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THE WORLD FROM THE PERSPECTIVE OF  
G E O P O L I T I C S  
AND  
G E O E C O N O M I C S



JAPAN BANK FOR  
INTERNATIONAL COOPERATION

# The World from the Perspective of Geopolitics and Geoeconomics



What are geopolitics and geoeconomics? How can we understand the world through these two concepts? Guided by Japan Bank for International Cooperation (JBIC) experts, this issue's special feature looks at noteworthy topics for 2023 to provide a perspective on the world that is useful at work and in daily life: the relation between conflict and interdependence, Japan's position in the world, and geoeconomic risks in the energy sector.



Illustration by OKUBO Naoto

## Geopolitics is “realism.” Geoeconomics is its “economic means.” Understanding the complexity of the world

The dangers of the “fragility” that lies in economic interdependence. AMANO Tatsushi, Director General of the Strategic Research Department at JBIC, shares his “realistic” worldview.

### The U.S.-China conflict and the invasion of Ukraine heightening interest in geopolitics

As did the old Cold War between the U.S. and the Soviet Union, the current “New Cold War” between the U.S. and China is dividing the world. Then in February 2022, Russia invaded Ukraine, a conflict that is also having major impacts on the global economy.

Against this backdrop, “geopolitics” is attracting renewed attention. Geopolitics is the analysis and study of relations between countries and national strategies that centers on geographical

conditions. For example, landlocked countries such as those in Europe are easily affected by bordering countries, while island nations such as Japan focus on maritime trade.

Such global trends cannot be ignored now by Japanese executives, businesspeople, consumers, or students, as the situation in Ukraine, more than 8,000 kilometers away, is impacting household utility bills.

JBIC conducts an annual survey on Japanese companies with operations overseas. In the latest edition, released in December 2022, 85 percent of companies said geopolitical risks were

significant (see the graph on the following page). Some 90 percent of companies responded that the invasion of Ukraine had a negative impact, despite the fact that very few of them operate in Russia or Ukraine.

To start with, what is geopolitics? And how does geoeconomics differ from geopolitics?

AMANO Tatsushi, Director General of the Strategic Research Department at JBIC, is also engaged in research on geopolitics. In 2022, he participated in “Strategic Japan,” a research program of the Center for Strategic and International Studies (CSIS) U.S. think tank, where he

presented a paper on Japan's economic and security policies. According to AMANO, the 19th-century geographer and biologist Friedrich Ratzel is considered the father of geopolitics. Ratzel saw the state as a physical organism with its territory, its “body.”

As this was associated with Nazi Germany's expansionism, use of the term “geopolitics” was avoided after World War II. “That is why it has not been established as a discipline in Japanese universities, despite the fact that ‘study’ is inferred in the Japanese word for geopolitics,” explains AMANO.

However, in the 1970s, geopolitics reemerged as a term to describe relations among states. According to AMANO, “You could say that contemporary geopolitics is almost synonymous with ‘realism’ in international politics.”

### Interdependence prevents conflict? That illusion has been shattered

Along with geopolitics, recent years have seen growing interest in “geoeconomics.” A portmanteau of geography and economics, this word has no established definition. According to AMANO, “Geoeconomics is often used in the sense of ‘using the economy for geopolitical aims,’ with more emphasis on policy implementation than analysis of the current situation.” Economic

sanctions against Russia are a case in point.

Reflecting on historical experience, international politics since 1945 had sought to limit sovereignty and avoid armed conflict. “Most illustrative of this trend is the EU. Reflecting on the numerous wars fought during the 19th and 20th centuries, Europe worked to strengthen economic interdependence after World War II.”

But Russian invasion of Ukraine shattered illusions that economic interdependence would lead to peace. The economic ties between the two countries had been extremely strong, and until Russia's annexation of Crimea in 2014, Ukraine's largest trading partner was Russia. “Broadening our perspective even more, do frameworks increasing economic interdependence, such as the CPTPP (Comprehensive and Progressive Agreement for Trans-Pacific Partnership), RCEP (Regional Comprehensive Economic Partnership), and IPEF (Indo-Pacific Economic Framework), also lead to less conflict? Not necessarily so.”

Such partnerships naturally have major economic significance, but when it comes to conflict prevention, that comes down to international realpolitik, comments AMANO.

He explains that there are two types of economic interdependence:

“sensitivity” and “vulnerability.” Even if a country is heavily dependent on another for a certain commodity, if it can easily procure a substitute, it is “sensitive” and not “vulnerable.”

“As in the case of China's restrictions on Australian wine imports, countries sometimes implement policies that exploit vulnerability. When deepening economic integration, the key point is how to overcome vulnerabilities caused by interdependence.”

