

# JBIC Today

May 2021

**Special Feature**

## **Survey of Overseas Direct Investment by Japanese Companies - Rethinking Supply Chains -**

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**JAPAN BANK FOR  
INTERNATIONAL COOPERATION**



# Survey of Overseas Direct Investment by Japanese Companies -Rethinking Supply Chains-

## After China and India, Vietnam remains firmly popular What the future holds for globalized production networks

Since 1989, JBIC has conducted a survey of Japanese manufacturers every year on their overseas business operations and reported its results. The objective of the survey is to understand the current trends, agenda, and future outlook of the overseas business operations of internationally active Japanese manufacturing companies. Many companies cooperated in the FY2020 survey even amid the impact of the COVID-19 pandemic. It revealed some interesting results in terms of the outlook for the overseas expansion of the manufacturing industry in the future.

**COVID-19 affects many companies' production activities**  
**Expectations are growing for China, which resumed economic activities quickly**

In FY2020 JBIC Survey Report on Overseas Business Operations by Japanese Manufacturing Companies (Survey of Overseas Direct Investment by Japanese Companies), in addition to the regular themes of business performance evaluation, business development prospects, and medium-term promising countries/regions, this year's survey also covered the special themes of the impact of COVID-19 on the supply chain and companies' efforts and future outlook toward the SDGs. While annual survey items are positioned as fixed point observations, these special themes are positioned as a prediction of the current status and future trends of themes of particular interest.

Ever since it emerged, the COVID-19 pandemic has wreaked havoc around the world, but the epidemiological situation and preventive measures being taken vary from country to country, and the impact on corporate activities also varies.

Regarding promising countries/regions over the mid-term (next three years or so), China regained its position at the top of the rankings in the FY2020 survey. The difference between China and India, which fell back to second from the top spot, appears to have been these two countries' respective responses to the pandemic. While China was quick to resume economic activity, India has suffered from a protracted lockdown,

exacerbating its already troubling economic situation.

Nevertheless, mere two votes separated China and India. Although this reversal in the top rankings is important, even more notable points are the extent to which these two countries have pulled ahead of the third-ranking and lower countries/regions, the continued high expectations for ASEAN member states in the overall rankings, and, on the other hand, the decline in expectations toward Mexico over the past several years.

Particularly worthy of attention is Vietnam, which has consistently placed high in the rankings for the past 15 years and continues to hold firm popularity. Given its clear gaps from India in second place and Thailand in fourth, Vietnam is likely to remain in third place for the foreseeable future. Vietnam has been incorporated into the supply chain as a production base for a wide range of industries, including general machinery, and it is also becoming increasingly attractive as a market due to rising domestic incomes. These trends are making Vietnam an attractive prospect in terms of both internal and external demand.

Bangladesh, where trade inquiries have been increasing in recent years, and Germany, which is a major industrial center in Europe, continue to be seen as promising.

Conversely, Myanmar is seen as concerning, falling one rank to 10th place in the FY2020 survey. It enjoyed a temporary boom in popularity around 2015, before settling down slightly in recent years, but the political upheaval in February this year has raised concerns that expectations for Myanmar may decline significantly.

### Promising Countries for Overseas Business over the Mid-term (Next 3 Years)

Ranking		Country/Region (Total)	No. of Companies		Percentage Share (%)	
2019	2020		2019 (404)	2020 (356)	2019	2020
2	1	China	180	168	44.6	47.2
1	2	India	193	163	47.8	45.8
3	3	Vietnam	147	131	36.4	36.8
4	4	Thailand	133	111	32.9	31.2
6	5	US	93	98	23.0	27.5
5	6	Indonesia	102	96	25.2	27.0
7	7	Philippines	48	37	11.9	10.4
9	8	Malaysia	41	34	10.1	9.6
8	9	Mexico	47	32	11.6	9.0
9	10	Myanmar	41	25	10.1	7.0
14	11	Germany	14	20	3.5	5.6
11	12	Taiwan	18	18	4.5	5.1
21	13	Bangladesh	7	16	1.7	4.5
15	14	Australia	13	14	3.2	3.9
12	15	Korea	15	12	3.7	3.4
12	16	Singapore	15	11	3.7	3.1
17	16	Brazil	11	11	2.7	3.1
26	18	UK	4	9	1.0	2.5
18	19	Russia	9	8	2.2	2.2
20	20	Turkey	8	7	2.0	2.0

Note: Countries/regions with the same rank were ordered based upon their rank in the previous survey.

### Surveyed Companies

The companies targeted in this survey are Japanese companies which have three or more overseas affiliates (including at least one production base).

