two systems”; 4) adhere to the One China principle; 5) oppose any form of independence; 6) promote the peaceful development of cross-strait relations; 7) facilitate

cross-strait communication and integrative development; 8) promote cross-strait negotiations; 9) pin hopes on Taiwan's people; 10) strive for understanding and support from the international community; and 11) stress that the Taiwan problem is China's internal issue.ⁱⁱ

These fundamental policies have not changed over past decades. Every generation of Chinese leaders emphasizes peaceful unification while not ruling out the use of force. In 1955, at the fifteenth extended session of the National People's Congress Standing Committee, Zhou Enlai instructed that Chinese government should strive for the peaceful liberation of Taiwan if possible.ⁱⁱⁱ Deng Xiaoping once said, "We insist on solving the Taiwan problem by peaceful means, but we cannot renounce non-peaceful means."^{iv} Jiang Zemin made similar arguments.^v During Hu Jintao's tenure, the CCP passed the Anti-Secession Law. Article 5 stipulates that "the state shall do its utmost with maximum sincerity to achieve a peaceful reunification," while Article 8 states:

"In the event that the 'Taiwan independence' secessionist forces should act under any name or by any means to bring about Taiwan's secession from China, or that major incidents entailing Taiwan's secession from China should occur, or that possibilities for a peaceful reunification should be completely exhausted, the state shall employ non-peaceful means and other necessary measures to protect China's sovereignty and territorial integrity."

President Xi Jinping, in his speech for the fortieth commemoration of Message to Compatriots in Taiwan, used the word "peace" thirty-nine times, nineteen of them were expressed by the term "peaceful unification."^{vi} He reaffirmed peaceful national reunification in the ceremony speech marking the centenary of the CCP.^{vii} The Chinese government has always considered the right of using force to safeguard territorial integrity as inherent to national sovereignty. Giving it up is equal to "tying up our own hands,"^{viii} meaning China could do little to stop secessionist forces and foreign intervention—such would be unacceptable.

In recent years, however, as its national prowess has grown significantly, China has become more assertive in its foreign policy. China's leaders have used more forceful language in their rhetoric. For example, in 2017, President Xi announced in his report at the nineteenth Communist Party of China National Congress that achieving full reunification is an essential part of China's national rejuvenation.^{ix} Under Xi, China is more confident to take hardline stands when faced with territorial or sovereignty disputes. Beijing also has increased military pressure on Taiwan by conducting joint exercises and daily flights close to Taiwan.^x In economic areas, when conflicts arise, China tends to use economic sanctions to achieve its goals. Such actions, understandably, cause other states, especially major trading partners like the United States, to be concerned. As a result, there has been a surge of criticism against China for trying to undermine the existing world order. In addition, caveats about a disastrous cross-strait war between China and Taiwan have become a common perspective among China watchers. For example, then-commander of US Indo-Pacific Command Adm. Philip S. Davidson predicted that China would initiate a war against Taiwan around 2027.^{xi} Such speculations, indeed, are partly caused by China's over-assertive diplomatic stances. Beijing should self-reflect on such reactions to its hyperbolic rhetoric. But still, such observers should not overstate the possibility of military conflict and use rhetoric that demonizes China. There has been no fundamental alteration in

Beijing's policies toward Taiwan.

Currently, Taipei and Beijing are at odds over commitments to the 1992 Consensus, which refers to the outcome of a meeting in 1992 between the semiofficial representatives of the Beijing and Taiwan governments. As a result, cross-strait official dialogues have completely stopped. This does not mean that the mainland has abandoned the possibility of reviving cross-strait talks. President Xi has said that he welcomes dialogues with any Taiwanese party or group, but slightly different from his predecessors, he stresses that the 1992 Consensus must be the prerequisite to such talks. In retrospect, it is clear that there has been no fundamental change from earlier statements by Chinese leaders regarding the Consensus. Previously, for example, Hu Jintao stated that “we are ready to have dialogue, consultations and negotiations with any political party in Taiwan on any issue, as long as it recognizes that both sides belong to one and the same China.”^{xii} What Xi has done is to explicitly bridge the One China principle with the Consensus by stating, “The 1992 Consensus is important because it embodies the One China principle.”^{xiii}

The “One China” principle remains key. because the Consensus has a certain amount of ambiguity. For the mainland, it means both China and Taiwan belong to the same “One China,” while Taiwan perceives it as “One China, Differently Expressed.”^{xiv} Ma Ying-jeou is a Hong Kong-born Taiwanese politician who served as President of Taiwan from 2008 to 2016. During his term in office, Beijing and Taipei tacitly decided to put aside differences and cooperate. Beijing's understanding of the Consensus then was that it had a loose guarantee from Taiwan that it would not seek independence. It saw both sides as adhering to the One-China principle and working together to reach national reunification.^{xv} So when Tsai Ing-wen became president in 2016 and chose to break the common understanding about the cross-strait dialogue, Beijing reacted sharply. Even though Tsai later kept claiming that she supported maintaining the status quo, Beijing no longer trusts her words.

Ongoing Cross-Strait Connections

Despite the deterioration of political ties between Beijing and Taipei, economic relations have remained resilient. Indeed, some analysts have argued that economic interdependency would make Beijing think twice before recklessly attacking Taiwan; the damage to China's economy would be too high. In 2020, cross-strait trade increased 14.3 percent to \$260.81 billion.^{xvi} From 2011 to 2021, the respective proportions of cross-strait trading accounted for mainland China's and Taiwan's foreign trade volume have risen from 4.4 to 5.4 percent and from 28.6 to 33 percent, respectively.^{xvii} According to data from Taiwan's Bureau of Foreign Trade, in the first two months of 2022, trade with mainland China (including Hong Kong) totaled \$45.37 billion, with Taiwan having a \$17.55 billion surplus.^{xviii} Mainland China is still Taiwan's biggest trading partner and its largest source of trading surplus. Taiwan is also a big investor in China, with cumulative approved investment in the mainland comprising 44,577 cases and totaling \$193.51 billion from 1991 to 2021.^{xix} Simultaneously, China relies on Taiwan's technology industries, especially cutting-edge semiconductors, given US restrictions on such exports. In 2020, semiconductor equipment and chips account for 50.6 percent of Taiwan's total exports to China.^{xx} Many of Taiwan's semiconductor companies, such as TSMC, Media Tek, and VIA Technologies, have invested and built factories in China over the past decades, contributing to China's high-tech industries. In other words, the two sides are economically co-dependent on each other.

The Chinese government's recent efforts to promote cross-strait people-to-people communications signal its willingness to maintain mutually beneficial ties. The Seventh National Population Census shows that the number of Taiwan residents living on the mainland totals 157,886.^{xxi} According to Executive Yuan, in 2020, 242,000 Taiwanese went to work on the mainland (including Hong Kong and Macao), 153,000 fewer than 2019, but still accounting for 48.3 percent of the total population working overseas.^{xxii} The Chinese government hopes that cross-strait communications will continue to attract Taiwanese people, promote social integration and enhance mutual understanding. It has introduced a series of preferential policies to attract Taiwanese to work and live on the mainland. For example, in 2017, then chairman of Chinese People's Political Consultative Conference Yu Zhengsheng proposed measures to strengthen grassroots exchanges with Taiwan's younger generation.^{xxiii} In 2018 and again in 2019, Beijing announced a basket of preferential measures, covering finance, employment, education, medical care, market-access improvements, and other areas that would help Taiwanese to adapt to mainland society and that would remove entry barriers for Taiwanese enterprises.

How Does Taiwan Perceive the Situation?

Different from Western analysts' perceptions, Taiwan believes there has been no fundamental changes in Beijing's policies. The consensus in political circles is that Beijing has no clear plan for reunification and that cross-strait issues still largely depend on diplomatic approaches.^{xxiv} According to Chao Chun-shan, the former president of the Prospect Foundation and the Foundation on Asia-Pacific Peace Studies, Beijing's main stance has not changed: promote peaceful reunification, oppose foreign interference, but threaten to use force in order to deter independence.^{xxv} Chao used to be the key consultant on cross-strait issues for President Ma Ying-jeou, and he is still an important figure on whom Tsai relies. Chang Wu-Ueh, the director of the Center for Cross-Strait Relations of Tamkang University, told the German press that in order to analyze whether Beijing's policies have fundamentally changed, attention should be placed on Xi's major speeches, the CCP's official media (not including overseas versions), and comments from high level spokespersons of the Taiwan Affairs Office.^{xxvi} The recently released "General Plan for Settling the Taiwan Problem" is basically a summary of Xi's key speeches on Taiwan issues, and those speeches indeed do not signal any major changes. Wang Hsin-Hsien, the chairman of Institute of East Asian Studies in National Cheng-Chi University, points out that Xi has recently deemphasized the connection between "one country two systems" and Taiwan, implying that he might come up with a new and more concrete concept in the near future.^{xxvii} This could bring more certainty to the situation.

The People's Liberation Army's (PLA) actions in the Strait mainly aim at countering US naval transits through the Strait, as well to deter Taiwan. According to a report released by the South China Sea Strategic Situation Probing Initiative (SCSPI), the US Navy has recently stepped up its military deterrence operations against China in the South China Sea, including deploying carrier strike groups, dispatching nuclear-powered attack submarines, and sending warships to transit the Taiwan Strait. Beijing reportedly has been reacting to such enhanced activities.^{xxviii} For example, the PLA's actions around Taiwan have evolved from non-tactical operations aiming at normalizing military presence and claiming sovereignty, to targeted operations, such as sending ASW Maritime patrol aircrafts.^{xxix} The PLA's main goals toward Taiwan involve psychologically frightening independence forces on the island as well as wearing down Taiwan's military without

declaring war.^{xxx} China takes the position that the so-called Taiwan Air Defense Identification Zone (ADIZ) does not exist, since Taiwan belongs to China. Consequently, the PLA has been sending aircraft, warships and aircraft carriers to show Taiwan the PLA is capable of blockading the island.^{xxxi} Reacting to such grey-zone actions are quite expensive for Taiwan. If Taiwan tries to intercept every PLA aircraft, its defense budget as well as the pilots' psychological state will be under great pressure.^{xxxii}

There seems to be little room for the cross-strait dialogue to restart in the near future. The DPP^{xxxiii} is a pro-independence party whose political stances fundamentally clash with Beijing's. Chen Ming-tong, the current Director General of the National Security Bureau, wrote during Chen Shui-bian's tenure as President (2000–2008) that the first and foremost political goal of Chen's DPP administration was to build a consensus on national status based on the premise that Taiwan, according to the Constitution, is a sovereign state with the name Republic of China.^{xxxiv} The DPP's 1991 platform explicitly asserted that Taiwan is a sovereign state independent from the mainland government.^{xxxv} President Tsai, however, is more pragmatic and has tried to take a position that falls short of advocating independence. Still, given the need for support from the pan-Green Coalition, it is really hard for her to adopt a Kuomintang (KMT)-like stance. The KMT, Taiwan's main opposition party, tends to be much more accommodating toward Beijing.

In recent years, Taiwan's willingness to compromise and seek dialogue with Beijing has been shaken by events on the mainland. For example, Beijing's treatment of Hong Kong's democracy movement has seriously undermined Taiwanese trust in the CCP. The DPP can easily win votes because people fear that the CCP would do the same thing to Taiwan if unification occurred. Even the KMT has been constrained from showing friendliness to the mainland.^{xxxvi} Unfortunately, mainland's society has similarly been inundated with nationalist sentiments against Taiwan administration. And the CCP is adept in using such nationalism and tough diplomatic gestures to promote social solidarity, which means the impetus for any dialogue is absent from both sides.^{xxxvii}

Why Does the Taiwan Strait Matter for Japan?

Japan's Interests in the Taiwan Strait

The peace, stability and openness of the Strait are critical for Japan's national security. First and foremost, Taiwan's geographic proximity to Japan and the US bases that it hosts make it certain that should there be a cross-strait war, the security of Japan will be greatly threatened. Japan's westernmost point, Yonaguni Island, is only 110 kilometers from Taiwan, so if PLA forces occupied Taiwan, it would be difficult for the SDF and the US forces to protect Yonaguni, the Senkakus, and Okinawa, where 70 percent of US bases in Japan are located.^{xxxviii} Those US bases in Okinawa would be certain to attract PLA attacks.^{xxxix} In 2015, Japan enacted a set of security legislation that enables the SDF to come to the aid of the US Forces if they are engaged in operations for the defense of Japan.^{xl} The legal restriction on use of the right to exercise collective self-defense has thus been partially lifted, and Japan will be expected provide support to US forces should Washington decide to respond to an invasion of Taiwan. It is hard for Japan not to become embroiled.

Second, a cross-strait military conflict will disrupt important sea lanes on which Japan

heavily relies. As the world's third largest economy, Japan depends on the liberal order that guarantees free and open passage for trade in international waters. The Taiwan Strait is an international waterway. Japan depends heavily on those shipping routes. Stretching westward to the Middle East and beyond, Japan's shipping lanes pass through the South and East China Seas, with Taiwan being the chokepoint in between. Being scarce in natural resources, Japan needs to import oil, natural gas (LNG), and other fossil fuels to meet its energy demands. Oil is the country's largest source of energy, and 90 percent of Japan's oil comes from the Middle East, the bulk of which pass through the South China Sea and the Taiwan Strait.^{xli} Since the LNG is not suitable for long-term storage, its stockpile in Japan can only last for two to three weeks.^{xlii} If a military conflict breaks out in the Strait, Japan's economy and society will be in an extremely vulnerable situation.

Additionally, from Japan's perspective, if the PLA succeeds in militarily taking over Taiwan, the influence of United States and its alliance network in the region would be significantly weakened. The first island-chain system, which Japan regards as crucial for the safety of its territorial waters, would be breached, and its maritime lifeline would come under China's control. Furthermore, with US power in the area weakened, it would be impossible for Japan to pick up the slack to maintain the current regional order. Although in recent years, Japan has devoted efforts to strengthen its self-defense capabilities, its alliance with the United States remains the keystone of its national security.

Japan's Special Position

Japan has close relations with three relevant parties in the Taiwan issue: the United States, its close ally; China, its largest trading partner; and Taiwan, an important trading partner with which it has cultural affinity. Japan shares common democratic values with the United States, and endorses the current US-led liberal international order. As a rising power that is challenging the existing international rules and order, as well as greatly expanding its regional and global influence, China has naturally worried Japan. In this sense, should the Washington decide to take confrontational approaches to deter China, Japan has little option but to side with the United States and other like-minded countries.^{xliii} Japan has deepened regional security cooperation with the United States and other allies or partners. The growing multilateral framework among the United States, Japan, Australia and India—also called the Quad—involves personnel exchanges, joint training and exercises, and shared defense equipment and technology. Membership in the Quad has demonstrated Japan's determination to deter possible aggressive military actions from China.

China, Japan's largest trading partner, is a crucial part of the global supply chain and therefore a country with which both developed and developing states want to cooperate. Even during the current pandemic, the volume of Japan's trade with China has not declined much, and its share has even hit a record level.^{xliv} Simultaneously, Japan is China's biggest foreign direct investor. These two countries have strong reasons to cooperate and coexist. In contrast to the growing protectionism tendency in the United States, Japan firmly supports multilateralism, as seen in its leadership in the CPTPP and membership in RCEP. Any pressure from Washington requiring allies to decouple their trade and technology from China does not suit Japan's national interests. Economically, instead of excluding China, Japan is more willing to strengthen multilateral economic order and create room for the rise of that country.^{xlv}

Taiwan and Japan share cultural, political, and economic affinities, and security connections have strengthened in recent years. According to a Nikkei poll in April 2021, 74 percent of Japanese support Japan's engagement in the Taiwan Strait.^{xlvi} A recent report from the Japan-Taiwan Exchange Association shows that Taiwanese view Japan as their most favorable country, and 46 percent think that Taiwan needs to grow closer to Japan.^{xlvii} Despite absence of an official political relationship, policy-level connections continue to develop. For example, the Liberal Democratic Party (LDP), Japan's ruling party, established in 2021 its first Taiwan-focused project team, charged with delivering policy recommendations to the prime minister. The team also has facilitated legislative-level dialogues between Japan and Taiwan.^{xlviii} Japanese officials have publicly offered support for Taiwan. Economically, Japan is Taiwan's third largest trading partner and Japan is Taiwan's fourth largest. The two sides have recently agreed to deepen cooperation on semiconductors, with TSMC announcing that it will build a new plant in Japan.^{xlix} In security aspects, Japan has formally joined the Global Cooperation and Training Framework to bolster trilateral cooperation that includes the United States.¹ Moreover, there have been discussions about security issues between the previously mentioned LDP project team and the DPP.

What Can the Sino-Japanese Relationship Do to Ease the Tense Situation?

Strengthen Sino-Japanese Dialogue on Taiwan Issues

It is important that dialogue be expanded between Japan and China regarding Taiwan issues. Direct communication will help ensure accurate interpretations of each other's behaviors and increase mutual trust, which are crucial for stabilizing the situation and avoiding unnecessary friction. Although the bilateral relationship has improved somewhat in recent years, it is by far a "from minus to zero" progress.^{li} No substantial improvement has been reached in fundamental issues such as territorial disputes. The mutual trust level remains low. China has serious doubts about the motivation for Japan's interference in Taiwan issues and its support for the Tsai Ing-wen administration. Current dialogue between China and Japan regarding Taiwan issues is less mature and effective than the one between China and the United States.