### Globalization and the pandemic make economic security Japan's key challenge

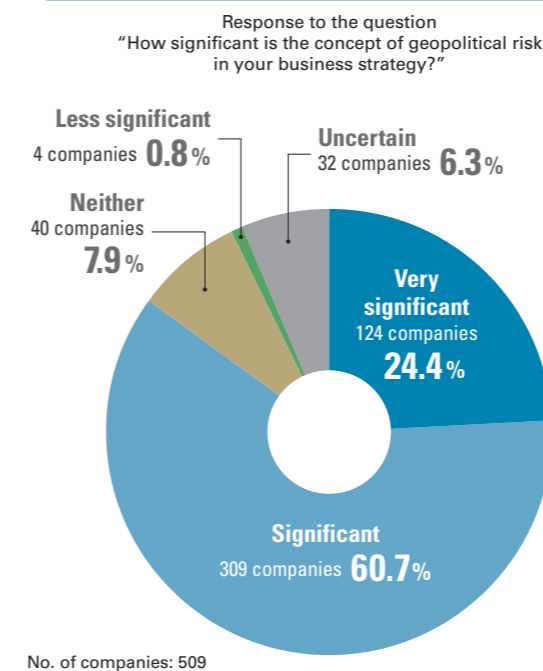
This is precisely the kind of geopolitical risk that is of concern to corporate management. In this respect, what cannot be overlooked is the relation between China and Taiwan.

China insists Taiwan is part of its territory — its “One China” policy — while support for independence rises in Taiwan, with the U.S. also involved. From a geopolitical perspective, the reason China is now adamant on integrating Taiwan, even if it means regional disruption, lies in Taiwan's geographical importance.

China and Russia can be categorized as land powers maintaining border security, while the U.S. and Japan can be categorized as maritime powers

### Importance of geopolitical risks in business strategy

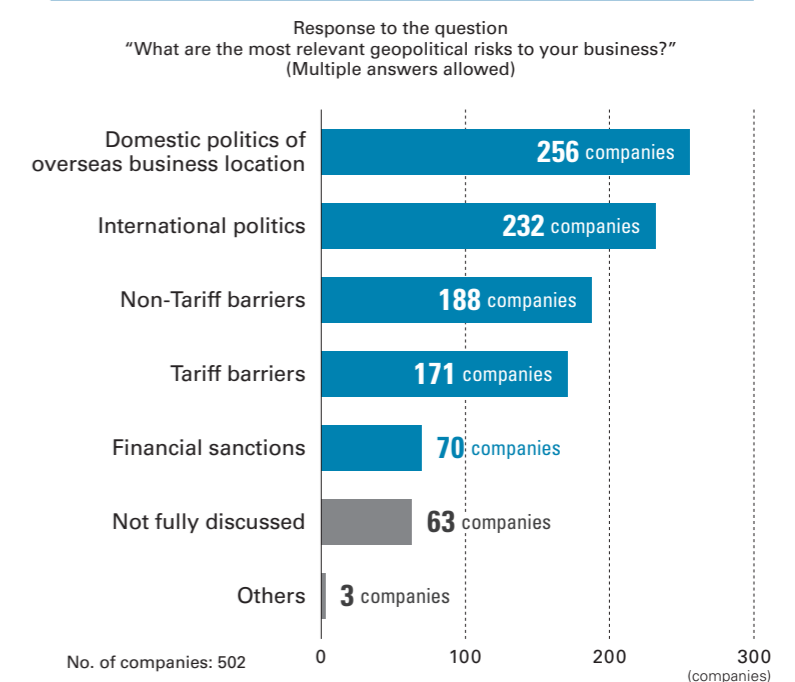
85 percent of companies responded that geopolitics is “significant”



Source: JBIC, “Survey Report on Overseas Business Operations by Japanese Manufacturing Companies — JBIC 34th Survey, 2022”

### Geopolitical risk factors relevant to business activity

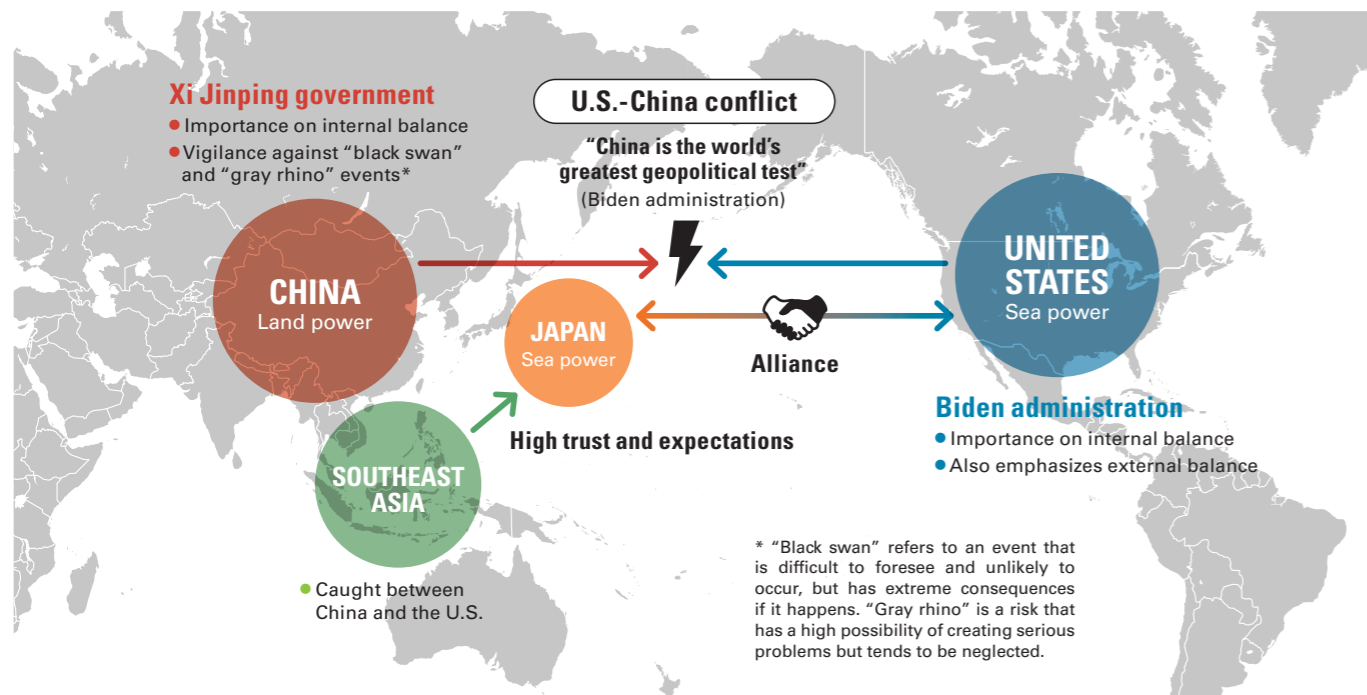
Domestic and international politics were considered higher risks than non-tariff / tariff barriers