Number of surveyed companies: 954 Number of valid respondents: 530 companies (168 by post, 362 online) Valid response rate: 55.6% Survey period: August 21 – September 30, 2020

### From production base to giant market: Shift in China's positioning Expectations for solid recovery and concerns about slowing economy

Data on overseas production ratios have been collected since 2001. This figure indicates the involvement of Japanese companies in China. 2001 is the year when China joined the WTO, and it was also around that time that the Japanese manufacturing industry began to consider China as a factory of the world. Japanese companies started manufacturing overseas in earnest in the 1980s. This trend was further spurred on by the presence of China, with the overseas production ratio increasing to more than 35% in 2015 and climbing as high as 36.8% in 2018.

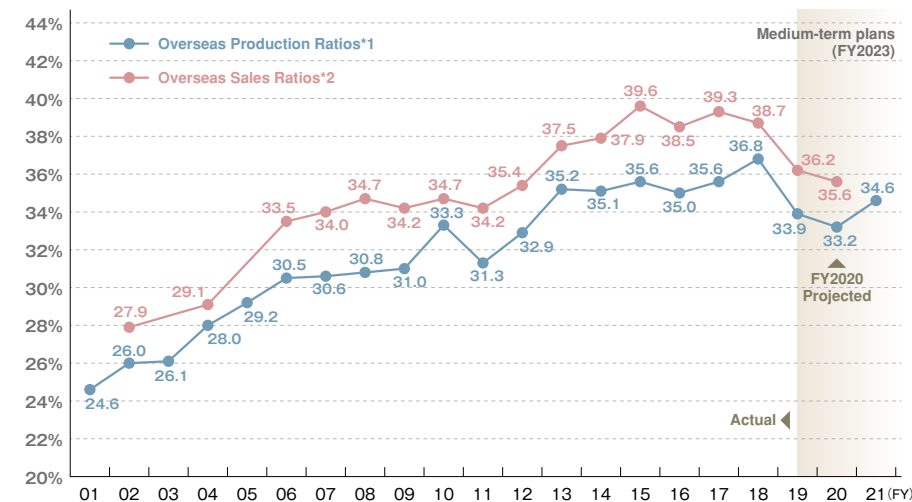
China's position has changed significantly over the past 20 years. When Japanese companies first ventured into China, while some production was for local sales, their main intentions were to export the goods they produced in China to Japan and the United States, or to assemble them in the ASEAN region before re-exporting them on to other countries. However, that perception has changed significantly in the past 10 years or so. The red line in the graph below shows the trends in overseas sales ratios, indicating the extent to which Japan has captured overseas markets. This figure started increasing in 2011.

This is when Japanese companies started to see China as a market. In other words, the graph shows that, for Japanese companies, China was a production base until the early 2000s, but in the following decade, their positioning of China changed to a market for them to sell their products.

The impact of COVID-19 can also be seen in this graph. Overseas production ratio rose as high as 36.8% in 2018, but fell to 33.9% in 2019, which was the largest decline in history. Based on extremely rough calculations, if we were to divide this decline by 12 months, it represents a decline of about 3% per month. In other words, from a macro-economic perspective, it can be assumed that, overall, COVID-19 and the accompanying lockdowns had the impact of suspending overseas production by Japanese companies for about a month.

Views on the outlook for future recovery vary depending on the industry. In the summer and autumn of 2020, when the questionnaires were sent out, many observers at that point in time were predicting that a recovery to about 34.6% would be achieved by the end of fiscal 2023. However, with the Chinese market

### Trends in Overseas Production Ratios\*1 and Overseas Sales Ratios\*2



\*1 (Overseas Production) / (Domestic Production + Overseas Production) \*2 (Overseas Sales) / (Domestic Sales + Overseas Sales)

\*3 Each of the ratios in the graph is a simple average based upon the values reported by responding companies.

### Countries Attracting Attention for Overseas Business Investment

#### Germany

Germany boasts the largest concentration of industry in Europe and demonstrates a major presence as a gateway to the continent/Europe and as a country with technology development partners. With railway connections between Germany and China being developed in recent years, Germany's role as a European base for entering the Chinese market is also attracting attention.

#### Bangladesh

Bangladesh rose in the rankings from 21 in the previous survey to 13 in FY2020. In addition to expectations that the market will expand against the backdrop of its large population, many companies seem to be attracted by Bangladesh as a production base for automotive components due to its reasonable labor costs. Its future development is also expected from geographical perspectives, with hopes for future cooperation with neighboring countries such as India and Thailand also growing.

#### Mexico

Mexico's rank peaked in 2016 but fell during the Trump administration. Due to its proximity to North America, the automotive industry has high expectations of this country. However, many companies seem to consider the enforcement of the United States-Mexico-Canada Agreement (USMCA), in particular, its Rules of Origin, as a constraint on their business, so this situation will require ongoing monitoring.

Commentator of the survey  
Director, Division 1, Strategic Research Department

**KASUGA Takeshi**

showing a steadier recovery than expected, some companies are now aiming to recover during fiscal 2021.