During the Taiwan Strait crisis in 1996, Vice Foreign Minister Liu Huaqiu met with Secretary of State Warren Christopher, Secretary of Defense William Perry and National Security Advisor Anthony Lake.^{lii} Those high-level talks ensured that each side understood the other's policy signals, largely stabilizing the situation. Similar clarifications and discussions also happened after the United States and Japan announced a joint security declaration in 1996 and guidelines for defense cooperation in 1997.^{liii} In contrast, such communications between China and Japan have been less satisfying. The level of communication is too low, the explanations are too vague, and the timings are too late.^{liv} For example, Tokyo should have been more proactive in its communications and explanations to Beijing before and after the US-Japan 2+2 Meeting in 2021, something the United States did during talks with China in Anchorage. Insufficient communications to some extent fuel China's distrust of Japan.

Avoid Beijing's Overreactions

Although Beijing claims Taiwan as inherent to the "great rejuvenation of China," Taiwan issues largely center on the state of the US-China relationship. It would be risky if Washington were to treat Taiwan as a tool to contain China in the greater competition between the two powers.

Japan can possibly play an intermediary role to avoid Washington turning Taiwan into a proxy.

The US-China relationship is currently at a stalemate, with both sides becoming increasingly hawkish toward each other. Policymakers and think tank pundits in Washington no longer believe China will ever transform into a liberalist-like country. The United States seems to have given up hope that China will voluntarily change the nature of its state capitalism, end militarization efforts in the South China Sea, and soften its domestic rule.^{lv} Although it has used softer language, the Biden administration's basket of policies toward China have continued to be harsh. What is worse for China is that compared to Trump, the Biden administration is more sophisticated in utilizing multilateralism and its alliance system. Beijing, therefore, feels that the United States is trying to suppress China's rise across the board, and it has responded with a similar tough stance. The United States wants China to self-reflect on its aggressive foreign policy stances and to liberalize its domestic system, while the latter wants the former to accommodate its rise, stop interfering in its domestic issues, and exit from its backyard.^{lvi} There is no end in sight to such confrontation.

Beijing has already warned Washington not to "play the Taiwan card" to contain China. A spokesperson on May 23 said that the United States is playing with fire and could get burned. Such rhetoric should not be taken lightly by Washington. US actions could push Beijing to overreact. Taiwan should be treated as a special issue that should be viewed more or less separately from the overall competitive aspects of the US-China relationship. For Beijing, Taiwan has already been built into its ruling legitimacy. In earlier crises across the Taiwan Strait, China's power was much weaker, and it ultimately retreated, but those incidents indicate how sensitive and determined Beijing is on this issue.

China, now much more powerful, has been very skeptical about the Tsai administration from the outset. Such distrust derives from historical experience and DDP's constitutional pro-independence standpoint. Tsai also had a very close relation with former president Lee Teng-hui (1923–2020), who was famous for his pro-independence stance and whose actions are said to have led to the 1996 Taiwan Strait Crisis. Tsai's immediate denial of the 1992 Consensus after taking office has confirmed Beijing's worries. Given such a context, if the United States and Taiwan become too close or move toward an alliance, the Chinese government would feel it has no choice but to take action.^{lvii} In recent years, Washington has moved toward crossing the red line set by Beijing by sending high-level officials to the island and increasing arms sales. Washington might view such behavior as showing its determination to support Taiwan and to deter the mainland's actions in the region. Nevertheless, such actions will only intensify Beijing's unease and bring more uncertainty to the situation.

Japan could play a part in preventing the United States from going too far. A more cooperative Sino-Japanese relationship could help ease some of Beijing's anxiety, but Japan might also act as a brake on the United States' increasingly radical tendency in the region, should that start to occur. Tokyo should try to strike a balance between its now robust alliance with Washington and falling into the trap of contributing to conditions creating a war that everyone wants to avoid. As the key ally of the United States in the region, it is understandable that Japan will side with Washington to support Taiwan. However, US policy toward the Strait runs the risk of being overly hawkish. Instead of blindly following the US lead in that case, Japan should try to

act as a restraint on possible radical and risky actions. That could start for example with Japan not developing close military ties with Taiwan. It should strengthen its defense cooperation with the United States, but direct support to Taiwan would be too provocative.

In addition, Japan could be the broker for a trilateral US-China-Japan dialogue regarding the situation in the Strait, which is after all international water. Such communication can avoid misunderstandings and misjudgments, such as an unplanned or unforeseen incident on the high seas. Fortunately, the Biden administration has already shown interest in building up “common-sense guardrails”^{lviii} for US-China relations to ensure that competition will not turn into conflict. The two countries still have room for cooperation in areas such as climate change, global health, and North Korea. Also, during the 2022 Shangri-La Dialogue, defense officials from both sides have held meetings, and according to US officials, the Biden administration is seeking to establish more robust communication mechanisms for crisis managements.^{lix} This signals US patience and willingness for diplomatic engagements. Washington and Tokyo will not end up at odds with each other if the latter chooses to take a step back in certain issues. If Japan could be more cooperative to China while remaining on the US side, the situation will likely cool down, which is favorable to all sides.

Mitigate Economic Tension

Currently, the Tsai administration is trying to reduce Taiwan’s economic dependence on the mainland, weaken cross-strait economic ties, and promote increased cooperation with the United States, Japan, and Southeast Asian countries. However, this policy should not be an either-or question. Cross-strait economic connections should be encouraged since they have contributed to peace and prosperity on both sides of the Strait. Diversifying Taiwan’s trading partners can enhance the island’s economic security. But the two goals are not incompatible. Multilateral economic frameworks can serve as intermediaries to mitigate cross-strait economic tensions.

China’s and Taiwan’s simultaneous applications for CPTPP membership could be an opportunity for dialogue in which Japan can play a role. Although some analysts have doubted the sincerity of China’s move, CPTPP members should not close their minds to the possibility, for bringing China into the mega-trade deal could bring about a win-win outcome. Economically, the current CPTPP’s global income gains would quadruple from estimated \$147 billion annually to \$632 billion, a quarter more than the original form with US participation.^{lx} At the same time, CPTPP, known for its high-standard economic and trade requirements, will bring serious challenges to China, especially in areas of state-owned enterprises (SOEs), data flows, and labor rights. This means the ambitious trading regime can significantly pressure China to carry out domestic reforms, better integrate the economic giant into regional and global trading systems, and mitigate geopolitical tensions. From China’s perspective, CPTPP membership indicates huge benefits, including boosting GDP by 0.74 to 2.27 percent and exports by 4.69 to 10.25 percent.^{lxi}

China has signaled its determination for multilateral economic integration. To be sure, obstacles exist. For example, regarding e-commerce, China’s Cybersecurity Law contradicts CPTPP’s requirements for cross-border flow of information and data localization. The Law stipulates that personal information and important data collected and generated in China by critical information infrastructure operators should be stored within China’s territory (Article 37). Moreover, China would have to make great concessions in order to gain membership, such as

significantly drop tariff barriers, reform SOEs and support more neutral competition, improve anti-monopoly legislation, and allow freedom of association and collective bargaining in labor.^{lxii}

China has made some progress in recent years. For example, it reduced by nearly two-thirds the number of restrictive measures on the foreign investment negative list.^{lxiii} In the financial sector, China has further opened up that market and lifted barriers for foreign participation.^{lxiv} Further, as its economy continues to move up in the value chain, the government had ramped up IP protections.^{lxv} Although these improvements are far from enough, they signal China's seriousness in getting itself integrated into, rather than isolated from, multilateral economic frameworks. China's move to apply for CPTPP membership is not an expediency under geopolitical pressure, but a result of careful consideration, based on the country's development needs.^{lxvi}

As an export-oriented economy, Taiwan is eager to join multilateral trade deals. The deteriorating cross-strait relationship has impeded the island's participation in regional trade blocs. The most recent case is its exclusion from RCEP, the world largest free trade agreement. Currently, it is unclear what impact RCEP might have on Taiwan's economy. According to Chun Lee, the senior deputy CEO of the Taiwan WTO & RTA Center, the influence will be limited; 70 percent of Taiwan's exports to RCEP signatories already enjoy tariff-free status.^{lxvii} Nevertheless, scholars argue that negative effects in the long term are noteworthy. For example, in the ASEAN market, which the New Southbound Policy is designed for, Taiwan will be faced with increasing competition pressures from Japan and Korea in traditional manufacturing sectors and investments because of lower tariffs and trading and investments barriers for RCEP members.^{lxviii} It is undeniable that the potential marginalization effects could be detrimental to the island's economic prospects. Given such circumstances, CPTPP's membership is crucial for Taiwan.

Since China and Taiwan are applying on an equal footing, it gives Japan, the main pusher for the ambitious regime after US withdrawal, potential leverage to get the two sides to talk. Beijing and Taipei are currently hung up over the disagreement on the 1992 Consensus, with neither side willing to back down. Official dialogue channels have been completely closed, further intensifying mutual distrust and gradually dragging the situation into a vicious circle. To deal with the impasse, the 1992 Consensus can hardly play a meaningful role. No matter whether it is a misunderstanding or not, the reality is that the Taiwanese have already equated the Consensus with the "One Country Two System" scheme, which they strongly dislike based on deep distrust against the CCP after Hong Kong's experience. If Beijing keeps regarding the Consensus as the prerequisite for dialogue, it will be difficult to resume talks.

So, the eagerness of both sides to join the CPTPP provides an opportunity. Japan could carefully incorporate the Taiwan problem into the trade negotiation process with China. That does not mean recklessly threatening China, which would infuriate Beijing, but rather pressing China to be more flexible in restarting a cross-strait dialogue and negotiating a new scheme in place of the 1992 Consensus for future cross-strait engagements. Pressure should also be put on Taiwan. It would be too naïve for the DPP to expect Beijing to be friendly to a pro-independence Taiwan administration. Tsai needs to show sufficient sincerity, instead of repeating the equivocal "maintaining the status quo" slogan, and try to win understanding from Beijing. As the key pillar of the CPTPP, Japan could play a significant role. Undoubtedly, it will be an extremely challenging

process, but as long as the two sides start to talk again, the possibility of armed conflict would decrease.

Establishing a Trilateral Framework

The Sino-Japanese relationship has the potential to promote a trilateral dialogue among China, Japan, and Taiwan about East Asian maritime security. This is not a task starting from scratch. The 2008 Sino-Japan Principled Common Understanding on the ECS Issues, the 2012 Ma Ying-jeou East China Sea Peace Initiative, the 1997 Sino-Japan Agreement on Fisheries, and the 2013 Japan-Taiwan Agreement on Fisheries together formulate a possible basis for a new trilateral dialogue on maritime cooperation. These initiatives and agreements indicate the common interests of East China Sea security shared by the three parties. Although the mainland side might not currently agree to start such trilateral negotiations given Tsai's denial of the Consensus, it is a goal worth pursuing. Establishing an institutional framework among these three parties can build up mutual trust and create a peaceful way of channeling conflicts.

Conclusion

The cross-strait relationship has now reached a critical juncture. The situation is, indeed, quite tense, and requires sophisticated crisis-prevention by the main parties. Nevertheless, the possibility for a war breaking out is still at a controllable level. Within today's hawkish atmosphere dominating US-China relations, Japan—by tapping the still cooperative aspects of the Sino-Japanese relationship—can play a determinative role. Regarding the Taiwan issue, Japan could also apply its relatively cooperative relationship with China to help cool down the situation. At the same time, the solid alliance between Japan and the United States will continue to act as an unignorable deterrence for China.

In addition, external pressure should be placed on Beijing and Taipei to restart talks as soon as possible, as argued above. Japan could take the lead through multilateral frameworks. It is quite understandable for many countries in the international community, especially those with Western values, to view China's rise skeptically. However, those skeptics should be cautious not to create an enemy where one does not actually exist. China, as a country with a population of 1.4 billion, must take good care of its economy. That means, there is no reason for the Chinese government to recklessly launch a war over Taiwan and disrupt the peaceful international environment which it has benefited from for decades. Fierce competition between China and the United States, as well as with other US allies, may be the norm for the foreseeable future. So, it is important for every party to remain calm and rational. The roles of Japan and China, as close neighbors in the Indo-Pacific, are critical for regional peace and stability.

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Evaluating Japan's Status as an Official Development Assistance Superpower

Michael Lawrence

Introduction

After its defeat in World War II, Japan found its economy in shambles and its infrastructure devastated. A massive reconstruction effort would be needed to rebuild the country. Most of the assistance came from the United States via the Dodge Plan, reinvigorating the nation and putting it on the fast track to its present-day status as a global economic giant and vital member of the liberal international order. The World Bank and the IMF also helped Japan rebuild its infrastructure in the 1950s. This experience as a developing nation, aided and strengthened by foreign assistance, greatly shaped the national consciousness of modern Japan. A core aspect of the last seventy years of Japanese foreign policy has been to replicate this experience by coming to the aid of other developing nations through the disbursement of Official Development Assistance or ODA.

Since World War II, Japan has seen itself grow from a recipient of ODA to one of the world's largest donors of ODA. Without a doubt Japan can be thought of as an ODA superpower throughout the end of the twentieth century and the beginning of the twenty-first. Now, however, the situation is in flux. The COVID-19 pandemic has seemingly changed everything about how the world operates and has given rise to uncertainty about what the future holds. We seem to be at a crossroads in how members of the global community interact with each other, and this inflection point provides an opportunity to reassess the status of Japan's ODA programs. In this paper, I will examine whether Japan is still an Official Development Assistance superpower, as well as assess the strengths and limitations of Japan's ODA programs. I will also examine where the geographical emphasis now lies and what kind of programs are being given priority. First, however, it is important to have a brief overview of Official Development Assistance and Japan's ODA programs.

A Brief Overview of Official Development Assistance

Official Development Assistance is known as the gold standard of foreign aid. It is bilateral or multilateral government aid given to developing countries with the specific intention of promoting welfare and economic advancement. Data on ODA is compiled, authenticated, and published by the Organization of Economic Cooperation and Development (OECD). The Developmental Assistance Committee (DAC) is a group of nations within the OECD that is tasked with collaborating on and promoting sustainable policies which are intended to increase global ODA spending. The committee sets a target of 0.7 percent of total DAC member Gross National Income (GNI) to be spent on ODA. Global ODA expenditures reached an all-time high in 2021, totaling \$178.9 billion (USD), up 4.4 percent from 2020. Despite this, DAC member countries hit 0.33 percent of combined GNI, falling well short of the agreed upon target.ⁱ

As one of the world's largest donors, Japan has long been referred to as an ODA superpower, spending \$550.5 billion gross and \$387.5 billion net from 1954 to 2019 in aid programs covering over 190 countries. The difference between the two numbers results from loans being repaid to Japan. This aid has been disbursed bilaterally through grants, technical cooperation, and concessional loans, as well as multilaterally through grants to international organizations like

agencies of the United Nations or multilateral financial institutions like the Asian Development Bank. ODA also comes in the form of human expertise, as Japan has sent over 197,000 experts to 183 countries and 54,000 volunteers to 98 countries. It has also trained over 649,000 people from ODA recipient countries over this same period.ⁱⁱ

According to the Ministry of Foreign Affairs (MOFA), the intention of Japan's ODA is to "build a better future by connecting the world." The ODA has three main objectives: (1) "places emphasis on and supports self-help efforts of developing countries on the basis of Japan's own experience"; (2) focuses on achievement of poverty eradication through sustainable economic growth; and (3) "promotes 'human security' to counter various risks that threaten people's lives and livelihoods, such as poverty, environmental degradation, natural disasters, terrorism, and infectious diseases."ⁱⁱⁱ

Officially, MOFA sets policy direction, and the Japan International Cooperation Agency (JICA) is responsible for implementation. Informally, other bureaucratic agencies like the Japan Bank for International Cooperation (JBIC); the Ministry of Economy, Trade, and Industry (METI); and the Ministry of Finance (MOF) exert influence on various stages of the ODA formation process. Also, both formally and informally, Japanese companies can affect ODA policy direction and implementation. Many ODA projects are joint public-private initiatives, occurring almost exclusively with Japanese corporations.

Examples of Japan's ODA include infrastructure projects such as the construction of the port of Mombasa in Kenya, support for sustainable development growth including construction of the Pacific Climate Change Center in Oceania, or peacekeeping initiatives like providing equipment and training on de-mining for the Cambodian Mine Action Center.^{iv}

History of Japanese Official Development Assistance

In order to determine whether Japan remains an ODA superpower, it is imperative to examine the origins of the program. Through tracking development of Japan's ODA to the present day, it is possible to make educated predictions on what the future may hold for Japan's status as an ODA superpower.