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Country relations in the Asia-Pacific

Amid U.S.-China conflict, expectations toward Japan are rising



controlling certain areas of the ocean. According to geopolitical theory, land and sea powers are likely to clash. “China, which regards itself as being surrounded and threatened by sea powers, aspires to maritime expansion,” explains AMANO. “Taiwan of course has historical relevance in the formation of China, but its strategic importance in access to the Pacific Ocean cannot be overlooked.”

So how should Japan’s position be considered?

Amid the increasingly tense international situation, a key policy of the KISHIDA cabinet is economic security. Economic security basically means “protecting the country from what could be economic existential threats.” Specifically, securing semiconductors, food, oil, iron, and other resources necessary for economic independence. AMANO points out that economic security is an important issue because “greater economic interdependence resulting from globalization after the end of the Cold War has increased vulnerability.”

The U.S.-China struggle for hegemony and the loss of free economic exchange due to the coronavirus pandemic have undermined the U.S.-led liberal international order. Japan is now tasked with bolstering supply chains disrupted by the pandemic and overcoming economic vulnerability.

Southeast Asia, caught between China and the U.S., holds expectations for Japan

In October 2022, the Biden administration’s first National Security Strategy named China a key competitor.

“I believe that for the time being, U.S. strategy toward China will be based on ensuring strategic stability while avoiding unintended and accidental conflicts. In other words, backed by military power, the U.S. and China will be antagonistic to each other, but will not fight,” comments AMANO.

Meanwhile, Chinese President Xi Jinping was elected to a third consecutive term at the Communist Party Congress that same October. China is also emphasizing the need for economic resilience. Both the U.S. and China are placing importance on internal balance, but the U.S. is also emphasizing cooperation with Japan and other allies.

One of Japan’s strengths is its close alliance with the U.S., but this is not its only advantage. According to an opinion poll conducted on ASEAN member states by a Singapore-based research institute in 2022, in answer to the question, “How confident are you that Japan will ‘do the right thing’ to contribute to global peace, security, prosperity, and governance?” 54 percent answered “very confident” or “confident.” This level of trust surpassed

that for China, the U.S., and the EU.

Since the start of the second ABE administration in 2012, Japan has been pursuing unique diplomatic strategies including “diplomacy that takes a panoramic perspective of the world map” and “proactive contribution to peace.” It could be said that these are now being put to the test.

According to AMANO, “Southeast Asian countries, caught between China and the U.S., and unwilling to side with either, have high expectations for Japan. Japan’s challenge is whether it can live up to these expectations and more effectively utilize its economic capabilities.”

Do not think these are matters of international politics of no concern to ordinary people. Not only governments, but also companies and individuals need to take a realistic geopolitical and geo-economical view of the world.



ANALYST’S BIO

Director General of the Strategic Research Department, JIBC  
**AMANO Tatsushi**

Joined JIBC in 1995. Engaged in research on industry and participated in a research program of CSIS. Graduate of the Faculty of Law, University of Tokyo. Graduate of the University of Pennsylvania Law School. A New York State registered attorney.

Five Geopolitical and Goeconomic Topics for 2023

It’s not easy to predict the near future, but geopolitics and goeconomics can provide hints. AMANO explains five key topics in an easy-to-understand way.



Carried over from 2022 : Russian invasion of Ukraine

From energy prices to grain supply and demand, the course of the invasion of Ukraine, which began in February 2022, will likely have major implications for 2023. The war ending will be key to global economic recovery. But the Ukrainian government’s draft budget for 2023 — submitted in September 2022 — assumes a continuation of the war, and analysts see an

early end as unlikely. According to TAKAHASHI Sugio of the National Institute for Defense Studies, “A new international order will be created with the end of the war. How the war ends will be critical.” Whether the current deadlock continues or the situation escalates is the biggest issue for 2023.



Industry’s eyes on semiconductors and batteries

JBIC’s AI-based analysis of 4 million news articles from 200 countries and regions around the world, revealed “semiconductor” and “battery” to be important keywords for supply chain resilience. In the U.S., concern over the semiconductor shortage has intensified following the pandemic, as evidenced by semiconductor export restrictions and the August 2022 enactment of the CHIPS Act to support

domestic production. According to the AI analysis, batteries, which are indispensable for electric vehicles, have also grabbed more attention since April 2022 following Russian invasion of Ukraine. Future global trends must be carefully watched in order to revive Japan’s once world-leading semiconductor and lithium battery industries.