In general, the overall view of the manufacturing industry is that the higher a sector's dependence on the Chinese market, the earlier that sector is expected to recover. For example, at the time of this survey, there had been a large drop in the automotive and general machinery sectors, but these two sectors are now riding the wave of China's recovery. Hence, it is expected that some companies will see their business performance achieving better results than expected in the future.

Respondents from all industries, regardless of sector, commented that their business in China has recovered. While this is certainly a promising sign amid the COVID-19 pandemic, for this very reason, the concerns expressed about what would happen in the event of a slowdown of the Chinese economy are certainly understandable. Continuing to diversify their markets, in other words, developing markets other than China could be described as a common challenge for all industries.



# Supply Chain Overcoming Pandemic and Growing Increasingly Resilient

COVID-19 has brought issues in production networks to light. Supply chains are shifting from cost-consciousness to improvement of reliability.

SDGs are also showing signs of spreading through supply chains.

**Limitations of supply chains developed with an emphasis on cost**  
**Goal now is reliability as represented by Just-in-Time**

The FY2020 survey has revealed anew the high degree of dependence on China and ASEAN member states by Japanese companies' supply chains and their vulnerability to external shock, namely the pandemic. However, the signs of any repatriation to Japan are weak, with few companies considering withdrawing from overseas. Not many companies are choosing to relocate or reorganize their bases. The overall direction is to first secure and increase their working capital and work on areas such as strengthening local procurement, before engaging in qualitative improvement of the supply chain.

Of particular note in this regard is factory automation. In the FY2019 survey, when asked about automation of production processes,

labor saving, and IT-based optimization, a third of the respondent companies expressed some interest. In particular, they have already been considering factory automation in China, Thailand, Indonesia, and Vietnam, and the pandemic could also be thought of as a trigger that will further encourage such trend.

Based on the results of the survey, when we asked experts, a common response was that, until now, Japanese companies have sought out locations with cheaper labor for their supply chains from an emphasis on lower costs, but it appeared that, since the pandemic, their awareness has started to change toward making "reliability" a source of competitiveness. There is a tremendous sense of trust in Japanese companies that pursue

"Just-in-Time" operations, so that is likely to become a key point in their competitive advantage.

In fact, some companies are starting to consider increasing the reliability of their supply chain, even if it means incurring certain costs. Their intention is to treat the symptoms through responses such as multiple streams of procurement and building-up of inventory, while, at the same time, strengthening the quality of the supply chain itself and improving reliability to make it more resilient. It is becoming more difficult for Japanese companies to continue to compete successfully against China and emerging countries by cost competitiveness alone, and the manufacturing capabilities of emerging countries are also progressing dramatically. Because the COVID-19 pandemic occurred in this kind of competitive environment, it may be only natural for Japanese companies to reflect on their development of bases from a single-minded pursuit of lower costs and to start re-thinking their supply chains on the basis of competitiveness in terms of resilience, that is, their ability to recover from external shocks.

The friction between the U.S. and China and the COVID-19 pandemic have led to the realization that globalization is not all good. Ensuring resilience against various external shocks in the future, including climate change, appears to have emerged as an important theme.

**Decoupling already underway even before US-China friction**  
**Trend in optimization of production locations will continue**

Companies with business bases in both the United States and China were asked about how they were handling the debate about US-China decoupling, referring to the separation of their US and China businesses. The most common response, as expected, was "no discussion," but a considerable number of companies responded that they had already decoupled their US and China businesses. A surprising result was a large number of companies that responded that they were in the process of decoupling.

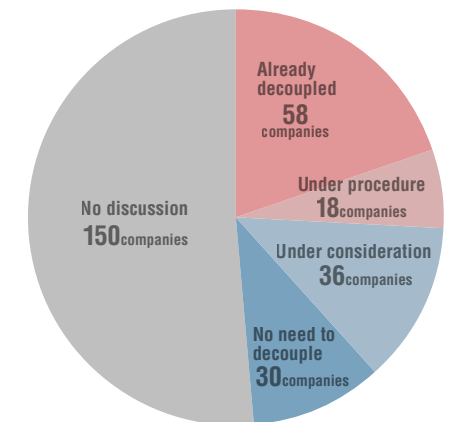
In interviews, we also received several comments along the lines of "US-China decoupling took place naturally," "China as a production base ended around 2010. As China's working-age population has peaked out and production costs are rising, our production bases have been transferred to the ASEAN region." These responses could lead to the assumption that the relocation of business bases had already started even before the rise of US-China friction.