Japan's Official Development Assistance officially began in 1954 with Japan joining the Colombo Plan, a regional initiative developed to facilitate economic cooperation centered on British Commonwealth Nations. This marked the first official government to government economic cooperation in which Japan would engage.^v

Initially, Japan's ODA had a dual focus on distributing war reparations and facilitating economic cooperation with WWII-affected countries in Southeast Asia. Japan spent years—starting in 1954 and finishing in 1958—negotiating reparations agreements with the Philippines, Indonesia, Burma (now Myanmar), and Thailand. Japan's first economic cooperation agreement was signed with India in 1958. A clear benefit of these agreements was the resulting strengthening of ties between Japan and its South and Southeast Asian neighbors. An additional advantage, one that would be felt for the coming decades, was the integration of new markets for Japanese companies. As these reparation payment and economic cooperation agreements came with

stipulations placed on them by the Japanese government, Japanese companies found themselves the beneficiaries. This would be a continuing theme throughout the history of Japan's ODA.^{vi}

These early agreements also had the effect of burnishing Japan's reputation as a respected contributor to the international order. This burgeoning status would coincide with Japan's economic boom period in the 1960s, and the result was a corresponding increase in the size and scope of ODA. In 1960, Japan would join the Developmental Assistance Committee. Four years later in 1964 they would join the OECD as its first Asian member, unofficially cementing their spot on the global stage.^{vii}

Japan's newfound reputation as a major ODA player came with its fair share of detractors. Japan was chided by other major ODA donors for what was still a commercially focused ODA program. Some argued that the primary beneficiaries of Japan's ODA were Japanese companies, and not those on the ground in developing countries that needed it most—a charge still levied at Japan today. In 1970, Japan pledged to commit 0.7 percent of GDP toward ODA, in line with overall DAC member country goals.^{viii} Despite this, Japan has never reached this goal even though that remains the pledge today.^{ix}

Hit hard by the 1973 oil crisis, Japan would undergo another shift in ODA strategy by moving some disbursement of funds toward the Middle East starting in 1975.^x This would mark a turning point in overall geographical strategy from a regional priority of Southeast Asia to the truly global ODA program Japan employs today.

In 1976, reparations payments to the Philippines would end, also marking the end of the reparations era of Japanese ODA. With this, Japan would announce a new, tiered strategy with the goal of increased ODA going forward. Priority program focus would shift to different sectors of aid, including Basic Human Needs and Human Resource Development, as well as the traditional focus on economic infrastructure. Additionally, geographical focus would shift to Latin America, Africa, and other regions of Asia, in addition to the Middle East. This would be codified in a 1978 MOFA publication titled "The Current State of Economic Cooperation and its Outlook: The North-South Problem and Development Assistance." Within it, this strategic shift was summed up by two main points:

1. Japan can ensure its security and prosperity only in a peaceful and stable world. One of the most appropriate means for Japan to contribute to the peace and stability of the world is assistance to developing countries.
2. Japan is closely interdependent with developing countries since it is able to secure natural resources only through trade with those countries. Therefore, it is essential to maintain friendly relations with developing countries for Japan's economic growth.^{xi}

The emphasis of Japanese ODA was now clearly on ensuring regional and global security, as well as maintaining access to necessary resources through friendly relations with developing countries. Now, ODA was viewed as a necessary cost to make the world a place where Japan could thrive.

By 1980, Japan had become the fourth largest ODA donor, trailing only the United States, France, and West Germany. Japanese ODA loans that once came with many stipulations attached, for the benefit of Japanese companies, were now among the most unfettered among DAC countries. Where there was once a focus on capital-intensive economic assistance, now much of the money was making its way directly to the poor in developing countries, addressing on-the-ground economic needs.^{xiii}

MOFA categorized overall strategy on ODA in this moment through a 1980 publication titled, “The Philosophies of Economic Cooperation, Why Official Development Assistance?” Here, MOFA would state that Japan’s economic cooperation is guided by two principles: “Humanitarian and Moral Considerations,” and “the recognition of interdependence among nations.” Additionally, “it defined Japan’s aid philosophies based on Japan’s own experience and conditions’ (having a peace Constitution, being an economic power, economically highly dependent on other countries, having accomplished modernization and a non-Western country) combined with aid rationales commonly held by donor countries. It concluded that providing ODA is a cost for building an international environment to secure Japan’s comprehensive security.”^{xiii}

With this codification of a shift in ODA strategy in the 1980s, priority was given to four programs: rural and agricultural development, development of new and renewable energy, human resource development (technical assistance), and promotion of small- and medium-sized businesses in developing countries.”^{xiv}

The 1990s would bring another change in ODA strategy, but this time there would be a return to tightening of requirements around disbursement of funds. In 1991, following the end of the Cold War, the Japanese government announced new guidelines that would help to steer ODA implementation. Four categories would be monitored, in light of the different global landscape following the collapse of the Soviet Union: trends of the military expenditures of recipient countries; trends of their development and production of mass-destruction weapons and missiles; export and import of arms; and their efforts to promote democratization and introduce a market-oriented economy, as well as the situation regarding the securing of basic human rights and freedoms.^{xv}

These guidelines were meant to reflect the new reality of an international order that was no longer bipolar. Japan still wanted ODA to reflect the overall goal of maintaining global peace and security to allow for countries to thrive. Now, though, a special focus would be given to those who kept military expenditures low and rather focused on the cultivation of democracy, open markets, freedom, and human rights.

This new philosophy was finally culminated in the ODA Charter, which was adopted by the cabinet on June 30, 1992. Enshrined in the Charter were an additional four core principles: (1) humanitarian considerations, (2) recognition of interdependence among nations in the international community, (3) environmental consideration, and (4) support for self-help efforts of recipient countries.^{xvi}

The rest of the decade saw criticism hurled at this charter, depicting it as too rigid. It would be revised again ten years later in 2002 under Prime Minister Miyazawa Kiichi to loosen the

criteria around use of ODA for military purposes. Language was changed to state that use of ODA for military purposes should be avoided, giving policy makers more flexibility in disbursement. This revision of the ODA charter would largely be the guiding principle of Japanese ODA until the Abe administration (2012–2020).

Official Development Assistance under the Abe Administration

Abe Shinzo, Japan’s longest serving prime minister, oversaw yet another shift in ODA strategy, molding the program largely into what it is today. Along with then foreign minister (and current prime minister) Kishida Fumio, Abe looked to streamline the notoriously bureaucratic ODA process by centralizing control. A philosophical shift was also underway, as the Abe administration looked to use ODA as a geopolitical tool by wielding it as another arm of government to advance the foreign-policy interests of Japan and bolster its security interests. Additionally, the administration looked to use ODA as a hedge against China’s rapid rise and shifted ODA program emphasis back toward infrastructure. Additionally, there would be a new focus on health and the environment. This was all done under the umbrella of Abe’s main foreign policy goals of increasing Japan’s role and visibility on the world stage and embracing multilateralism.

As part of the Abe administration’s overall goal of cutting red tape, revamping military policy, and promoting “proactive pacifism,” the Prime Minister enacted a few rules that would have the effect of making the ODA process less onerous and change for what ODA could be used. First, tangentially related, Abe abolished the prohibition on exporting military weapons. Second, by cabinet decision, the administration reinterpreted Article 9 of the constitution to allow the limited use of collective self-defense by the Japanese Self Defense Force in responding to a national crisis. Lastly, Abe took aim at nullifying specific principles of the ODA charter in an effort to allow ODA to be used to support foreign military forces.^{xvii} These actions caused enormous controversy, since neighboring countries like China and South Korea were ever wary of potential rearmament. The Abe administration downplayed such concerns, claiming any changes were made with the idea of rectifying the common criticisms of Japanese ODA—the main one being a primary focus not on developing nations that desperately need the aid, but rather on areas of the globe that Japan has economic interests.^{xviii}

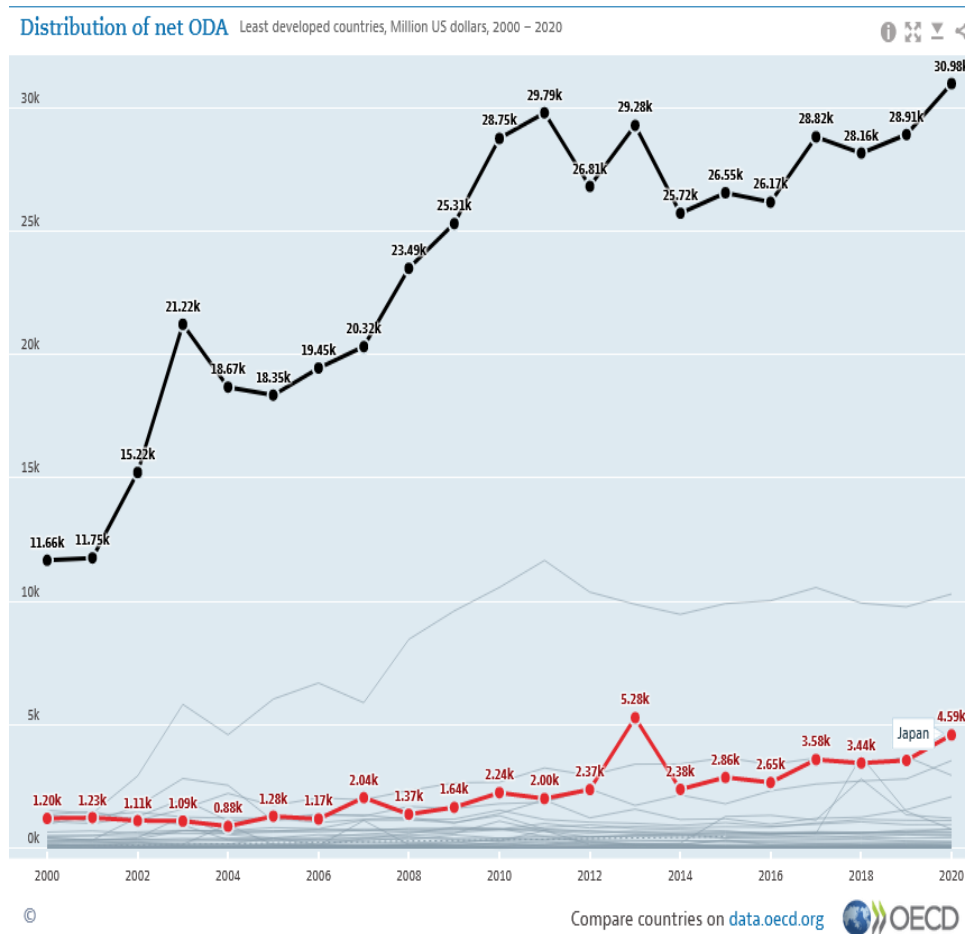
The Abe administration also insisted on a shift in emphasis back toward infrastructure projects in the ODA program, as well as newly identified health and environmental issues. The administration saw an opportunity to leverage the quality infrastructure projects Japanese ODA had a reputation for, against the cheaper, influence peddling Belt and Road Initiative (BRI) infrastructure projects China was undertaking. Abe additionally centered on the need to fund health initiatives, drawing on Japan’s own domestic experience with health care. In 2017, he pledged \$2.9 billion in ODA to support Universal Health Care. Climate initiatives also came to the forefront under his watch. By 2018, 53 percent of Japanese bilateral ODA was dedicated to projects with climate-minded parameters attached to them. By the end of his term in office, ODA climate financing has increased 175 percent from 2011, despite ODA remaining flat as a percentage of GNI from 2013–2019.^{xix}

During Abe’s time in office, he oversaw a monumental step in the direction of Japanese ODA. In 2018, on a trip to Beijing, Abe announced the end of the ODA program to China after

forty years. China had graduated from being an ODA recipient and had become a foreign aid donor. Having begun in 1979 after the 1978 signing of The Treaty of Peace and Friendship between the two nations, Abe declared mission accomplished. “China has developed into the world’s second-biggest economy. The historic mission (of the ODA) is completed,” proclaimed Abe.^{xx} Certainly, there were other geopolitical considerations in mind upon announcement. It should also be noted that the complete halt of ODA toward China was not completed until March of 2022.^{xxi}

While current Prime Minister Kishida’s legacy on ODA is in the process of being written, it is likely that we will see a continuation of many of the policies enacted under the Abe administration. It would not be a surprise, however, to see more shifts in strategy, programs, and locations of emphasis, as the history of Japan’s ODA clearly shows. The program has proven to be successful and flexible over its almost seventy years in existence. To determine whether that continues to be the case, and to judge whether it will be going forward, it is imperative to examine where Japan’s ODA programs stand today.

Where We Stand Today: A Look at Japan’s Official Development Assistance Data



(Source: OECD^{xxii})

This OECD chart depicting distribution of net ODA by country shows that Japan today remains a formidable distributor of development assistance, ranking second only to the United

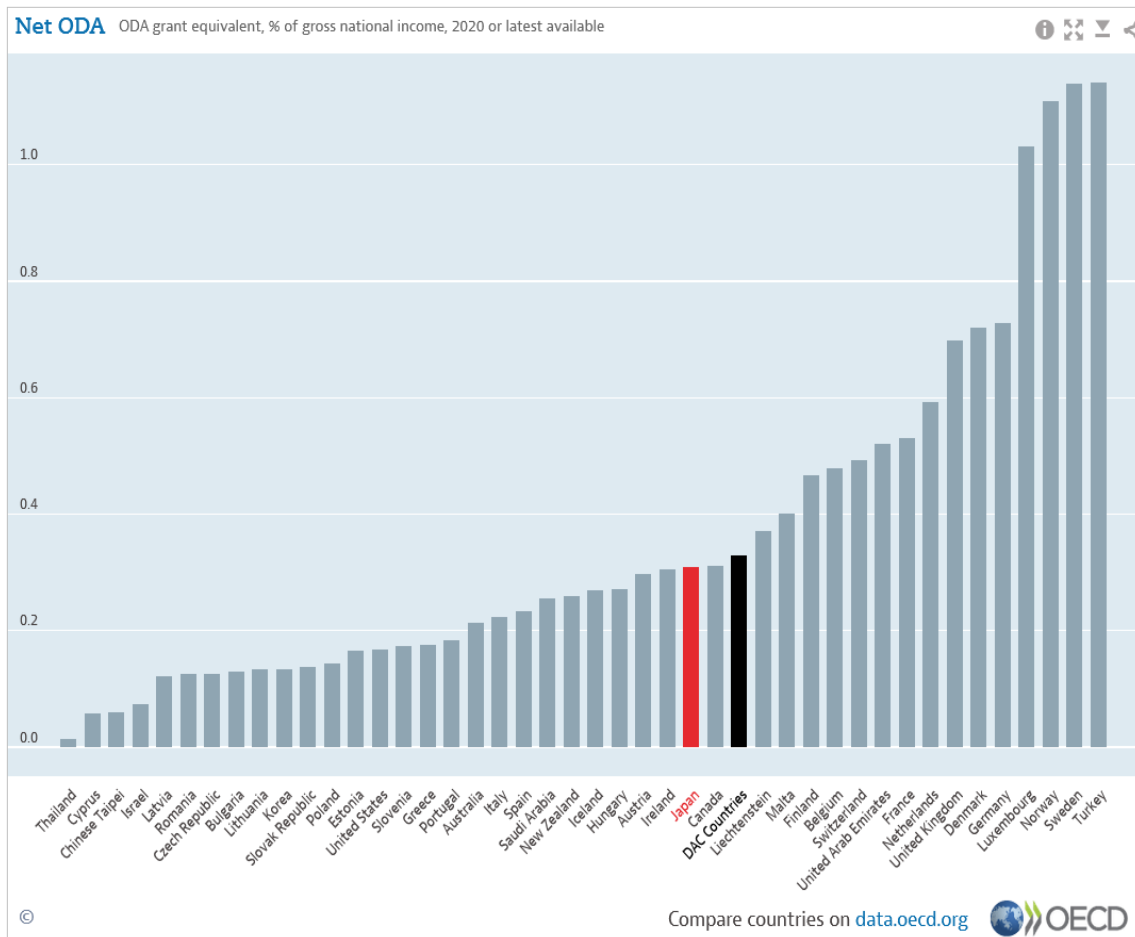
States. Japan provided 14.81 percent of global net ODA in 2020. This was an increase of 12.1 percent over the previous year, largely due to the onset of the COVID-19 pandemic and the need for related aid.

A further breakdown of ODA numbers helps illuminate some of the strengths and limitations of Japanese ODA as well as some of the programs of emphasis.^{xxiii} As of 2020, the last year for which much OECD data is available, Japan ranks fourth among DAC member countries in social infrastructure spending, defined as “physical facilities and spaces where the community can access social services...including health-related services, education and training, social housing programs, police courts, and other justice and public safety provisions, as well as arts, culture and recreational facilities.”^{xxiv}

Economic infrastructure remains a clear strength of Japanese ODA, as it has been through history. Japan ranks first among DAC countries in economic infrastructure spending by a wide margin, spending 33 percent more than second place Germany. Economic infrastructure can be defined as “internal facilities of a country that make business activity possible, such as communication, transportation and distribution networks, financial institutions and markets, and energy supply systems.”^{xxv}

Additionally, Japanese ODA ranks fourth in production spending, second in multisector, and fifth humanitarian aid as of 2020. Long a common criticism of Japanese ODA, it appears that humanitarian assistance is still a weakness relative to other priorities.^{xxvi}

Finally, in what is a clear strength of Japanese ODA, Japan ranks number one in program assistance ODA, almost tripling the spending of the second place United States in 2020. Program assistance is defined as “all contributions made available to a recipient country for general development purposes, i.e., balance-of-payments support, general budget support and commodity assistance, and not linked to specific project activities.”^{xxvii}



(Source: OECD^{xxviii})

While looking at total net ODA spending shows Japan as a dominate present-day assistance power, examining through the lens of net ODA by percentage of Gross National Income complicates the story. As a reminder, the DAC sets targets of 0.7 percent ODA spending relative to GNI. Most countries do not hit this target, and only seven did in 2020, the latest year for which data is available. By this metric, Japan ranks seventeenth in net ODA as a percentage of GNI at 0.31 percent and falls slightly behind the DAC country average of 0.33 percent. This is not unusual for Japan, as they have consistently hovered between 0.2 and 0.35 percent over the entire history of their ODA programs despite constant pledges to improve in this metric. However, as a result of Japan’s prolific economic output over the past few decades, total Japanese ODA expenditures remain significantly higher than almost all nations.