The future and impacts of China’s “post-COVID” economy

China’s “zero-COVID” policy, designed to thoroughly contain the spread of the coronavirus, is significantly impacting the lives of its citizens through strict lockdowns and other restrictions. Strong protests against this policy have been growing more active both within and outside China since November 2022.

This poses huge risks for the Chinese

economy and for the global economy as well due to supply chain disruptions. On the other hand, if the Chinese economy recovers rapidly after the end of the zero-COVID policy, this could then lead to global shortages of energy, food, and other commodities. The world needs to prepare for changes in China’s COVID policy and the impacts that will have.



Climate change and the new issue of “loss and damage”

While climate change response is becoming a priority in developed countries, many developing countries are unable to deal with a rapid transition from fossil fuels to renewable energy. Climate change issues are now inseparable from energy issues.

The most important debate at COP27 in 2022 was “compensation for loss and damage,”

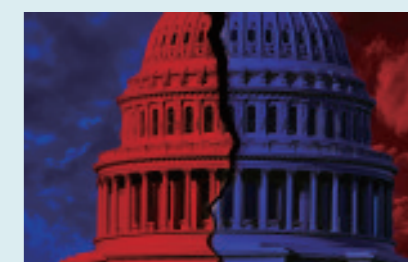
with it argued that developed countries, which had emitted huge amounts of greenhouse gases in the past, should provide developing countries with even more relief measures such as financial assistance. North-South conflict is expected to intensify in the run-up to meeting the 1.5°C target by 2050.

The geopolitical aspect of the U.S. political divide

Political instability is increasing in the U.S. with the divide between conservative Republicans and liberal Democrats intensifying with each passing year. Take inflation, for example. Republicans say that inflation is due to increased public spending in response to the pandemic, seeing it as the country’s biggest problem. Meanwhile, Democrats argue that the cause of inflation is Russian invasion of

Ukraine and that climate change is a much more serious problem.

Inflation in the U.S. and the resulting economic policies affect Japan, too. So, it is important also to understand the background of the political division in the U.S. Geopolitical thinking can also be used to analyze domestic situations and public sentiment.



## The “energy crisis” current core of geopolitical and geo-economic risk

Soaring energy prices, the double-edged sword of economic sanctions against Russia, and renewable energy, explained by KATO Manabu, Director General of the Energy Solutions Finance Department at JBIC, and a Russia expert.



Fossil fuels such as oil and natural gas are not only finite and distributed unevenly in the world, but there are also risks in their transportation through “chokepoints” and countries in conflict.

### Q Why are there high geo-economic risks in the energy sector?

**A** Reserves of fossil fuels such as oil, natural gas, and coal are finite and unevenly distributed. The major areas supplying fossil fuels include the Middle East, North America, Russia, and Australia, and energy prices are significantly impacted by the political situation in these countries and regions. The Middle East in particular is known for frequent conflicts and political instability.

Risks also lie in transportation. When fossil fuels are transported by ship or pipeline, they often have to pass through maritime chokepoints or countries in conflict, creating challenges around the safety of sea lanes.

Moreover, energy supply is sometimes used as a means to achieve geopolitical objectives. In a conflict between countries, the country supplying a resource can stop exports at a level that benefits itself; similarly, a purchasing

country can stop imports from a specific country as a way to apply pressure. This risk was exposed all too clearly by the energy crisis that broke out in the wake of Russian invasion of Ukraine.

### Q How are European economies affected now?

**A** Following the invasion of Ukraine, Western countries imposed measures to suspend imports from Russia. However, economic sanctions against Russia, the world’s largest energy supplier, led to energy insecurity and are seriously impacting peoples’ lives. While the shale revolution has enabled the U.S. to be energy self-sufficient, Europe is at a greater disadvantage because of its high dependence on Russian gas supplied through pipelines, with this accounting for nearly 40 percent of its total natural gas procurements in 2019 (2020 BP statistics).

The average gas bill for a single-family home in Germany has more than

doubled since 2021. In the U.K. as well, electricity and gas bills soared, leading to frequent protests and deepening political turmoil.

Economic sanctions can be a double-edged sword as they can also damage the economy of the imposing side. Looking at GDP growth rates, for example, the U.S., Europe, and Japan have repeatedly made downward revisions after Russian invasion of Ukraine. There are also fears of stagflation, in which inflation and recession occur simultaneously. On the other hand, underpinned by strong Indian and Chinese demand for Russian oil, projections for the Russian economy have been repeatedly revised upwards (see table on the following page). Indeed, it may be that the economic sanctions are more damaging to the West and other countries than they are to Russia.