Assessing the Strengths and Limitations of Japan’s Official Development Assistance

Having examined the rich history of Japanese ODA and analyzed present-day data, it is now possible to assess the strengths and limitations of Japan’s ODA. Beginning with the strengths, it is clear that Japan’s ODA has proven to be broad-reaching and flexible over time for such a large program. It has gone through several shifts in strategy since its inception, with different programs of emphasis and various regions of the world prioritized based on conditions of the time. Japan’s

ODA as a percentage of GNI has remained relatively constant throughout the years, but total ODA spending has steadily increased as a result of Japan's prolific economic output.

This enormous expenditure has led to another strength of the program: it has cemented Japan's role as a major player in the international order. From mending ties with its neighbors after the war all the way through to Abe's focus on multilateralism, Japan has seen its position in the global order strengthened as a result of its successful ODA. This is likely to continue as Prime Minister Kishida looks to build upon the goals of the Abe administration, of which he was a key architect as foreign minister.

While tougher to quantify, there is no doubt that another strength of the program is the role it has played in the success that many East Asian economies have experienced over the last couple decades. For example, in Indonesia:

“Japan's ODA loans financed the construction of power stations which generate 15 percent (1,994mw) of the nation's total power output, the construction and renovation of 12 percent (799km) of its railway systems, the construction of 15 percent (56km) of its toll roads, the construction of 60 percent of the intra-city communication transmission cable conduit system of Jakarta, and the construction of 54 percent of the city's water filtration facilities (9,600t/s).”^{xxix}

While Japan's ODA has seen numerous and tangible successes, it has not been without its share of limitations as well. Despite pledging for decades to increase ODA spending as percentage of Gross National Income to come in line with the DAC member goal of 0.7, Japan has fallen well short. During the entirety of the initiative, ODA spending has hovered between 0.20 and 0.35 percent of GNI. The government has pledged to improve this metric as far back as 1970,^{xxx} but it has made no progress as the rate has remained relatively flat within this window. Sources inside the administration defend the stagnation by saying that while the rate has not gone up, the money being spent is being done so more efficiently. While there may be some truth to that, the reality is that net ODA spending has remained flat despite Japan's emergence as one of the largest economies.

Additionally, despite the Abe administration's efforts to streamline government and cut red tape surrounding the ODA process, in practice ODA disbursement is still very decentralized. Multiple governmental agencies have a role in the crafting and implementation of ODA policy, both formally and informally. JICA and MOFA formally tussle over ODA disbursement, but other agencies informally exert influence on the process. METI, the JBIC, and even powerful Japanese companies exert considerable influence over which programs are emphasized and which regions are prioritized. There are many interested parties that have a stake in the eventual outcome of ODA policy, and each find ways to get a piece of the pie throughout the process. This slows down implementation and can have a negative effect on the quality of the final product.

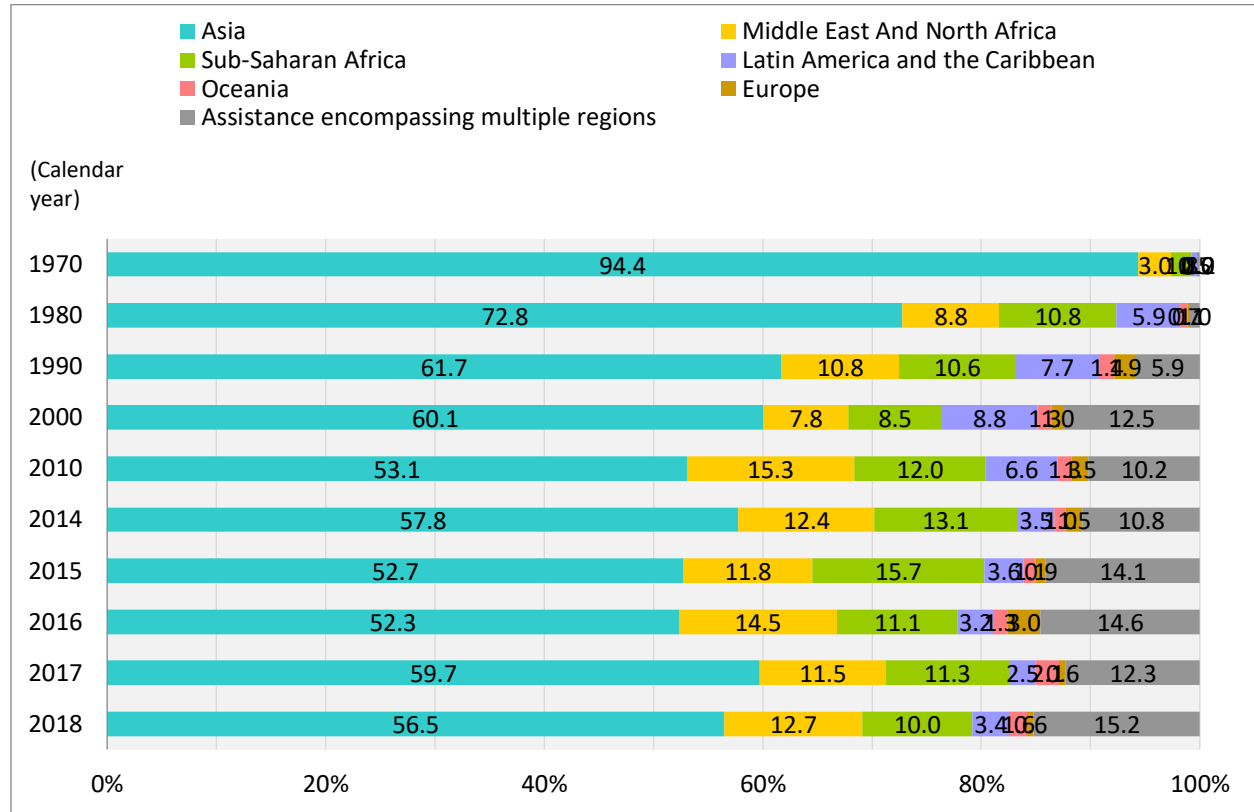
Sources with knowledge of the inner workings of the ODA bureaucracy say the interagency process is broken. Recent attempts at creation of a National Security Council like body to oversee all parties with a stake in ODA have failed. Cooperation is difficult, and credit is not shared. METI remains the all-powerful organization behind the decision-making process despite MOFA and

JICA having the defined roles. Additionally, the lines between public and private are blurred, and economic favoritism is the tool used to advance other interests of Japanese foreign policy. All this has led to a situation where traditional development work on the ground can be seen as lacking from Japan's ODA programs.

Lastly, a limitation of Japanese ODA is the low profile of the program internationally. Domestically, at least relative to the United States, the Japanese government receives high marks on informing the public of the goals of foreign aid by teaching it in schools and amplifying the necessity of such programs through public services announcements. These methods focus on how we are one global society and remind citizens of how Japan was once itself dependent on foreign aid as a devastated and developing nation after World War II.

Conversely, internationally, the public profile of Japanese ODA is much lower. For example, take the case of Japan's multilateral donations to the UN. In recent years large chunks of ODA funding has originated out of the supplemental budget process that occurs at the end of the Japanese fiscal year, rather than the normal, onerous ODA budget process that takes place over the entirety of the overall budget. This has had both positive and negative effects. For one, this money is not subject to pilfering by numerous entities with a stake in ODA outcomes, like JICA and MOFA. This helps to mitigate that particular limitation of ODA policy. On the other hand, once the supplementary budget process is completed, the leftover ODA money is donated multilaterally to the UN and subsequently enters into their general fund. Japan then gets no credit internationally for programs the UN then enacts with those funds, keeping the global profile of Japanese ODA low.

Examining Geographical Areas of Emphasis for Japan’s Official Development Assistance



(Source: MOFA^{xxxii})

Just as ODA has seen multiple shifts in strategy over the decades, so to have the areas of geographical emphasis changed. In 1970, 94.4 percent of Japan’s ODA went to Asia. Three percent went to the Middle East and North Africa, and the little remaining was scattered across Sub-Saharan Africa, Latin America, and the Caribbean. By 1980, a clear globalization trend had taken hold, as significant funds shifted out of Asia and to the rest of the world. This trend would continue through 2010, with the share of ODA funds to Asia almost bottoming out at 53.1 percent of total ODA expenditures. The big winners in this shift were the Middle East and North Africa, Sub-Saharan Africa, Latin America, and the Caribbean, as well as a subcategory encompassing overlapping regions, each garnering 15.3, 12.0, 6.6 and 10.2 percent of ODA funds respectively. The remaining bits were distributed to Europe and Oceania.^{xxxiii}

During the second half of the Abe administration, and coinciding with some of his stated security goals, there appears to be another shift underway in geographical emphasis for ODA recipients. The percentage of ODA toward Asia seems to be increasing and gaining steam, reversing the earlier trend of globalization. By 2019, the top seven recipients of Japanese ODA were all Asian countries, with India far outpacing second place Bangladesh as the top recipient country.^{xxxiii} Sources knowledge of the situation expect this trend to continue as Japan focuses heavily on regional security through the Free and Open Indo Pacific initiative as well as its partnership with India in the Quad.

Examining the Priority Programs of Emphasis for ODA

2018 (calendar year)		(Commitments basis, Unit: US\$ million)				
Sector	Type	Grant Aid	Technical Cooperation	Total Grants	Loan Aid	Bilateral ODA
						(Share, %)
I. Social infrastructure & services		1,073.77	624.72	1,698.50	1,344.11	3,042.61 15.77
1. Education		162.08	329.77	491.85	168.66	660.51 3.42
2. Health		305.10	71.51	376.61	162.41	539.02 2.79
3. Population policies and reproductive health		24.10	14.61	38.71	-	38.71 0.20
4. Water and sanitation (water and sewerage)		179.81	78.45	258.26	877.22	1,135.48 5.88
5. Government and civil society		360.86	61.79	422.65	-	422.65 2.19
6. Other social infrastructure & services		41.82	68.59	110.41	135.82	246.24 1.28
II. Economic infrastructure & services		489.12	340.39	829.50	10,230.86	11,060.37 57.32
1. Transport and storage		341.82	240.98	582.80	9,006.63	9,589.43 49.70
2. Communications		3.26	15.70	18.96	-	18.96 0.10
3. Energy		89.81	51.78	141.59	1,224.24	1,365.83 7.08
4. Banking and financial services		52.54	18.42	70.96	-	70.96 0.37
5. Business support		1.68	13.50	15.19	-	15.19 0.08
III. Production sectors		189.31	313.94	503.25	949.00	1,452.26 7.53
1. Agriculture, forestry and fisheries		145.37	175.83	321.20	813.64	1,134.85 5.88
1) Agriculture		89.83	126.57	216.39	601.55	817.94 4.24
2) Forestry		1.28	29.63	30.91	212.09	243.00 1.26
3) Fisheries		54.26	19.64	73.90	-	73.90 0.38
2. Manufacturing, mining and construction		37.09	89.27	126.36	135.36	261.72 1.36
1) Manufacturing		35.28	81.54	116.82	135.36	252.18 1.31
2) Mining		1.81	7.73	9.54	-	9.54 0.05
3) Construction		-	-	-	-	- -
3. Trade and tourism		6.85	48.84	55.69	-	55.69 0.29
1) Trade		6.30	39.54	45.83	-	45.83 0.24
2) Tourism		0.55	9.31	9.86	-	9.86 0.05
IV. Multi-sector aid		366.87	607.82	974.69	-	974.69 5.05
1. General environmental protection (environmental policy, biodiversity, etc.)		22.31	26.23	48.54	-	48.54 0.25
2. Other multi-sector (urban/rural development, etc.)		344.56	581.60	926.16	-	926.16 4.80
V. Commodity aid and general program assistance		128.66	-	128.66	300.00	428.66 2.22
1. General budget support		0.50	-	0.50	300.00	300.50 1.56
2. Food aid		95.71	-	95.71	-	95.71 0.50
3. Import support		32.45	-	32.45	-	32.45 0.17
VI. Debt relief ¹		23.72	-	23.72	-	23.72 0.12
VII. Humanitarian aid (emergency food aid, reconstruction, disaster risk reduction, etc.)		566.00	5.33	571.33	-	571.33 2.96
VIII. Administrative costs and others		70.58	765.12	835.70	905.49	1,741.19 9.02
Total		2,908.02	2,657.33	5,565.36	13,729.46	19,294.82 100.00

(Source: MOFA^{xxxiv})

Infrastructure development has historically been a strength of Japanese ODA, and there is no doubt that the emphasis continues to lie with these projects today. Economic infrastructure, consisting of things such as transport and storage, communications, energy, banking and financial services, and business support, accounted for 57.32 percent of bilateral ODA, which represents the majority of Japan's ODA. Social infrastructure spending, including education, health, population policies, water and sanitation, government and civil society, and other social infrastructure and services, accounted for 15.77 percent. Administration costs figured as the third largest bilateral expenditure at 9.02 percent. Production sectors like agriculture, forestry and fisheries, manufacturing, mining and construction, and trade and tourism accounted for 7.53 percent of bilateral spending.

Multilateral spending, which overall accounts for 22.4 percent of Japan's total ODA spending as of 2019, was largely allocated to international organizations including the World Bank Group, the UN, and regional development banks. These organizations saw 87 percent of total multilateral ODA funds.^{xxxv}

Sources with knowledge of Japan's priorities going forward expect the heavy focus on infrastructure to continue. Japan sees its reputation for delivering high quality infrastructure projects through ODA as a key counterbalance to the more cost-effective Chinese Belt and Road Initiative projects. Additionally, greater emphasis will be given to global health, continuing an emphasis of the Abe administration, particularly in light of the global COVID-19 pandemic. Lastly, a June 2020 survey of Japanese legislators that asked them to identify what they believe should be the top priority for bilateral ODA going forward indicated education as the third highest priority for ODA emphasis.^{xxxvi} Additionally, sources with knowledge of the inner workings at JICA foresee a coming emphasis on climate related initiatives, as well as an attempted remedy for the historical lack of emphasis on humanitarian programs.

Conclusion

There is no doubt that for much of the past seventy years since the origination of Japan's ODA programs that the country has been a major player in the foreign assistance realm. This is even more assuredly the case during the past forty years as Japan has grown into the world's third largest economy. However, as the globe has been turned upside down over the last two years following the onset of the COVID-19 pandemic, and the resulting uncertainty of what the future holds, it is fair to reassess everything that may have once held true. Nevertheless, in this turbulent, insecure time, one constant remains true: Japan is still an ODA superpower and remains poised to be one well into the future.

The storied history of the program shows that it is by its nature flexible and responsive to the needs of the times. It has adapted to challenges like the oil crisis of the 1970s or the fall of the Soviet Union; Japanese ODA is no stranger to massive international challenges. The Abe administration instituted critical reforms that will further strengthen ODA, centralizing the process to streamline implementation. Additionally, the emphasis placed on health programs will pay dividends as developing nations come out of the pandemic. A renewed focus on quality infrastructure projects will continue to create a key counterweight in the region against China's Belt and Road Initiative. As emphasis shifts back toward Asia and Africa in line with Japan's Free and Open Indo Pacific initiative, Japanese ODA will prove to be critical.

Japan can afford to be in the middle of the pack when it comes to net ODA spending as a percentage of gross national income because of the strength of its overall economy. It may never hit the DAC pledged goal of 0.7 percent, but it does not need to as they still remain in the top five of total net ODA spending and have been trending upward in this category for the last few years.

Certainly, Japan has the means to remain an ODA superpower. Critically, though, they also have the will. Sources with knowledge of Japanese government thinking say that Japan wants to be seen as a serious and equal player to western ODA powers. This can be seen in Japan's largely unprompted response to the Ukraine crisis, as they fell in line with and implemented almost all of

the sanctions that Western nations levied against Russia without prodding. Japan has both the will and the way—quite the formidable combination. All in all, in 2022 Japan remains an Official Development Assistance superpower, and looks poised to be so for the coming decades.

ENDNOTES

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The Sunk-Cost Fallacy of Nuclear Power in Japan

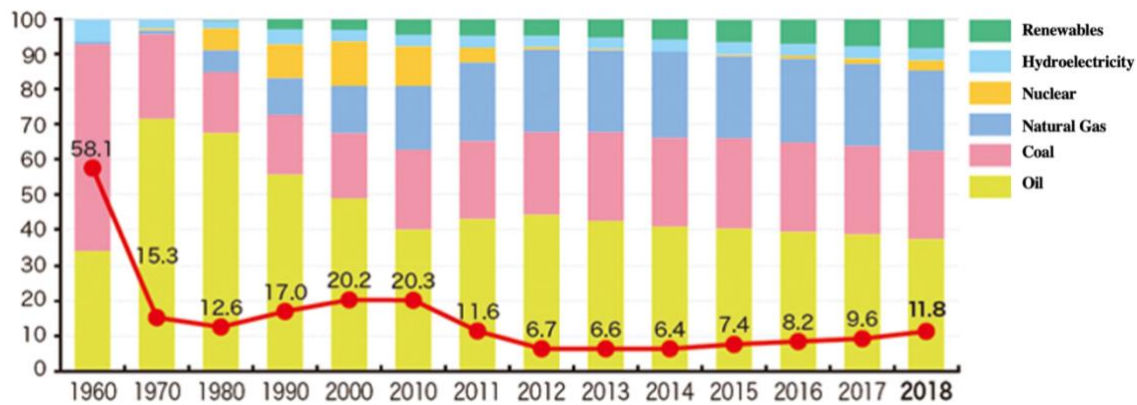
Nishant Annu

Introduction

In the postwar era, Japan's energy policy has been guided by deep self-awareness of a fundamental weakness: an extremely limited endowment of fossil fuels that forces it to rely on imports to satisfy its domestic energy demand.