However, sufficient analysis of the blowback damage from sanctions in the energy sector has not been made. In

### Revisions of the economic growth rates of key economies

## Russia has been making upward revisions since the invasion of Ukraine

When the West imposed economic sanctions on Russia, it was expected that the Russian economy would suffer a major decline, but instead, the damage to the world as a whole has been greater than expected.

|               | 2022<br>Projections as of January | 2022<br>Projections as of April | 2022<br>Projections as of July | 2022<br>Projections as of October | 2023<br>Projections as of October 2022 |
|---------------|-----------------------------------|---------------------------------|--------------------------------|-----------------------------------|--|
| WORLD         | 4.4                               | 3.6 ( - 0.8 )                   | 3.2 ( - 0.4 )                  | 3.2 ( - )                         | 2.7                                    |
| UNITED STATES | 4.0                               | 3.7 ( - 0.3 )                   | 2.3 ( - 1.4 )                  | 1.6 ( - 0.7 )                     | 1.0                                    |
| EURO AREA     | 3.9                               | 2.8 ( - 1.1 )                   | 2.6 ( - 0.2 )                  | 3.1 ( + 0.5 )                     | 0.5                                    |
| JAPAN         | 3.3                               | 2.4 ( - 0.9 )                   | 1.7 ( - 0.7 )                  | 1.7 ( - )                         | 1.6                                    |
| CHINA         | 4.8                               | 4.4 ( - 0.4 )                   | 3.3 ( - 0.9 )                  | 3.2 ( - 0.1 )                     | 4.4                                    |
| RUSSIA        | 2.8                               | - 8.5 ( - 11.3 )                | - 6.0 ( + 2.5 )                | - 3.4 ( + 2.6 )                   | - 2.3                                  |

Source : IMF, World Economic Outlook

addition, no country has imposed sanctions on Russia for the enriched uranium necessary to fuel nuclear power plants. That is because the U.S. and Europe both depend on Russia for about 20 percent of their enriched uranium, a supply they do not wish to see cut. Astute assessment of the double standards of the West imposing such sanctions is necessary.

### Q What are Japan's geo-economic risks with respect to energy?

**A** Japan has the world’s third-largest GDP but an energy self-sufficiency rate of just 12 percent, the lowest among the G7 nations. Japan relies on imports for 99.7 percent of its crude oil, 97.7 percent of its liquefied natural gas (LNG), and 99.6 percent of its coal. Notably, Japan depends on the Middle East for about 90 percent of its oil. As an island nation, Japan cannot import electricity from other countries through the grid, as can be done in Europe, and so the diversification of import sources is extremely important from the aspect of energy security. JBIC, in collaboration with the Japanese government, strives for long-term energy security by maintaining lines of communication with resource-producing countries to gain an astute understanding of their intentions.

In order to achieve carbon neutrality by 2050, thermal power generation using natural gas or LNG is considered essential for resource-poor countries like Japan. Because natural gas and

LNG emit less carbon dioxide than oil or coal, they are expected to play roles as bridging fuels in the transition to renewables. The invasion of Ukraine disrupted that scenario, however, and there is now fierce competition for natural gas and LNG across the globe. The year 2023 will indeed be the crucial period for securing a stable, long-term energy supply system.

### Q Could you talk about fossil fuel market trends, particularly around oil?

**A** The global trend toward decarbonization has led to fossil fuel divestment. In fact, investment by Big Oil fell by as much as 49 percent between 2015 and 2021, and this was one of the factors in the soar in energy prices, spurred further by the energy crisis following Russian invasion of Ukraine.

An intense tactical game is being played out between OPEC+ — made up of OPEC (Organization of the Petroleum Exporting Countries) and other oil producers including Russia — which is taking actions to maintain prices through production cuts, and the U.S., which wants oil prices to go down while curbing Russian oil revenues. Oil prices are projected to remain high and unstable for some time to come.

### Q Will the spread of renewable energy reduce geo-economic risks?

**A** Renewables such as solar, wind,

hydro, and geothermal energy also carry risks. That’s because their suitability for a particular area depends on its topography, weather conditions, and other factors.

In addition, with 80 percent of the polysilicon for solar panels said to be produced in China, solar power is not immune to geo-economic risk. As for wind power, China holds about a 70 percent share in the production of rare earths indispensable for wind turbines. While efforts to become carbon neutral are urgent tasks for the world to address, it is important to be aware that as long as supply chains go beyond national borders, there will always be geo-economic risks, even in the case of renewable energy.

### ANALYST'S BIO

Director General, Energy Solutions Finance Department, JBIC  
**KATO Manabu**

Joined JBIC in 1996. Was stationed in Moscow, engaged in Russia’s resource development and export projects, etc., for a total of eight years. Served as the Special Advisor for geo-economic risks and other positions before assuming his current position. Graduated from the Faculty of Law, Keio University. Author of “Kotei-CEO Putin no Yukue (Putin, Emperor and CEO)”.

JBIC engages in various projects around the world. Senior JBIC staff on the front line share their thoughts and stories behind their projects.

Supporting the Indian health sector during the pandemic through Quad collaboration

## Supporting COVID-19 measures in India, experiencing firsthand the unique excitement of policy-based finance

JBIC signed a loan agreement in May 2022, for the improvement of the healthcare sector in India, as a novel financial outcome of Japan-Australia-India-U.S. (Quad) efforts. MIKITA Satoshi, the project leader, shares the story.

### JBIC's first loan for COVID-19 vaccine production

"This project epitomizes JBIC's vision, 'supporting your global challenges,'" says MIKITA Satoshi, Deputy Director General of the Social Infrastructure Finance Department, who shaped the project into reality. The loan was extended to the Export-Import Bank of India (EXIM-India) for the purpose of boosting the production of COVID-19 vaccines, therapeutic drugs, etc., through financial support for local pharmaceuticals and others.