From 1960–1970, Japanese economic growth drove surging demand for imported oil and its energy self-sufficiency rate dropped to 15 percent, compared to nearly 60 percent in 1960, when its energy demand had largely been satisfied by domestic coal.ⁱ

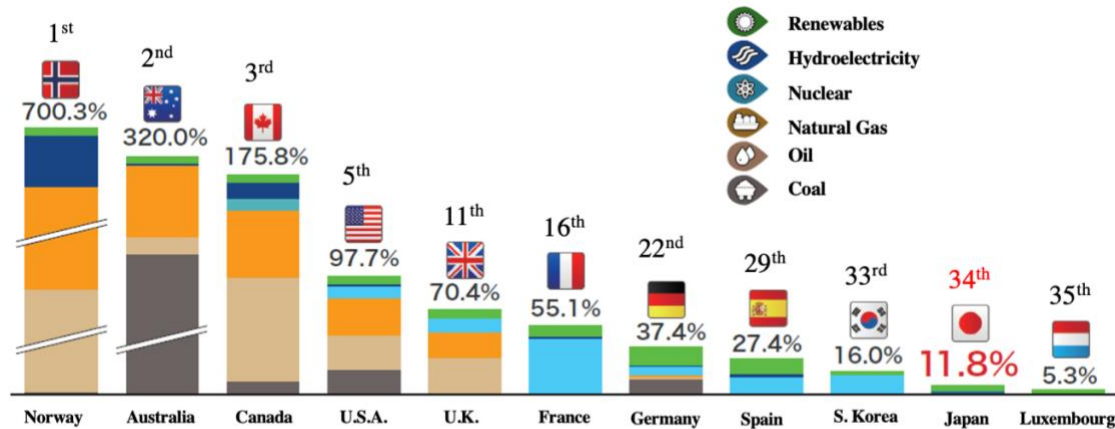
Figure 1. Japan's Energy Self-Sufficiency Ratio (1960–2018)



(Adapted from "日本を取り巻くエネルギー事情." Chugoku Electric Power)

In 2018, Japan's energy self-sufficiency rate of 11.8 percent ranked thirty-fourth out of thirty-five OECD countries—above only Luxembourg (a country with approximately 1/200 of Japan's population) and well below other large economies like Germany (37.4 percent), the United Kingdom (70.4 percent), and the United States (97.7 percent).ⁱⁱ

Figure 2. Energy Self Sufficiency Ratio, OECD Countries



(Adapted from 日本のエネルギー 2020年度版, METI)

Nuclear energy, therefore, appeared to present a compelling way for Japan to reduce its dependence on foreign oil. Beginning in the 1960s, the government heavily subsidized the development of the nuclear power industry, and Japan began operation of its first nuclear power plant, Tokai Power Station, in 1966. The oil crises of 1973 and 1979, triggered by the Yom Kippur War and the Iranian Revolution, respectively, only strengthened the case for Japan to diversify its energy supplies and self-procure as much energy as possible.ⁱⁱⁱ

In the 1990s, evidence of mankind’s impact on climate change became irrefutable, and the burning of fossil fuels was identified as the primary contributor to global warming. International commitments to limit atmospheric greenhouse gas emissions were first codified in the United Nations Framework Convention on Climate Change (UNFCCC) in 1992. This was followed by the Kyoto Protocol, signed in 1997, which determined national targets for emissions reductions. Since nuclear power stations do not produce greenhouse gas emissions during operation, the environmental benefits of nuclear energy appeared to justify further investment and expansion. Indeed, as far as Japan’s Ministry of Economy, Trade, and Industry (METI) was concerned, nuclear energy appeared to be a panacea for achieving the core objectives of its policy strategy—dubbed the 3Es—energy security, economic efficiency, and environmental sustainability.ⁱⁱ

This narrative, however, had to be reconsidered in 2011 when the Great East Japan Earthquake and the resulting tsunami triggered a catastrophic failure of the cooling equipment at the Fukushima Daiichi Nuclear Plant. The subsequent meltdowns and hydrogen explosions released radioactive contamination into the atmosphere and ultimately prompted the government to issue an evacuation order for residents living within a twenty-kilometer radius of the plant—over 160,000 people in total. Classified Level 7 on the International Nuclear Event Scale (INES), the Fukushima Daiichi reactor meltdown is considered the worst nuclear disaster to occur since Chernobyl in 1986, and as of 2022, has cost Japanese taxpayers over thirteen trillion yen.^{iv}

Although the disaster initially prompted a suspension of the operation of all of Japan’s nuclear plants—from 2013–2015 none of Japan’s nuclear power stations were in operation^v—in

recent years, the government has moved to accelerate safety approvals for non-operational plants with the aim of increasing nuclear energy's share of Japan's energy mix to 30 percent by 2030.^{vi}

Proponents argue that nuclear energy is an indispensable asset for Japan to meet its Paris Agreement greenhouse gas reduction commitments. However, this paper will argue against continued investment in nuclear energy for three reasons:

- 1) Japan's unique natural disaster risk makes it difficult to implement sufficient countermeasures to ensure safe operation. As one of the most seismically active countries on Earth, Japan faces the dual threat not only of highly destructive land-based earthquakes, but also ocean-based earthquakes that can trigger large tsunamis. Despite Japan's robust disaster mitigation infrastructure, the nature of natural disasters makes them highly difficult to model. Even in the Great East Japan Earthquake, countermeasures that were implemented in many coastal communities based on previous tsunamis were insufficient to prevent catastrophe. Considering the long operating lifespan of nuclear plants, ensuring safe operation will require policymakers to project disaster risk as far as seventy years into the future—a tall order indeed.
- 2) Nuclear energy is expensive. The narrative of nuclear's cost-effectiveness is based on the idea that nuclear plants do not require additional capital investment after their upfront costs have been paid. However, the new countermeasures whose implementation is required for restarting plant operations are expected to cost more than 5 trillion yen.^{vii} Furthermore, the costs associated with nuclear disasters, as well as those associated with plant decommissioning, are also exceedingly high. If policymakers are sincere in their intention to use nuclear energy as a transitional step on the road to more widespread utilization of renewables, it would be preferable to cut short the timeline for nuclear energy use and make more long-term investments in clean energy.
- 3) Commitment to continued investment in nuclear energy will require grappling with social problems whose resolution is far from guaranteed: persistent public opposition to restarting plant operations and the challenge of gaining local approval for long-term storage of high-level radioactive waste. In many communities where nuclear plants are based, there remains deep distrust of government agencies and utility companies. Aggressive PR campaigns to convince the public of nuclear safety have therefore been counterproductive. Even if the opposition can be overcome, the problem of long-term storage of high-level radioactive waste from nuclear plants is also unresolved, although this issue is not unique to Japan.

This paper is divided into three sections. The first section will examine the history of nuclear power in Japan to put the country's nuclear policy in context. The second section will elaborate the three arguments outlined above—disaster risk, high cost, and unresolved social problems—to present a case against continued long-term investment in nuclear energy. Finally, the paper will conclude by summarizing the main points and offering recommendations for alternative avenues for investment that can help pave the way for Japan's sustainable energy future.

The History of Nuclear Power in Japanⁱⁱⁱ

President Dwight Eisenhower’s 1953 speech “Atoms for Peace” is often noted as the starting point for the era of peaceful use of nuclear power worldwide. In Japan, the Atomic Energy Basic Law was enacted in 1955, and the Atomic Energy Commission—whose role was to develop the country’s nuclear energy potential as a means for driving economic development—was established in 1956. During this period, however, Japan had virtually no nuclear engineering expertise and therefore needed to rely on extensive support from the United States and the United Kingdom.

The government also recognized that achieving its nuclear energy ambitions would require a scale of investment beyond what private enterprise alone could reasonably commit. It therefore established the Japan Atomic Power Company (JAPC), with ownership divided between the Electric Power Development Company (a government agency) and nine regional electric utilities (excluding Okinawa). This entity would spearhead both research and development of nuclear energy and be responsible for operating the first nuclear power stations.

JAPC’s first commercial nuclear reactor Tokai 1, a gas-cooled reactor imported from the United Kingdom, began operation in 1966. In the 1970s, Japan started introducing light water reactors (LWR). These were purchased from US suppliers who built them collaboratively with Japanese companies. Although the first commercial reactors suffered from technical issues that affected their reliability,^{viii} the oil shocks of 1973 and 1979 caused a surge in consumer prices and depressed economic growth, seemingly validating the government’s efforts at developing a serviceable domestic energy source. METI (then known as MITI—the Ministry of International Trade and Industry) redoubled its investments in nuclear energy with the launch of the LWR Improvement and Standardization Program in 1975. The 1970s also saw Japan develop fast-breeder reactor technology and expand its domestic capacity for processing spent fuel.^{viii}

By the 1990s, Japan was considered to have a world-class nuclear power industry capable of independently designing and building LWRs with domestic technology. The 90s also were a time of heightened global awareness about climate change. The combustion of fossil fuels was understood to be the primary contributor to worldwide greenhouse gas emissions, so nuclear energy’s position as a “clean” energy source offered further encouragement to Japanese policymakers who wished to continue expansion of the country’s utilization of nuclear power. Although the 1990s also saw several serious accidents related to nuclear plants—including a liquid sodium leak at Monju in 1995 and a uranium enrichment accident at Tokai in 1999 that resulted in fatalities—policymakers remained broadly optimistic about the potential for nuclear energy to open the door to achieving the three pillars of Japan’s energy policy strategy: energy security, economic efficiency, and environmental sustainability. The 2011 Great East Japan Earthquake, however, would force policymakers to reconsider the core value proposition of nuclear energy.

Nuclear Energy and Disaster Risk in the Japanese Context

Observations from the Great East Japan Earthquake^{ix}

At 2:46 PM on March 11, 2011, a magnitude 9.0 earthquake off the coast of Miyagi Prefecture triggered an automatic shutdown of the reactors at Fukushima Daiichi Nuclear Plant.

The shutdown of the reactors, along with widespread failure of the regional electrical grids, caused a loss of power in the reactor units. The plant's emergency diesel generators, however, immediately began to restore power. The operation of these diesel generators was crucial for powering the pumps that circulated coolant throughout the reactors; sustained cooling was essential for preventing a critical temperature rise from residual decay heat.

The earthquake, however, also generated a powerful tsunami that arrived approximately fifty minutes afterward. In the area around the plant, the wave reached a maximum height of fourteen meters and quickly spilled over the plant's 5.7-meter sea walls. The backup generators in the plant's basement were inundated with seawater and disabled. Reactor core cooling was thus interrupted, leading to a temperature increase that resulted in the meltdowns of three reactors, three hydrogen explosions, and the release of radioactive contamination into the atmosphere.

On the evening of March 11, Japan declared a state of emergency at the nuclear plant and initially issued an evacuation order for residents living within a two-kilometer radius of the plant. As the situation continued to deteriorate and the government's understanding of the severity of the crisis evolved though, this evacuation order was revised several times, eventually being extended to a twenty-kilometer radius around the plant—an area where over 160,000 people lived.

The Fukushima Daiichi nuclear disaster is one of the only two accidents ever to be classified Level 7 on the International Nuclear Event (INES) scale (the other is Chernobyl). As of 2021, the disaster is already estimated to have cost Japan over thirteen trillion yen—making it by far the most expensive nuclear accident in history. One of the most striking facts of the Great East Japan Earthquake, however, is that it only caused catastrophic failure at one power station despite the heavy stress placed on two other plants: Onagawa and Tokai. Nuclear proponents might point to the aversion of disaster at other plants as evidence for how effective countermeasures can successfully mitigate disaster risk. However, these disaster-prevention measures now only seem sufficient in hindsight.

The Onagawa Power station was the plant closest to the earthquake's epicenter. Immediately after the earthquake, a fire that broke out in Unit 1 caused damage to the high voltage electric panel and rendered it unable to draw power from the grid.^x The emergency diesel generators, however, were able to maintain the pumps that circulated coolant to the reactors until external power was restored. Onagawa's nuclear plant was notably protected by the presence of a fourteen-meter-high sea wall that prevented it from becoming flooded and suffering from catastrophic electrical failure. The Sanriku Coast, however, has thousands of years of tsunami history. Sea walls built at other parts of the coast based on records from previous disasters proved ineffective at protecting many communities from catastrophe. What would have happened if a twenty-meter tsunami, the same height as struck other parts of the coast hit the Onagawa Plant? What if there had been a total grid failure as there had been in Fukushima? Indeed, Onagawa's escape from catastrophe might just as easily be attributed to chance as it might be to robust disaster planning.

Crisis at Tokai Nuclear Power Plant was averted even more narrowly than at Onagawa.^{xi} After the 2004 Indian Ocean tsunami, Ibaraki Prefecture conducted a reevaluation of its official tsunami projections. For a Boso Peninsula offshore earthquake, the prefecture revised its estimate

for a tsunami at Tokai Power Station from 4.86 meters to six to seven meters. The prefecture informed JAPC of its updated estimates and advised that the sea walls around the power plant be raised. In response, JAPC conducted its own analysis, raised its estimate for maximum tsunami height to 5.72 meters and elected to raise the sea walls to 6.1 meters. Construction on the sea walls had not yet been completed by the time of the Great East Japan Earthquake, but the work that had been finished was sufficient to save two out of three of the plant's emergency diesel generators. These generators were able to power the seawater pumps that successfully kept the reactors cool enough to prevent a meltdown. What might have happened, though, if JAPC's sea wall construction had happened on a slightly delayed timeline? Would it be possible to commend JAPC for its foresight if the unfinished sea walls had not successfully prevented the backup generators from being inundated?

Policymakers' understanding of disaster risk is informed by historical data. Regarding earthquakes, reliable information typically only exists as far back as the Meiji Period. Only in the modern era do policymakers and disaster scientists have the benefit of technical risk metrics that can be generated with sophisticated modeling tools. Despite these innovations, mankind is still limited in its capacity to predict natural disasters, and this difficulty is compounded when policymakers must project risk decades into the future when considering the long operating lifespan of nuclear plants. Nuclear proponents may argue that Japan was successful in averting catastrophe at all but one of its power stations during the Great East Japan Earthquake, but it is difficult to determine whether this resulted from chance as much as effective planning. Conversely, an incremental change in the variables could have produced a drastically worse outcome. The science of disaster mitigation is relatively new and its reliance on data from past disasters limits its effectiveness in developing solutions for disasters for which there are no comparable historical data.

Japan's Earthquake Risk in the Next Half Century

Japan's position as one of the most seismically active countries on Earth cannot be overstated. Despite comprising only 0.2 percent of the world's land area, 18.5 percent of the world's large earthquakes between 2004 and 2013 occurred in Japan, according to the Cabinet Office.^{xiii} The figure below shows areas of Japan that are expected to experience an earthquake of 6+ on the Japan Meteorological Agency (JMA) Shindo scale.

Figure 3. Probability of Experiencing 6+ Earthquake (JMA Seismic Intensity Scale) Within the Next 30 years



(Source: “地震ハザードステーションJ-Shis,” Japan Seismic Hazard Information System, National Research Institute for Earth Science and Disaster Resilience)

Japan is located at the converging points of four tectonic plates: the Eurasian Plate, the North American Plate, the Pacific Plate, and the Philippine Sea Plate. Its unique geography therefore makes it vulnerable both to crustal fault earthquakes that occur on land, as well as offshore earthquakes that are caused by movements along underwater plate boundaries.^{xiii} The former have the potential to cause extensive structural damage in major metro areas—as seen in the Great Hanshin Earthquake of 1995—whereas the latter can generate powerful tsunamis that devastate coastal communities, as demonstrated in the Great East Japan Earthquake of 2011.

While seismic activity along fault lines is difficult to forecast, the subduction of plates can be observed, and these movements are known to generate earthquakes that are cyclical in nature. Despite a conspicuous lack of consideration by western energy scholars pushing enthusiastically for accelerating the restart of Japan’s nuclear plants, the Headquarters for Earthquake Research predicts that the next Nankai megathrust earthquake has a 90 percent probability of occurring within the next forty years.^{xiv} The government has projected that this earthquake will be magnitude 9.1, with the potential to generate tsunamis exceeding thirty meters in height.^{xv}

In contrast to the Great East Japan Earthquake, where the worst damage was limited mostly to the coastal areas of Iwate, Miyagi, and Fukushima Prefectures, the Nankai megathrust earthquake would affect all regions in proximity to the 700-kilometer Nankai Trough. This would include areas of Tokai, Kinki, Chugoku, Shikoku, and Kyushu. Considering the concentration of major cities in these areas, the government estimates that the economic costs could be more than ten times that of the Great East Japan Earthquake.^{xv}

Taking a Probabilistic View of Nuclear Disaster Risk

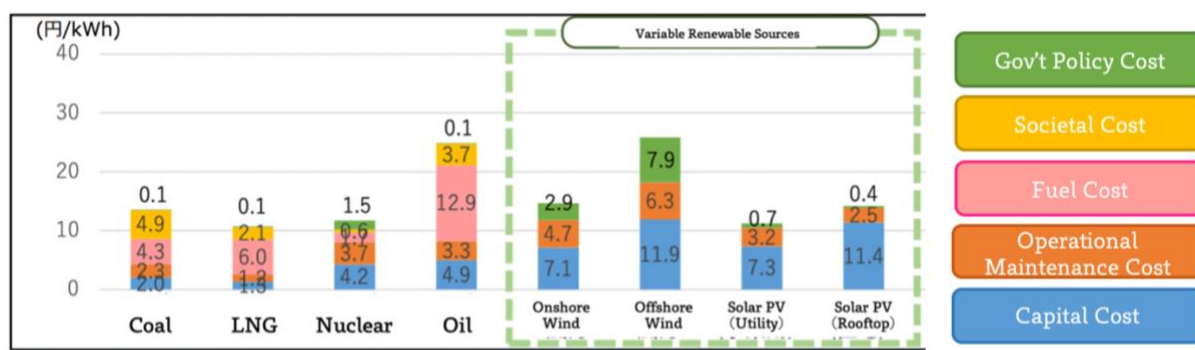
In 2003, a group of researchers at MIT modeled the frequency of damage to nuclear reactor cores with advanced probabilistic risk assessment (PRA) tools and estimated that four serious accidents would occur in the period from 2005 to 2055.^{xvi} If this model is accurate, and the Fukushima Daiichi nuclear disaster is taken to be one of these accidents, the world is still due for several more in the next century. Considering Japan’s compounding natural disaster risk factors, the chance of another Japanese nuclear disaster in the next century is not outside the realm of possibility. As Sovacool et al. note, “The point is not that systems fail—all energy technologies have their imperfections—but that nuclear power systems are so catastrophically damaging when they do fail: a billion-dollar asset can become a trillion-dollar liability in a matter of seconds.”^{xvi}

Is the Cost of Nuclear Worth It?

Proponents of nuclear energy in Japan typically make three arguments when presenting their case. First, unlike variable renewable sources that suffer from peaks and troughs in output capacity, nuclear reactors produce electricity consistently, making them well-suited to providing baseload power for the grid. Furthermore, as a “domestic,” energy source, nuclear allows Japan to provision this baseload power while curtailing its dependence on imported fossil fuels—an important consideration for energy security. Second, nuclear offers a way for Japan to realistically achieve its carbon-neutrality commitments. They argue that renewable energy technology is still in its infancy and therefore too unreliable and too expensive to rapidly displace fossil fuels. The third, and perhaps most important argument, however, is that nuclear is the most cost-effective energy source.

Indeed, according to METI, the generation cost per kWh of electricity at a nuclear power station is 11.7 yen—significantly cheaper than oil, and competitive with LNG, onshore wind, and utility-scale solar PV.^{xvii}

Figure 4. Electricity Generation Costs, Various Sources



(Adapted from “発電コスト検証について” (2021), Agency for Natural Resources and Energy, METI)

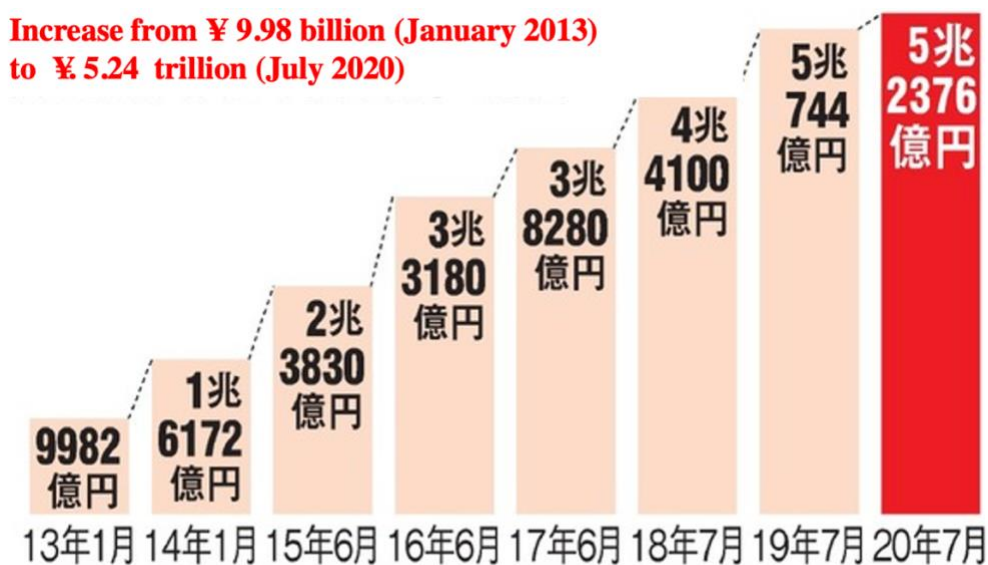
The low average cost for nuclear energy, however, only applies for plants that have been operating under normal conditions for a long time, whose capital expenditures have already been recovered. As Peter Bradford, a former member of the US Nuclear Regulatory Commission, has noted, “Nuclear can be safe, or it can be cheap, but it can’t be both.”^{xvi} Japan’s nuclear plants are no longer operating under business-as-usual conditions. Utility companies do not have the luxury

of simply sitting on legacy assets whose bills were paid long ago. They are now liable for extensive new capital expenditure to ensure compliance with new safety standards and to earn the trust of the people in the communities they serve. If the new normal—and the new costs—of nuclear energy are taken into consideration, is nuclear still the most cost-effective energy source for Japan?

Ratepayers will Bear the Costs of New Safety Countermeasures, Continuing Costs of the Fukushima Disaster

METI’s original calculations for per kWh costs for nuclear power are based on a 2015 study that assumed an expenditure of 60 billion yen for additional safety measures at each plant. By 2020, however, the expected costs for the eleven utility companies implementing the new safety measures had increased more than fivefold compared to their 2013 projections. The figure below shows how the original estimate of 9.9 billion yen has ballooned to over 5.2 trillion. ^{vii}

Figure 5. Expected Costs for Safety Countermeasures at Nuclear Plants (Total for 11 Utility Companies)



(Adapted from “原発の安全対策に5.2兆円 最安のはずが膨れるコスト,” Asahi Shimbun)

The long construction timelines associated with nuclear plants make them highly susceptible to extended delays and cost overruns.^{xvi} In Japan, these costs can be expected to balloon until right up to the restart of plant operations and ratepayers should anticipate that these costs will ultimately be reflected in their electricity bills.

The costs for retrofitting nuclear plants to comply with updated safety standards, however, pales in comparison to the astronomical costs of decommissioning Fukushima Daiichi Nuclear Plant, decontaminating the affected areas, and paying compensation to the disaster victims. In the first ten years since the disaster, those costs have totaled to thirteen trillion yen. By the time all the work has been completed, the government estimates the total cost to be 21.5 trillion yen.^{iv} Moreover, experts familiar with the nature of the decontamination work believe it is likely the final figure could be even larger. The Japan Center for Economic Research published a report in 2019 that found that total costs could range anywhere from thirty-five to eighty trillion yen over the next

forty years.^{xviii} Compensation payments and decontamination work will be financed by government bonds and repayments collected from TEPCO and its affiliated utility companies, but taxpayers can ultimately expect to foot a significant portion of the bills.

Oshima Kenichi, a professor of environmental economics at Ryukoku University says that in the past “economic efficiency has been emphasized at the expense of safety measures.”^{xix} The 2011 disaster has made this trade-off untenable. He argues that with the greater emphasis now being placed on safety, “nuclear plants will no longer be economical.” The conditions for METI’s thesis about nuclear cost-effectiveness therefore do not hold true in the post-Fukushima world. Regardless, the cost-effectiveness argument ignores the huge burden that is already being placed on Japanese taxpayers to pay for the 2011 disaster, and doubtless omits the eye-watering cost that might be associated with any future nuclear disaster in Japan.

Unresolved Social Challenges

Committing to restart Japan’s nuclear plants will also require policymakers to confront two major obstacles. In the short term, they must face strong public opposition to the proposed restart in many communities where the plants are located. In the long term, they must grapple with the fact that there is still no permanent solution for how to handle high-level radioactive waste.

In recent months, the energy security threat posed by the war in Ukraine has pushed public support for nuclear plant restart to its highest level since the Fukushima disaster.^{xx} Despite the change in national level polls, however, there remains strong opposition in many of the communities where the plants operate. Kashiwazaki, Niigata, is home to the world’s largest nuclear power station—Kashiwazaki-Kariwa Power Plant, a seven-reactor facility. Over half of Niigata residents oppose restarting the plant. In Kashiwazaki, 20 percent of residents want the plant to be decommissioned immediately, and another 40 percent support a gradual move towards decommissioning.^{xx} In Miyagi, where the government is moving to restart two reactors at the Onagawa Nuclear Plant in 2024, nearly 60 percent of residents are opposed, and since 2017 the share of residents answering that the government’s disaster countermeasures are insufficient has increased.^{xxi} The disconnect between the government and electric utility companies’ efforts to convince residents of the soundness of the nuclear plants’ improved safety standards and residents’ reluctance to take those claims at face value signals a deep distrust that will be difficult to overcome.

The lack of a long-term storage solution for high-level radioactive waste, on the other hand, is not a problem that is unique to Japan. Only about 15 percent of high-level spent fuel produced worldwide is reprocessed. Due to the difficulty of gaining community approval for a long-term waste storage facility, most nuclear plants around the world simply store their waste on-site until a feasible long-term solution can be reached. Rokkasho Reprocessing Plant in Aomori uses spent fuel to fabricate MOX fuel, but even this process generates significant amounts of waste that cannot be reprocessed further, leaving unanswered the question of what to do with the ever-accumulating waste stockpile^{xxii} While policymakers spend decades negotiating with constituents to find a more secure facility where waste can be housed, the waste at these “interim” facilities will continue to accumulate, increasing the risk that contaminated materials are accidentally released.

Conclusion

In the latter half of the twentieth century, Japan made ambitious investments in nuclear energy with the goal of driving its economic development while decreasing its dependence on imported fossil fuels. As the effects of fossil fuel combustion on global climate change began to be better understood in the 1990s and early 2000s, nuclear energy, for all appearances, seemed the ideal choice for achieving all three of Japan's strategic energy objectives: energy security, economic efficiency, and environmental sustainability. The 2011 Great East Japan Earthquake and the Fukushima Daiichi nuclear disaster that followed it, however, forced a reevaluation of the value proposition of nuclear energy.

Due to their reliance on seawater for cooling, nuclear power plants require proximity to the ocean. Japan's unique natural disaster risk factors complicate efforts to design sufficient disaster countermeasures at nuclear plants. The science of disaster mitigation is relatively new, and it is highly dependent on historical data. This data, however, while insightful, may not always be useful in predicting the scale of future disasters. For example, the tsunami in the Great East Japan Earthquake overwhelmed most of the sea walls on the Sanriku Coast, the height of which had been determined by height of the tsunami that followed the Great Chilean Earthquake in 1960. Despite the best efforts of policymakers and structural engineers to make nuclear plants disaster-resilient, the success of these efforts depends largely upon factors that are outside human control. The Nankai megathrust earthquake, which has a high probability of occurring within the next 40 years, should also be considered a critical risk factor when thinking about restarting nuclear plants.

Although nuclear energy has long been touted as a cost-effective energy source, this claim is only true when referring to the marginal cost of operating long-running plants whose capital expenditures have already been covered. In Japan's case, nuclear plants must account for new capital expenditure associated with retrofitting facilities to comply with updated safety regulations. The cost for these retrofits has vastly exceeded initial projections and provides evidence that refutes the "economic efficiency" claims of nuclear power. Arguments for the cost effectiveness of nuclear compared to other energy sources also fail to consider the significant burdens of nuclear accidents when they occur, which can raise costs exponentially. Japanese taxpayers will be footing the bill for the decontamination of areas around Fukushima Daiichi Nuclear Plant for decades to come.

Restarting Japan's nuclear plants will also entail grappling with social issues that remain unresolved. Despite a recent uptick in public support for nuclear energy at the national level, policymakers will still have to contend with opposition at the local level where the plants are located. Attempts to rush restarting plants without robust local consensus will risk undermining public trust, in both the government and in utility companies. In the long-term, policymakers will still have to deal with the issue of radioactive waste management. The ubiquitous nature of this problem alludes to the difficulty of its resolution. The longer it takes Japan to find a secure, permanent location to store its high-level waste, the greater the chance of an unforeseen accident.

Considering these factors, this paper recommends that Japan move away from relying on nuclear energy as a part of its long-term energy strategy. In their 2021 study, *Renewable Pathways*

to *Climate-Neutral Japan*, the Renewable Energy Institute recommends a phase-out date of 2030.^{xxiii} Ending the ambiguity about the long-term future of nuclear energy can prevent the sunk-cost fallacy from perpetuating the growth of bloated legacy assets that hold back investment in frontier energy technologies like offshore wind and electric vehicle-to-grid (V2G) infrastructure.

If Japan is serious about achieving carbon neutrality by 2050, it must continue to expand the deployment of renewables, invest in stronger transmission and distribution infrastructure that connects the areas that are suitable for renewable generation but far from major metro centers (Hokkaido, Tohoku, Hokuriku) with the areas that have insufficient renewable generation capacity to meet local demand (Tokyo, Kansai, Chubu), and invest ambitiously in battery storage capacity that offsets the variability of renewable generation sources.^{xxiii}

Realizing a nuclear-free sustainable energy future will not be possible by taking a business-as-usual approach. However, if Japan channels its imagination in the same way it did to develop a world-class nuclear energy industry from nothing, it can chart a sustainable energy future that will be a source of inspiration to countries around the world.

ENDNOTES

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Japan's Rural Depopulation Reaches Crisis Stage

Bradley Isakson



The Kabura River in Shimonita. Original photo taken by Bradley Isakson

Introduction

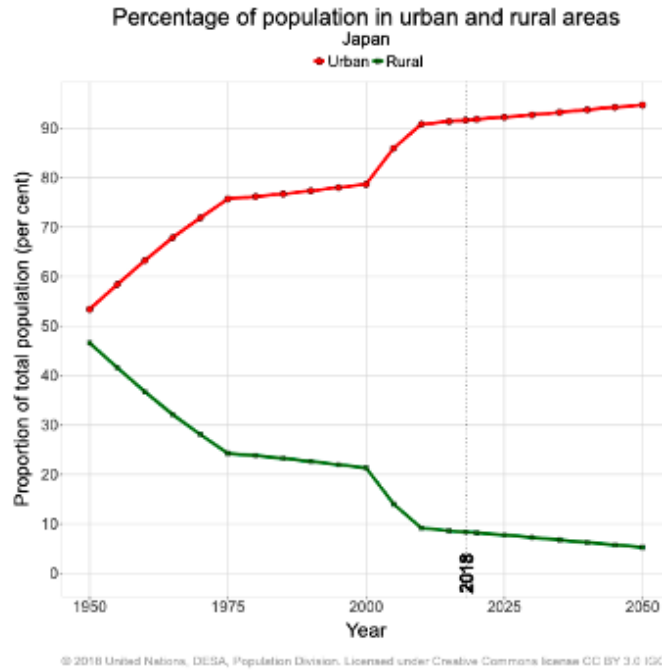
It is widely known that Japan has a demographic crisis in which the population is rapidly aging and fewer babies are being born each year. Last year, 2021, saw the largest natural decline in population since data became available. In the same year, the government announced that about 30 percent of the population was over the age of sixty-five—the oldest population in the world.ⁱ In addition to its “super-aging,” Japan also faces unprecedented rural decline. An increasing number of youths are moving out of rural areas and into such attractive urban centers as Tokyo, leaving behind a “death spiral” in the countryside. Due to a complex set of social issues in urban areas, such as the gender gap, work-life imbalances, a lack of child-care services, and the higher cost of living associated with cities, young couples are having fewer babies if at all. The double-income, no-kids (DINK) phenomenon has long been a feature of life in urban communities. In addition, young people tend to marry in their late twenties, making it difficult to have more than one child. Therefore, Japan’s rural-urban migration and low fertility rates have created, as the Headquarters for Overcoming Population Decline and Vitalizing Local Economy in Japan has called it, a vicious cycle that has led to overall population decline in Japan.

Japan's population peaked at 128 million in 2008, but since then, it has been in rapid decline. By 2020, it had dropped to 125 million, and by 2040 or so, it is expected to plummet to 107 million. Japan's fertility rate was at a startling low of 1.33 in 2021, far below the reach of the government's target of 1.8 by 2025.ⁱⁱ The 2015 census found that in thirteen out of forty-seven prefectures in Japan more than 30 percent were aged 65 or older.ⁱⁱⁱ In 2020, people aged sixty-five or older made up 28 percent of Japan's total population.^{iv} The percentage now has inched up to 30 percent. Population aging in Japan's rural areas has been exacerbated by the relentless outflow of young people seeking opportunities in urban areas, thus leading to the degradation of rural communities and infrastructure with fewer people there to maintain them. If proper measures are not taken soon to address the vicious cycle that has created Japan's demographic crisis, its population could fall to 86 million by 2060 and a frightening 42 million by 2110.^v

This paper will focus on Japan's rural depopulation, which in tandem with low fertility rates contributes to the overall crisis. The goal of this paper will be to critically analyze the government of Japan's past and present efforts to slow rural decline. Japan's rural revitalization strategies will be discussed and compared with other countries' initiatives, such as South Korea's. Additionally, interviews from a case study on a Japanese rural area will highlight local initiatives undertaken by such communities to cope with depopulation. Japan is one of the first major countries to experience rapid rural depopulation, and local efforts to deal with it could provide other countries with a roadmap on how to avoid a similar demographic crisis. While it may prove impossible to end this trend, the goal remains to slow its speed to maintain a stable Japanese population and dampen rapid depopulation's effects on Japan's future vitality.