"This financing involved the expansion of medical equipment production and the development of medical facilities as well as vaccine manufacturers. Against the backdrop of the pandemic, this financial support had a meaningful aim of underpinning India's economic development by raising the standards of the Indian healthcare sector and of improving the business environment for

Japanese companies operating in India."

India is a global manufacturing center for vaccines, exporting to countries across Southeast Asia and Africa. Boosting its vaccine manufacturing capacity with this loan will therefore benefit the health of people not only in India but also far beyond its borders.

"Our role is not only to lend money. We need to think about what we can do beyond this, for the economic development of partner countries and the world, and this project reminded me of that. This was JBIC's first financing for a wide range of sectors related to vaccine production during the pandemic," adds MIKITA.

One of the unique features of this project was that the diplomatic agenda of strengthening the Japan-Australia-India-U.S. partnership made headway through this cooperation to support India's healthcare sector. This unique aspect was perhaps something only JBIC — Japan's policy-based financial

institution — could work through.

### Five-hour online meetings were held due to pandemic-related travel restrictions

To realize a "free and open Indo-Pacific," the Quad partners are committed to cooperating in a wide range of areas to contribute to the region. At the first Quad Leaders' Meeting, held (online) in March 2021, the four countries identified the response to the pandemic as "the most urgent of global challenges." In this context, they agreed to work together to strengthen India's vaccine manufacturing capacity and to utilize their financial institutions including JBIC.

This project was therefore highly significant and involved political dynamics in terms of promoting cooperation at the government level, and so negotiations had to be conducted from multiple perspectives. "While difficult, the project also allowed us to experience firsthand the excitement of working as a



Deputy Director General  
Social Infrastructure Finance Department  
Infrastructure and Environment Finance Group

### MIKITA Satoshi

Joined JBIC in 1997. Served as a senior representative in Washington, D.C., and as a senior researcher at the SI-PI Promotion Office of the Hitachi Research Institute. Has been involved in projects in the global market for railroads, urban transportation, waste power generation, and water projects, as well as country assignments in the U.S., Canada, and other countries. Graduated from the Faculty of Law, Hitotsubashi University.

policy-based financial institution."

In addition to negotiating the details of the agreement with EXIM-India, it was also essential to discuss the positioning of this loan within the Quad framework with the U.S. Given the travel restrictions due to the pandemic, online meetings were held with representatives from EXIM-India for over five hours each day in the lead-up to the signing of the loan agreement. Careful local negotiations by JBIC representatives working in New Delhi were also a success, and the contract was concluded in time for the Quad Leaders' Meeting in Tokyo in May 2022.

### Supporting the overseas expansion of regional banks — toward the expansion of lending to India

The loan was co-financed by JBIC, MUFG Bank, The Hachijuni Bank, and The Bank of Kyoto. MIKITA described the role of JBIC in supporting the overseas expansion of regional banks as follows: "For regional banks that do not have extensive international operations, there are risks in developing overseas business on their own. We would like them to initially partner with government-affiliated

financial institutions such as JBIC to facilitate their overseas expansion through co-financing arrangements where we can provide loan guarantees."

An increasing number of regional banks are looking overseas for a variety of reasons, such as to expand their business or to support the overseas expansion of local companies. This project provided an opportunity for regional banks to expand their business into India.

While there were few loan projects to India until about five years ago, the number of projects has been increasing recently, mainly due to strengthened governance on the Indian side. India faces a number of challenges, including a disparity between its economic growth and electricity demand, and its heavy dependency on coal-fired power generation. As India moves forward with decarbonization and other initiatives, JBIC's involvement in the telecommunications and agriculture sectors may increase, as well as in the renewable energy sector.

This financing project produced a range of results, including stronger



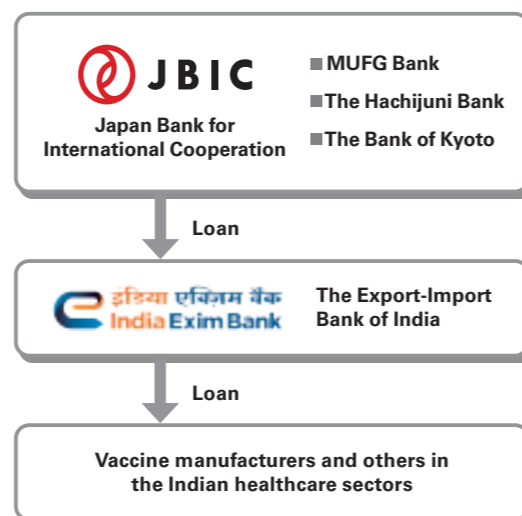
FURUYA Toshihiro, one of the project members. Under MIKITA's leadership, FURUYA underwent tough negotiations with EXIM-India. He recalls, "It was a significant project that involved both geopolitics and international policy."

Quad coordination on the diplomatic front and overseas expansion of Japan's regional banks.

"This project has opened up new avenues for financial support to India, which has a lot of potential for growth. With our lending and equity capacity, we will continue to leverage the strengths of Japan, such as its technological capabilities, to meet India's challenges." MIKITA believes the future is bright.