Japan's Rural Depopulation in a Global Context:

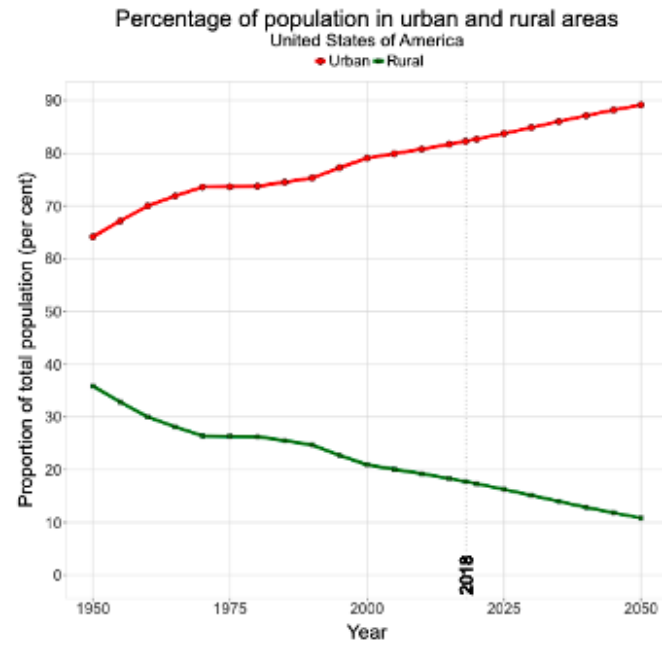
At the end of World War II, about half of Japan's total population lived in rural areas.^{vi} Over the course of its three postwar rural-urban migration waves, the ratio between urban and rural populations in Japan has become increasingly imbalanced. By 2000, Japan's rural population had shrunk to 20 percent of the national population. Currently, its rural population is only 8 percent of the total population, and urban dwellers account for more than 90 percent.^{vii} The graph below shows Japan's population trajectory and projection until 2050. At its current pace, rural areas will only comprise 5 percent or less of the Japanese population by that time.



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 Note: Urban and rural population in the current country or area as a percentage of the total population, 1950 to 2050.

(Source: UN DESA, 2018 World Urbanization Prospects)

Globally, rural populations are declining but at a much more economically manageable rate than Japan's. By 2050, the world's total urban population is expected to rise from 55 to 68 percent.^{viii} Compared to Japan's 90 percent urban population, only about 81 percent of the population of the United States of America live in urban areas.^{ix}

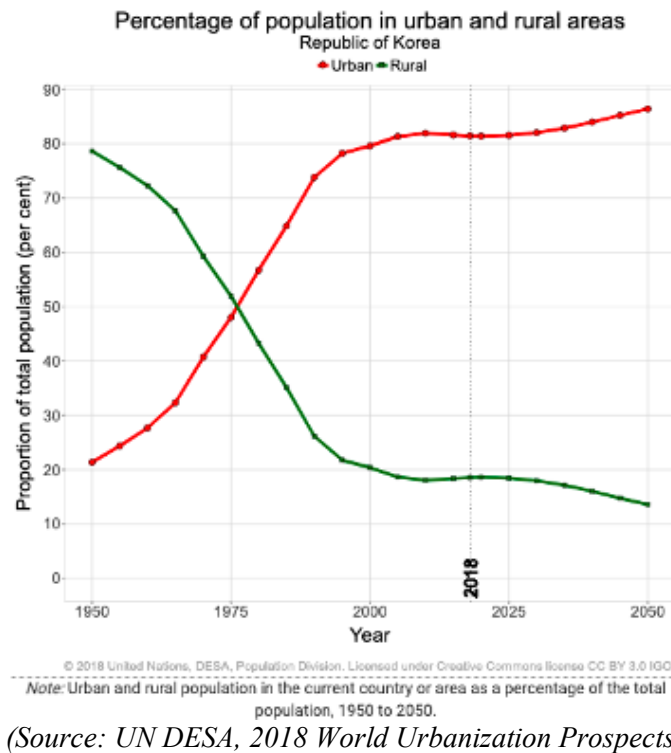


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 Note: Urban and rural population in the current country or area as a percentage of the total population, 1950 to 2050.

(Source: UN DESA, 2018 World Urbanization Prospects)

However, the urban population in Asian countries accounts for 54 percent of the world’s total urban population.^x Notably, South Korea, Japan’s regional neighbor, is experiencing its own demographic crisis characterized by the same issues as Japan’s vicious cycle: an aging population, low fertility rate, and rapid urbanization.

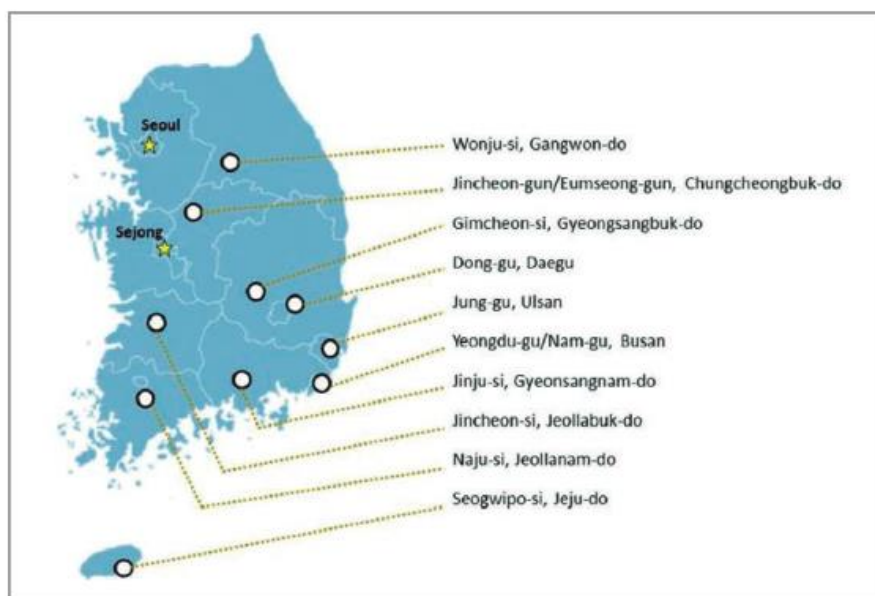
South Korea, like Japan, faced a similar postwar economic reconstruction and high-growth period. While Korea’s rural population has declined more gradually than Japan’s, Korea’s rapid economic expansion and industrialization have still brought about a great disparity between urban and rural population levels. For example, during the 1970s, Korea’s rural population represented 60 percent of its total population.^{xi} However, in 2018, its rural population had shrunk to only 18 percent. By 2050, this number is expected to drop to around 14 percent.^{xii}



In October 2021, the Organization for Economic Cooperation and Development (OECD) released two reports: “Perspectives on Decentralization and Rural-Urban Linkages in Korea” and “Smart Cities and Inclusive Growth.”^{xiii} Korea’s rapid industrialization of urban areas from the 1960s to 1980s led to massive urbanization of young generations and the marginalization of rural areas.^{xiv} To address Korea’s “unbalanced development path,” the government pursued several national policies focused on decentralization at the beginning of the twenty-first century. Among these initiatives were the building of new cities and relocating government agencies from the capital region to underdeveloped areas.^{xv}

In 2004, Korea began its Innovative Cities initiative as one of many policies to slow the population concentration in urban centers. The Innovative Cities project was intended to begin the development of Korea’s secondary and regional cities by relocating public institutions along with

their employees and families.^{xvi} In May 2020, the process was completed and a total of 153 public institutions were relocated from Korea’s capital region to ten secondary cities. The total population of the host cities has continued to increase over time as well, notably by 11 percent in 2019.^{xvii} Having completed the successful relocation of public institutions, the second phase of the Innovative Cities initiative has begun. In this five-year project, local authorities will now oversee development of their Innovation Cities, shifting from previous central government control.^{xviii}



Source: OECD elaboration based on MOLIT (2020), *Innocity*, <https://innocity.molit.go.kr>.

(Source: *Map of Korea’s 10 Innovative Cities from the OECD’s “New Horizons in Well-balanced Development in Korea: Focusing on Innovation Cities and Smart Cities”*)

As Ahn Kwang Youl, Counsellor of the Permanent Delegation of the Republic of Korea to the OECD summarized, Korea has been one of its most successful member countries in “productivity catch-up,” but as a result it has faced depopulation in its rural communities.^{xix} Korea’s strategies such as Innovative Cities have shown promise and have successfully brought more balance to its overall national development. However, as noted in the OECD summary report, while populations in rural regions close to major cities have increased, it has decreased in areas nearby small- and medium-sized cities. Therefore, Ahn concluded that the Korean government should continue to prioritize national development balancing strategies and higher emphasis on decentralization plans supported through fiscal policies and initiatives.^{xx}

The following section will outline the history of the Japanese government’s responses to rural decline in mostly centralized fashion in the early postwar period before beginning a twenty-first century push towards decentralization. While South Korea’s attention to regional areas came much later than Japan’s, it has undertaken and completed a massive effort to relocate public institutions across the country. Conversely, Japan has long supported regional communities with little effect on mitigating rural-urban migration and has only recently begun to lay groundwork for agency relocation and integration of urban-rural digital infrastructure.

National and Local Responses to Japanese Rural Decline:

Postwar and Post-Growth Rural-Urban Migratory Waves

As stated above, the intense rate of the current rural-urban migration trend in Japan is part of a larger crisis that threatens its future vitality and sustainability. The overall urbanization and rural depopulation trends in Japan can be traced as far back as the 1868 Meiji Restoration and the beginning of Japanese industrialization. However, this paper is mostly concerned with postwar and current-day, post-growth Japanese rural-urban migration and how the government has responded throughout the twentieth century and into the twenty-first century. Postwar refers to the period following World War II, and post-growth can be defined as the current economic state Japan has been in since the burst of the bubble economy in 1991.

In 2014, the then governor of Iwate prefecture and current president of Japan Post, Masuda Hiroya, published a highly controversial article titled, “The Death of Regional Cities,” in which he outlined, in stark and painful detail, the danger that Japan’s depopulation poses for not only regional areas but Japan in general.^{xxi} In addition to Japan’s declining birthrate, Masuda notes how postwar Japan has been hit by three waves of rural-urban migration, all related to the health of its economy. The first wave came during Japan’s high-growth period from 1960 until 1973. Masuda attributed this period of migration to mass employment and most of the labor force being concentrated in Japan’s three major urban areas (Tokyo, Nagoya, and the Kansai area). The second wave of rural out-migration came during Japan’s bubble economy period from 1980 until 1993. Service and financial industries in Tokyo grew significantly while rural areas were hit hard. Currently, Japan is in its third wave of rural-urban migration that began in 2000 due to a damaged manufacturing industry that caused deterioration of the regional economy and fewer employment opportunities.

Following each of its first two rural-urban migration waves, Japan experienced a balanced migration period where rural outflow was less than urban inflow. The first period of population balance occurred after the 1973 oil shock and lasted until 1980. The second span of migration balance came following the burst of Japan’s bubble economy in 1993. Following the outbreak of COVID-19 in March 2020, Tokyo’s net population shrank by 14,000 people in 2021, marking the first time in twenty-six years that Tokyo’s population decreased.^{xxii} Are we currently witnessing the third period of migration balance?

1950 to 2015

The first high-growth period of postwar urbanization noted by Masuda began during the 1960s. Throughout this time, Japan saw massive population growth. Between 1950 and 1972, its population had increased from 83 million to 107 million making it the sixth-largest country in the world at that time.^{xxiii} As noted earlier, such rapid industrialization in urban centers led the labor force away from Japan’s regional areas, and, as a result, this widened the rural-urban divide. By 1972, the urban population had risen from around 50 to 72 percent of Japan’s total population, while its rural population fell dramatically to less than 30 percent.^{xxiv} During this period, the national government enacted several top-down policies to address Japan’s meteoric economic and demographic rise.

In 1956, the national government initiated its Capital Region Development Act.^{xxv} This plan, partially based on Greater London's development plan of 1944, sought to develop the area around Tokyo and create a Green Belt of satellite towns. Ultimately, the 1956 Act did little to spread industrial growth to Tokyo's outlying region.^{xxvi} The ruling government of Japan, the Liberal Democratic Party (LDP), subsequently passed the Income Doubling Plan in 1960 with the aim to double the nation's gross domestic product (GDP) in ten years.^{xxvii} Japan's economy progressed rapidly and within one year its GDP had risen by 10 percent.^{xxviii} There was neglect and little foresight in anticipating any potential problems such an accelerated boom would cause. The resulting growth widened regional divides between urban and rural areas and spurred the LDP to swiftly pass the 1962 National Overall Development Plan.^{xxix} This program classified Japan into three areas: "over congested" areas such as Tokyo, Nagoya, and Kansai, "adjustment" areas, and "development" areas. Its goals were to restrict population and industrial growth in the over congested areas while carefully regulating industrial growth to its "adjustment" areas. The government named fifteen "new" industrial cities in Japan's "development" areas to be the sites for factories and industries. However, John Sargent notes that the national government expected local authorities to bear the costs associated with rapid development, and because of this, the new industrial cities failed to provide centers of industrial growth in regional areas at that time.^{xxx}

It was around the hundredth anniversary of the Meiji Restoration in 1968 that Tanaka Kakuei, then-Minister of International Trade and Industry, wrote that if change did not come, Tokyo's population would rise to 40 million by 1985, and pollution would become an exigent crisis.^{xxxii} The Tanaka Plan sought to remodel Japan by extending railways and creating industrial hubs in regional areas. Tanaka's plan to redesign the Japanese archipelago, as Masuda states in his 2014 article, never resulted in a self-sustained expansion of employment and maintenance of the rural population since the policies largely focused on using public spending on physical infrastructure.^{xxxii} Sargent states that regardless of the outcome, the Tanaka Plan represented a major shift in the national postwar development of Japan and one of the first attempts at tackling the issues associated with over-urbanization.

During Tanaka's brief stint as the Prime Minister from 1972 to 1974, he helped to continue the national government's first comprehensive rural revitalization campaign focused on addressing rural depopulation. The Emergency Act for the Improvement of Depopulated Areas (*kaso chiiki taisaku kinkyu sochi hō*), a ten-year plan from 1970 to 1979, was centered on five objectives: to support the independence of *kaso chiiki* (depopulated or sparsely-populated areas), to improve the prosperity of residents, to increase employment opportunities, to reduce regional income gaps, and to support the continuing existence of beautiful countryside.^{xxxiii} As noted by the scholar Thomas Feldhoff, this plan, like several others, failed in hindsight. However, this legislation would begin a series of ten-year policies aimed at Japan's depopulation crisis. Each one would see increases in financial assistance from the government.

Following a brief period of population migration balance after the oil shock of 1973, the Japanese economy boomed in the 1980s and rapid urbanization resumed. In response, the government passed its new ten-year plan called the Depopulated Areas Special Promotion Law in 1980.^{xxxiv} Feldhoff in "Shrinking Communities in Japan," describes this law's objective as intended to "improve the conditions of rural life by improving transportation infrastructure."^{xxxv} In 1990, the *kaso chiiki* law was updated and renamed as a revitalization law. The new law

reflected an emphasis on communal independence through stimulation of local income and encouragement of comprehensive communal development. Feldhoff notes this was a form of “soft” change to go alongside areas of “hard” development such as infrastructure and public institutions.^{xxxvi}

The third period of postwar rural-urban migration began in 2000, as discussed by Masuda. At the same time, the national government passed its new plan to address rural depopulation called the Special Law Promoting Independence in Depopulated Areas.^{xxxvii} This law was altered once more in 2010 and renamed the Revised Special Law Promoting Independence in Depopulated Areas. The 2000 law redefined “depopulated areas” to include any rural areas that have “experienced a significant population loss” to the point where their vitality has declined as a result. The 2010 law most notably introduced the term *genkai shūraku* into official Japanese policies.

Genkai shūraku is the Japanese term for “marginal settlements” that are at risk of disappearing.^{xxxviii} It was first coined in 1991 by Ōno Akira and would become widely popular by 2005.^{xxxix} *Genkai shūraku* are defined as rural communities that have reached their limits of manageability due to rapid depopulation. Additionally, the elderly (sixty-five and older) in these same communities make up more than half of their total populations. The term *genkai shūraku* has gradually come to replace *kasō chiiki* as the most used phrase when discussing rural decline, as shown in the revision to the 2010 depopulated areas law.^{xi}

After more than forty years of LDP economic policies aimed at maintaining its rural electoral base, there has been little to no long-term progress on curbing the regional depopulation as evidenced by the increase in *kasō chiiki* and *genkai shūraku*. In 2020, more than 60 percent of Japan consisted of *kasō chiiki*,^{xli} and more than 50 percent of Japan consisted of *genkai shūraku* in 2021.^{xlii} Precipitating this increase in marginal settlements, the Japan Policy Council released a report in 2014 that asserted that one out of three Japanese municipalities faced comprehensive collapse.^{xliii} Historian Ken Coates states that due to a strong Japanese collectivist ethos and the government’s history of attention to rural areas, it is unlikely that future policies will ever abandon regional communities entirely.^{xliv} However, a clear and sustained commitment must be made in order to effectively slow the decline. The second Abe administration signaled a shift toward a more bottom-up approach to the rural revitalization strategy.

2015 to Present Day

In 2014, the Abe administration decided to make revitalizing Japan’s regional areas one of its key missions and included it in the Third Arrow of Abenomics (structural reforms).^{xlv} The Headquarters for Overcoming Population Decline and Vitalizing Local Economy in Japan was formed that same year and developed the “Regional Empowerment for Japan’s Growth: Overcoming Population Decline and Revitalizing Local Economies: Japan’s Long-term Vision and Comprehensive Strategy.”^{xlvi} The Headquarters’ plan contained several actions aimed to maintain Japan’s population at 100 million by 2060. These policies were enclosed in two bills: the “Long-term Vision for Overcoming the Population Decline and Vitalizing the Local Economy” and the “Comprehensive Strategy,” in accordance with the Act for Overcoming Population Decline and Vitalizing Local Economy in Japan, passed in 2014.^{xlvi}

The Regional Empowerment plan was a five-year (2015–2020) decentralized approach to slow rural decline and the first of two revitalization phases. The government’s intent was to turn the vicious cycle of population decline—described above—into a “virtuous” cycle of work, people, and communities.^{xlvi} The virtuous cycle was described as a process where “work” attracts “people” and “people” attract “work,” therefore helping to reenergize the communities that support this cycle.^{xlix}

The plan laid out four objectives to create a virtuous cycle: “generate stable employment in regional areas;” “create a new inflow of people to the regional areas;” “fulfill the hopes of the young generation for marriage, childbirth, and parenthood;” and “create regional areas suited to the times, preserve safe and secure living, and promote cooperation between regions.”^l The first objective sought to achieve lasting employment for young people in regional areas mainly by creating 300,000 jobs by 2020. The second objective was aimed at limiting the inflow to the Greater Tokyo area and promoting urban-rural migration to achieve an equilibrium. One of the key policies in this objective was to relocate government institutions to regional areas. The third objective’s goal was to be achieved through a reform of work styles and to promote work-life balance. It emphasized the need to improve the “rate of continued employment for women” following childbirth. The final objective was to be realized by regional cooperation and the establishment of “small hubs” between local authorities.^{li}

Between 2016 and 2018, Goto Yasuhiro worked at the Headquarters for Overcoming Population Decline and Vitalizing Local Economy in Japan. During that time, Goto was in charge of helping to organize projects focused on foundational support for rural areas.^{lii} Goto explained that as part of the five-year Regional Empowerment plan, the national government provided yearly funding to regional municipalities. Rural authorities were to apply for funding each year, and, following review, the national government would allocate funds based on each municipality’s population sizes.^{liii} In this system, towns and villages created their own revitalization plans. Typically, Goto explained, regional municipalities would center their proposals around industries, attractions, or geographies, such as seaside, mountainside, or farming towns.^{liv}

The Abe administration’s Regional Empowerment plan signified structural reform in how the government approached Japan’s declining population. The national government sought to decentralize revitalization efforts and place more independence in the regional municipalities. Its main incentives were tax deductions, subsidies, lower costs of living, and work-life balance.^{lv} Goto stated that while the first phase of Abe’s ambitious plan did not reach the targeted migration equilibrium numbers, he believes that a decentralized approach fits well with some towns and villages.^{lvi} The Daiwa Institute of Research reported in March 2020 that in terms of dealing with the over-congestion of Tokyo’s population, phase one of “Regional Empowerment” had yet to show results.

On December 20, 2019, the second phase (2020-2025) of the Comprehensive Strategy was approved. The Daiwa Institute stated that the second phase requires “more regional autonomy than ever before” and that local authorities will aim for long-term development.^{lvii} Abe Shinzo resigned in 2020 and was never able to oversee the second phase of the Regional Empowerment plan. However, the current Prime Minister Kishida Fumio introduced a new and complementary concept to try to equalize rural-urban divides.

In December 2021, Kishida introduced the “Vision for a Digital Garden City Nation.” The goal of Kishida’s Digital Garden City Nation concept is to “maintain future prosperity in outlying regions” and achieve rural-urban digital integration and transformation.^{lviii} Kishida outlined four points necessary to attain a Digital Garden City Nation: “building digital infrastructure,” “developing and securing human resources with digital skills,” “implementing digital services to solve rural issues,” and “initiatives to leave no one behind.”^{lix} The first point aims to make high-speed, digital services accessible anywhere in Japan. The government hopes to achieve this by building a digital “superhighway” within three years that connects all of Japan and by building more than a dozen regional data centers in five years. Additionally, it hopes to universalize optical fiber by 2030 and make 5G available for 90 percent of the population by the end of fiscal year 2023.

The second point of the Digital Garden City Nation plan, “developing and securing human resources with digital skills,” seeks to establish a program to annually train 450,000 people to promote digitalization in regional areas by the end of fiscal year 2024. Kishida's third objective hopes to build off the previous two points and create an agriculture sector where most of its farmers are practicing smart agriculture, such as using AI or robots, by 2025. The fourth and final initiative, “initiatives to leave no one behind,” will work in tandem with the other three points and establish a human resource support network where no one (regardless of age, gender, or location) will be left behind. The administration hopes that anyone can utilize digital technologies, and the support system was aimed to be launched in April 2022.^{lx}

Still battling a pandemic, Japan has rightly adjusted its policies to focus on digitalizing rural areas to try to maintain rural populations and increase their population inflows at a time when many are relying on technology to work remotely. In addition, the Regional Economy Analyzing System (RESAS) developed in 2016 by the Cabinet Secretariat offers a comprehensive and interactive online way to view data regarding municipalities’ demographics.^{lxi} RESAS is currently being used to educate and train young people in solving regional problems.^{lxii}

While Japan’s immediate postwar period, dealt with the urbanization repercussions of rapid economic expansion in a top-down approach, the post-growth 2000s and beyond have seen a shift to a more decentralized approach. As Masuda explained in 2014 however, five-year plans will not show instantaneous results.^{lxiii} The future will be the best judge on how effective the Abe administration’s Long-Term Vision and Comprehensive Strategy have been. Importantly, Abe’s regional revitalization policies shifted responsibility to municipalities and emphasized regional creativity. This has been very effective for some towns and villages. Several other governmental and non-governmental campaigns have also sprouted up to address rural decline.

Other Rural Revitalization Initiatives and the COVID-19 Pandemic

In “Embracing the Periphery: Urbanites’ motivations for relocating to rural Japan,” Cornelia Reiher discusses Japan’s rural areas in a more positive light than how they have been studied over the past few decades. Reiher examines the recent increasing trend of urban dwellers’ relocating to the countryside. Specifically, she analyzes their motivations and the role that the Japanese government’s *Chiiki Okoshi Kyōryokutai* program (COKT; English: Community Building Support Staff Program) has played in incentivizing people to move to rural areas.

The COKT program was initiated in 2009 by the Ministry of Internal Affairs and Communication (MIC). The program gives municipalities in rural Japan the resources to support and attract newcomers from urban areas to move to their communities and promote revitalization projects for a fixed amount of time (three years).^{lxiv} While the objective of the COKT program is to get young urban-rural migrants to settle down and stay in the countryside, Goto states that this has been difficult to achieve. One of Goto's criticisms of COKT was that it did not limit the amount of time one can participate in the program. Therefore, he asserted, many urban-rural migrants do not settle in one location. Rather, once their three-year term has finished, they simply can reapply and get funding to go to another rural community.^{lxv} Additionally, Akuzawa Shingo, the owner of a curry restaurant in the rural town Shimonita, stated that residents want COKT members to come to Shimonita, but they are unsure exactly how to use COKT effectively.^{lxvi} Akuzawa explained that it is difficult for outsiders to get familiar with Shimonita and find the culture hard to understand, therefore they leave. It is for these reasons, Akuzawa stated, that the program is not working in Shimonita.

Despite urban-rural cultural divisions and the loophole that Goto criticized, one cannot doubt the success of COKT in bringing youths to the countryside in some capacity. Reiher notes that 4,830 people in 997 municipalities all over Japan were employed by COKT in 2017.^{lxvii} The aim of COKT and other revitalization schemes is to match younger people with rural communities and get them to play a role in revitalizing the rural areas by relocating.^{lxviii} Reiher observes that more people are moving to rural areas through revitalization programs like COKT. As such, between 2009 and 2013, the total number of participants in relocation programs nearly tripled from 2,864 to 8,181.^{lxix} Reiher discusses several different reasons for why many more young people are moving to rural areas from cities. She notes personal growth, the aspiration to contribute to society, the desire to start a family, and self-determination as a few of a wide range of reasons people in their 20s, 30s, and 40s are increasingly moving to regional communities.^{lxx}

Akuzawa relocated from Tokyo to the small mountain town of Shimonita in Gunma, Japan during the summer of 2019. Akuzawa was born and raised in Shimonita, but he moved to Tokyo to attend college and begin a career as Tokyo-based magazine editor.^{lxxi} He had always intended to return to Shimonita one day. However, he was not sure what he would be able to do there in a town of only 6,711. During his last stint as an editor, Akuzawa worked for a food magazine. This inspired him to pursue a business in the restaurant industry. While Shimonita does not have any members of the COKT program, Akuzawa pursued the opportunity to open Shimonhood, his curry restaurant, in Shimonita's "challenge shop" building. Shimonita rents out its "challenge shop" for three-year terms to entrepreneurs wanting to try a new business venture or "challenge."^{lxxii} The intention is to bring new businesses and people to Shimonita, helping to stimulate and revitalize it. Akuzawa stated that he chose to start cooking curry because Shimonita did not have any curry shops and because it required little training unlike becoming a sushi or ramen master. In addition to original curry dishes, Akuzawa brews drip coffee and employs high school students for part-time, after school jobs.

Shimonhood will close in September 2022, and Akuzawa is currently thinking about his future. He remains optimistic to stay in Shimonita and open Shimonhood permanently in a different building, but right now nothing has solidified. Akuzawa believes that challenge shops

like the one that has housed Shimonhood can help bring more people to Shimonita. Currently, there is only one challenge shop in Shimonita (the one that Shimonhood operates out of). If there were more challenge shops, Akuzawa thinks that younger people like his part-time high school employees, could try their own business ideas and there could be an increased chance for them to stay planted in their community. Consequently, these shops would attract tourists from bigger cities to visit Shimonita.

Following the closing of its borders to foreigners, Japan's tourism industry has had to rely entirely on local tourism and many small businesses suffered as a result. This led the Japanese government to initiate its national "Go To Travel" domestic tourism campaign in July 2020.^{lxxiii} The Go To event subsidized domestic vacationers' travel, offering discounted hotel rates to boost its tourism and keep businesses alive. However, due to a surge in coronavirus cases in December 2020, the subsidy program was suspended.^{lxxiv} While it had a positive impact on some rural areas, many Japanese citizens were confused by the mixed government messages to "stay home" but also "go travel."^{lxxv} Therefore, the Go To campaign received a bad reputation.

Consequently, the national government has initiated a rebranding of Go To Travel. In April 2022, it was announced that the Kishida administration would be rolling out its own attempt to boost domestic tourism called the *Waku Wari* event.^{lxxvi} Under this plan, those who have received the third dose of the COVID-19 vaccine will be eligible for discounts on sporting events, games, concerts, and other events. The *waku waku* subtitle for the event is a play on two Japanese words. It combines the "*waku*" from the Japanese word for vaccine (*wakucheen*) as well as the Japanese word for "excitement."^{lxxvii}

In addition to national initiatives like *Waku Wari*, there have been several local programs aimed at boosting domestic tourism. In Gunma prefecture, the *Aikyō Gunma* program began its fourth campaign in April 2022.^{lxxviii} Similar to *Waku Wari*, *Aikyō Gunma* incentivizes residents to get their COVID-19 booster shots. If a Gunma resident has received a third COVID-19 vaccine, the booster shot, they are eligible to receive a 5,000-yen discount at hotels or Japanese traditional inns (*ryokan*) within Gunma prefecture.^{lxxix} Matsubara Makiko is the owner and operator of a 112-year-old *ryokan* in Shimonita called Tokiwakan, and she explained that the *Aikyō Gunma* campaign has helped her business significantly more than the nationally organized Go To events.^{lxxx} While Tokiwakan was hit hard during most of the pandemic, losing out on usually reliable visitors coming to town during the *negi* (Shimonita's famous green onions) season. However, steadily things have been improving. In terms of the future of the family business, Matsubara is contemplating what she will do once she retires. Her two children both have no interest in carrying on the family tradition of operating Tokiwakan. Comparable to many other Japanese stories of rural decline, Matsubara will one day have to decide whether to close down Tokiwakan if her children move away to the cities.

In order to convince the younger generations to stay in or return to rural communities, Ushiki Tadashi believes that more commercial branches and government offices should be established in areas outside of Tokyo and big cities.^{lxxxi} Ushiki, a member of the Gunma Prefectural Assembly, thinks this would create more jobs and opportunities for the youth, in line with the objectives of Abe's Regional Empowerment Plan for a virtuous cycle. Ushiki stated that the national government has approached the rural decline mostly concerned with population numbers,

whereas rural regions must also take into consideration land and area usage when contemplating action plans.^{lxxxii}

Following the hopes of the Regional Empowerment Plan, Kanra has taken the initiative in developing independent revitalization plans to try to maintain a population of 11,600 by 2031. To achieve this, Kanra has several programs in motion. First, it is creating an interchange highway entry and exit that will allow travelers to visit Kanra more conveniently. Ushiki used an example of those traveling to the resort town of Karuizawa from Tokyo. Kanra sits halfway between the two, and it should be an efficient option for dog owners to stop and let their dogs take a break. Additionally, Kanra opened the new Mentai Park on April 21, 2022. Ushiki explained that this is the first time that a *mentai* (the Japanese word for walleye pollack) park has been created in a landlocked area.^{lxxxiii} There is much hope amongst townspeople that this will attract more tourists. The Mentai Park will join Kanra's well-established Konnyaku (English: konjac, devil's tongue) Park.

Revitalization initiatives like Kanra's Mentai Park and Shimonita's challenge shop have presented creative local alternatives to the historically top-down approach to solving Japan's rural decline. Amidst the pandemic and national confusion, local authorities have instituted subsidy programs like *Aikyō Gunma* to boost prefectural tourism. Where the national government has failed, local municipalities have picked up the slack in an attempt to prevent their communities from becoming the next *genkai shūraku*. Successful national programs like COKT and the current emphasis on regional independence give hope that Japan's rural decline can be properly addressed through a vibrant integration of local and national policies.

Conclusion and Recommendations

Future population projections for Japan remain bleak. However, the recent shift from centralized to decentralized initiatives combined with expanding digital infrastructure and relocating public institutions (similar to what South Korea has done for the past two decades) can dramatically curb Japan's rural decline. The 2014 Regional Empowerment Plan developed by the Abe administration's Headquarters for Overcoming Population Decline and Vitalizing Local Economy in Japan has emphasized a bottom-up approach to tackle Japan's vicious cycle. Although the first phase of Abe's plan had so far shown little progress to mitigate rural-urban migration, the COVID-19 pandemic presents an opportunity for the current government to capitalize on shifting priorities amongst its workforce that now desires a slow or family-friendly life in contrast to the hustle and bustle of Tokyo.

In order to entice more urban dwellers to move to regional areas, Japan needs to place more institutions and opportunities in pockets and hubs on outskirts of larger cities. The failed attempt at establishing industrial cities as part of Japan's 1962 National Development Plan can be re-envisioned as social issue-driven "smart cities" such as those designed by PwC in their 2021 report titled "Smart Cities in 2050: Rebuilding the Future of Japanese Cities."^{lxxxiv} These smart cities would be structured on three common layers: vibrancy to attract people, security to enable them to live comfortably, and safety services usable by any resident.^{lxxxv} Additionally, PwC identified eleven basic functions necessary for residents to live, such as tourism, education, and public services.^{lxxxvi} Each function would differ depending on the city's characteristics. Kishida's Digital

Garden City Nation concept may very well be the fuel for such projects to materialize in its emphasis on expanding digital access to regional areas. Through setting hard time-limits on achieving urban-rural digital infrastructure balance, Kishida will attempt to follow through on his plan's fourth initiative of leaving no one behind.

The desire to avoid the abandonment of rural communities has long been a part of Japanese collectivist sentiment, as Ken Coates noted. Over postwar and post-growth periods, the national government has sought to maintain its regional areas through central top-down approaches that have not always emphasized sustainability. As the Regional Empowerment Plan enters its second phase, greater responsibility will be given to regional communities to develop their own revitalization plans. However, local authorities cannot be left completely on their own. To avoid waste and inefficiency, central direction will need to work in tandem with local planning.

As the threat of the pandemic wanes, Japan needs to prepare for a resumption of inflow to its urban areas. The brief rural-urban migratory balance that COVID-19 brought has so far done more to mitigate rural decline in pure population numbers than recent national policies. However, policies like the Regional Empowerment Plan and Digital Garden City Nation may very well provide the foundation to build efforts designed to entice in-migrants like Akuzawa to stay in rural areas such as Shimonita after the pandemic has subsided. The national rural revitalization strategies should continue to place more responsibility on regional communities, emphasizing local initiatives with national support. Additionally, national programs such as COKT can look at COVID-19 urban-rural migration trends and reasons for relocating and frame incentives to meet growing desires for work-life balance. Likewise, local authorities can analyze pandemic relocation reasons and structure initiatives accordingly to be more accessible for city dwellers looking to settle down or contribute to the revitalization efforts of their communities. Through financial support and attention from the national government, local municipalities can expand their initiatives or collaborate with nearby communities to form small hubs as suggested by the Regional Empowerment Plan. These actions, in tandem with a committed long-term strategy of thirty to sixty years, will prove most effective to mitigate rural decline and maintain migration balance following the COVID-19 pandemic.

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