Even today, India's COVID-19 booster vaccination rate is less than 20%. Continued support is essential.



### Project Summary

In May 2022, a loan agreement was concluded with EXIM-India, India's policy-based financial institution, for up to USD100 million (including a USD60 million JBIC loan). JBIC provides guarantees for the portion of the loans from private financial institutions.



Press release on this project >>>



Asahi Kinzoku Kogyo Inc.  
President and CEO

**YAMANAKA  
Yasuhiro**

Joined the company in 1981, became president in 1989, and has continued to lead the business for more than 30 years. The company has thoroughly trained its employees with a "desire to make good products without cutting corners" and this has become part of the company's culture. This attitude will remain unchanged even in the face of global expansion.

**Asahi Kinzoku Kogyo Inc.**

**Aircraft parts maker recognized by Boeing  
Earning trust and experience for a global push**

In addition to a core plant in Gifu Prefecture in Central Japan, with an eye on the Asian market the company is also focused on a plant in Malaysia. With strong technical skills and reliability based on "manufacturing products that truly meet the required specifications," the company is moving forward with post-COVID global expansion.

**From soy sauce brewing to plating plant  
Business expansion with the development of the aircraft industry**

"We have a system in place to transfer the know-how we have accumulated in Japan on airframe components to overseas markets. India will be the next big market, followed by Africa."

YAMANAKA Yasuhiro, President and CEO of Asahi Kinzoku Kogyo, explained the company's vision and showed us around their Gifu plant, which he has nurtured with his own hands.

The company is known as a



Assets of strong technological capabilities and reliability, at 300-Year Factory in Gifu

manufacturer that performs surface treatments such as machining, plating, and coating for aircraft and rocket parts. The company was the first in Japan to receive Nadcap accreditation, an international certification for special process control related to the aerospace industry, and has earned the trust of major customers that include the U.S. company Boeing and Mitsubishi Heavy Industries. The company has operations in Kyoto, Gifu, Malaysia, and the U.S.

The company is headquartered in Kyoto, where it was a soy sauce brewery until World War II, when it was converted to a plating factory. "We coated soy sauce barrels with coal tar to make plating tanks. As the number of jobs increased to meet the demand for reconstruction, our company was asked to assist the aircraft division of Shimadzu Corporation, which is also in Kyoto."

The company supplied parts to the Japan Air Self-Defense Force and built a new plant in Kyoto to meet the growing demand for aircraft-related products with the arrival of the Boeing 747 jumbo

jet. Since then, as Boeing developed new aircraft models such as the 787 and 737, the company has expanded its own production system.

**A new plant for machining engine parts, and a "plant that will last 300 years" at the core**

The Gifu Anpachi Plant, currently the company's main site, consists of three buildings: the West Plant, the 300-Year Factory, and the East Plant. In 1992, the West Plant was established, with room for future expansion and good access to both the Kansai and Kanto regions. Operations began at the 300-Year Factory in 2002 and at the East Plant in 2011. The total area of the three plants exceeds 21,000 m<sup>2</sup>.

The 300-Year Factory, the core of the three, derives its name from being "a structure that can maintain production for 300 years." The structure is pillarless so that equipment can be replaced and the layout can be changed according to operating conditions. By establishing a production system that integrates the

processes of material input, machining, pre-treatment to improve corrosion resistance, and coating, the company is working to further shorten delivery times and lower costs. In addition, a fourth plant, which will focus mainly on machining engine parts, is scheduled to begin operations in 2023.

The aircraft industry, which involves cutting-edge technologies and safety standards on which many lives depend, would seem to require extraordinary technological capabilities to win the trust of the public, but YAMANAKA shakes his head. "It's not that the standards in the aircraft industry are unusually high. Automobiles have automotive quality requirements, and electronics have electronics quality requirements. But we have built trust and confidence through our honest efforts to meet the required specifications, and this has led us to where we are today."

That said, solid technology is certainly the key to trust. For example, in the parts inspection system, the use of a special fluorescent solution has achieved an accuracy that detects microscopic scratches and cracks (measuring in microns) that cannot be seen by the naked eye. These advanced technological capabilities, which have been accumulated over the years, are also utilized in the manufacture of rocket parts and medical devices.

**The aircraft industry makes another leap forward — continuing to invest with confidence**

Another characteristic of Asahi Kinzoku Kogyo is its aggressive stance toward market development not only in Japan but also overseas. In Japan, the aircraft

industry is basically structured such that large heavy industry companies, which are contracted by Boeing to manufacture airframes, outsource their parts processing and assembly to small and medium-sized suppliers. Expanding direct transactions with overseas companies is also important in terms of diversifying management risk.

In 2015, in an attempt to gain a foothold in the Asian market, the company established a subsidiary in Malaysia in response to the entry of an aircraft fuselage manufacturer into that country. The company also took advantage of a JBIC loan in anticipation of expanding the plant in 2021. "Malaysia is sure to be one of the centers of the aircraft industry going forward. We will continue to make the necessary investments while keeping a close eye on Boeing."

The aircraft industry has been struggling in recent years as the pandemic hit the industry. Cross-border travel was restricted, and domestic and international airlines were barely operational. "Although the freighter market was still moving to some extent, the passenger aircraft market dropped to about one-fifth of its peak, and the company's sales were also down."

Nevertheless, the company has not stopped making capital investments and expanding overseas, with reliance on the technology and trust it has cultivated and its confidence that the aerospace industry will make another leap forward.

"COVID has now subsided, and aircraft deliveries have begun to move again. In the future, there will be a growing trend toward decarbonization, such as increased use of hydrogen and bio-fuels. And aircraft are being developed with electric motors, like electric cars. In the world of aerospace components, specifications are everything. The key is how quickly, cheaply and accurately these specifications can be met. We feel that the stage is now set for us to demonstrate our strengths because of the trust we have earned from our customers."

| Asahi Kinzoku Kogyo Inc. |   |
|--------------------------|---|
| 1948                     | Company founded                                       |
| 1977                     | Approved as a special processing plant for Boeing Co. |
| 1988                     | Kyoto South Plant completed                           |
| 1992                     | Gifu Anpachi West Plant completed                     |
| 2002                     | Gifu Anpachi 300-Year Factory completed               |
| 2015                     | Asahi Aero Malaysia established                       |
| 2019                     | Asahi Aero America established                        |



The banner of support presented by Boeing at the time of the Great East Japan Earthquake was a sign of trust. The photo on the left is of the banner still displayed in the plant / High-quality production is possible overseas because of the company's thorough knowledge of aircraft parts (Photo on lower right of Malaysian subsidiary).

**Loan Summary**

In March 2021, a loan agreement was concluded with Asahi Aero Malaysia, a Malaysian subsidiary of Asahi Kinzoku Kogyo, for a loan of up to JPY100 million (JBIC portion). Co-financed with Shiga Bank. This support has contributed toward the maintenance and improvement of the international competitiveness of Japanese industry.

1950

## Postwar reconstruction and the birth of Japan Export Bank, JBIC's forerunner A step toward becoming a trading nation

The origins of JBIC date back to 1950, part of the history of Japan's postwar foreign monetary policy. This new series of articles will look back at the history of JBIC, one year at a time.



Discussions between Joseph Dodge (left), a key figure in the establishment of the Export Bank, and IKEDA Hayato, Minister of Finance (middle), 1951

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### Once postwar inflation had settled down, Japan hit on the idea of establishing an Export Bank

Five years after the end of World War II, the Japan Export Bank was established in December 1950; the forerunner of JBIC. The idea of establishing an Export Bank began with a meeting between Finance Minister IKEDA Hayato and U.S. monetary policy advisor Joseph Dodge in May of the same year.

Immediately after the war defeat, all goods were scarce in Japan, and people's lives were poor. However, GHQ (occupying authorities) severely restricted trade, forbidding imports other than items necessary to maintain a minimum standard of living. Eventually, the U.S. occupation policy toward Japan changed, in part because of the growing belief that stronger economies in Asia and Europe would stop the spread of communism.

In March 1947, the "Japan Economic Promotion Plan" was formulated, which stated that in order to revive the Japanese economy, it was first necessary for the country to import sufficient food and raw materials, and use those raw materials to manufacture goods for export. In other words, it was believed that exports could be a catalyst for reconstruction.

At the time, Japan was experiencing severe inflation, and in 1949 Dodge

implemented a balanced budget called the Dodge Line. Inflation was successfully brought under control, but then dissatisfaction with deflation began to rise in Japan. So, in May 1950, Prime Minister YOSHIDA Shigeru ordered Finance Minister IKEDA to visit Washington, D.C., where he met with Dodge. He proposed the idea of establishing an Export Bank.

### It was initially established as Japan Export Bank with no import financing permitted

Finance Minister IKEDA was looking for a way to promote exports to ease deflation, while Dodge hoped that boosting export financing from Japan would lead to economic recovery in other Asian countries. But things were not that simple. GHQ, which had been sidelined by this meeting between IKEDA and Dodge, objected. GHQ was displeased that Finance Minister IKEDA had consulted directly with Dodge instead of GHQ, which was supposed to be the official channel.

In October, Dodge arrived in Japan as an advisor to General MacArthur, the head of GHQ, and the idea was realized in the form of the "Outline for Establishing the Export Finance Bank." Fierce bargaining then took place over the next two months until the Export Bank Bill was passed in December. While Finance Minister IKEDA had initially pushed for

the Export-Import Bank proposal, Dodge did not approve of import financing until the end. He argued strongly that imports are the same as domestic consumption, which Japan should curb and use those resources for exports.

The Export Bank was initially limited to financing the export of equipment and technologies, but then the Korean War broke out, and Japan found itself in the midst of a procurement demand boom. In April 1952, the scope of operations was expanded to include import financing needed for the development and import of natural resources, and the name was changed to the Export-Import Bank of Japan. Japan had taken a strong step toward economic recovery as a trading nation.

### Foundation of Japan Export Bank

|      |                      |  |
|------|----------------------|--|
| 1945 | August               | End of World War II  |
| 1949 | March<br>April       | Dodge Line<br>Exchange rate of 360 yen to the dollar is applied  |
| 1950 | June<br><br>December | Foreign Exchange and Foreign Trade Control Order enacted<br>Outbreak of the Korean War<br>Establishment of Japan Export Bank |
| 1951 | September            | San Francisco Peace Treaty signed  |
| 1952 | April                | Name changed to the Export-Import Bank of Japan  |