Companies that responded that they were in the process of decoupling or that they were

considering decoupling but had not yet started appear to sense the risks in their supply chains straddling these two huge markets amid the US-China friction and the COVID-19 pandemic. Examples of such risks are the possibility of customs clearance procedures being disrupted due to the pandemic or the need to check whether or not a product is affected by the US-China dispute. For these kinds of reasons, it appears that some companies, rather than unreasonably maintaining supply chains that involve multiple markets, want to change their supply chains into a form in which local production and local consumption can be completed in separate individual markets.

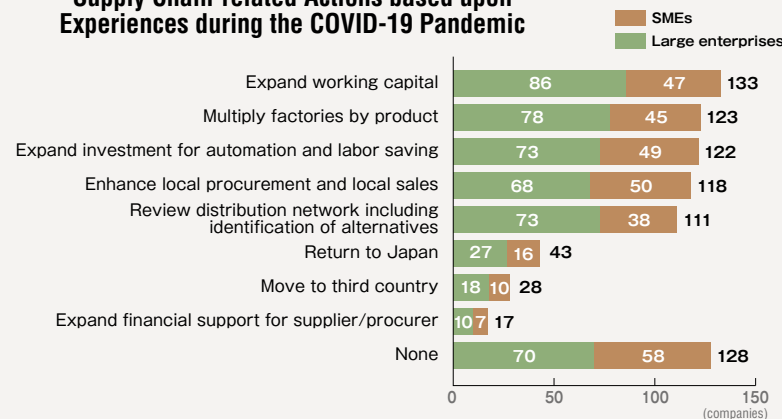
The important point is that US-China decoupling is not an objective, but the result of optimal business development by companies. This means that decoupling is one optional outcome of the process of reviewing and optimizing production frameworks, and that the US-China dispute and COVID-19 have served as a promoter or a catalyst leading to that action.

**US-China Decoupling Response of Companies with Bases in Both U.S. and China**

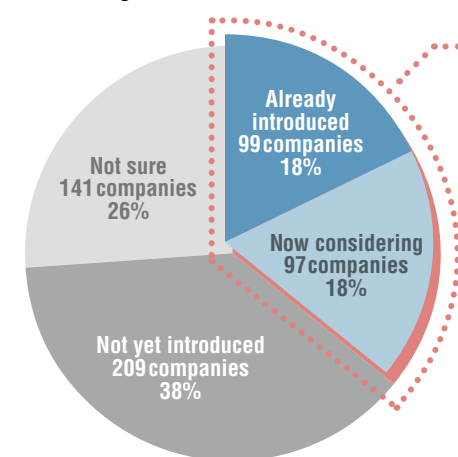


There has also been another key development relevant to US-China decoupling. In February this year, U.S. President Joe Biden signed an executive order to strengthen U.S. supply chains. The United States will work on measures to strengthen the resilience of U.S. supply chains over the next three months to a year, while at the same time promoting close cooperation with allies and partners of the United States. We should continue to bear in mind that global interest in supply chains is expected to remain high.

**Supply Chain-related Actions based upon Experiences during the COVID-19 Pandemic**

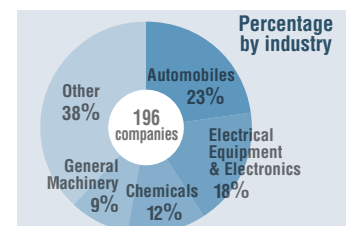
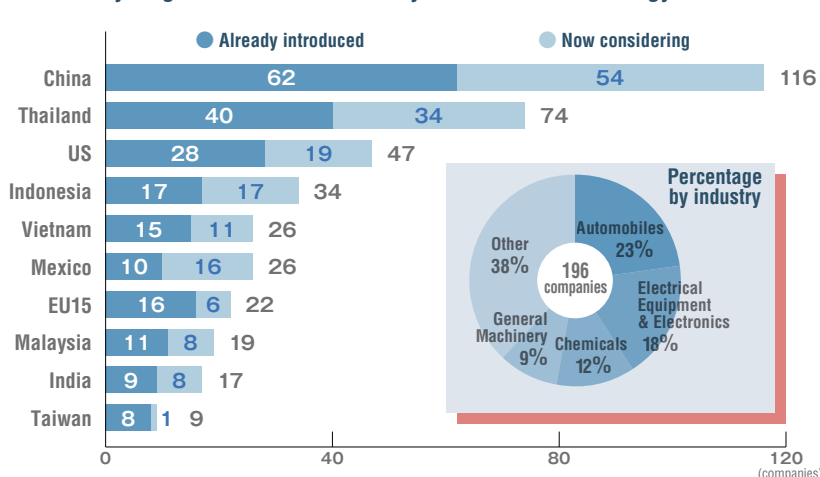


**(Ref: FY2019 Survey)**  
**Status of Introduction of Factory Automation Equipment /Technologies to Overseas Production Sites**



Overall (total answers = 546 companies)

**Country/Region to introduce factory automation technology/facilities**



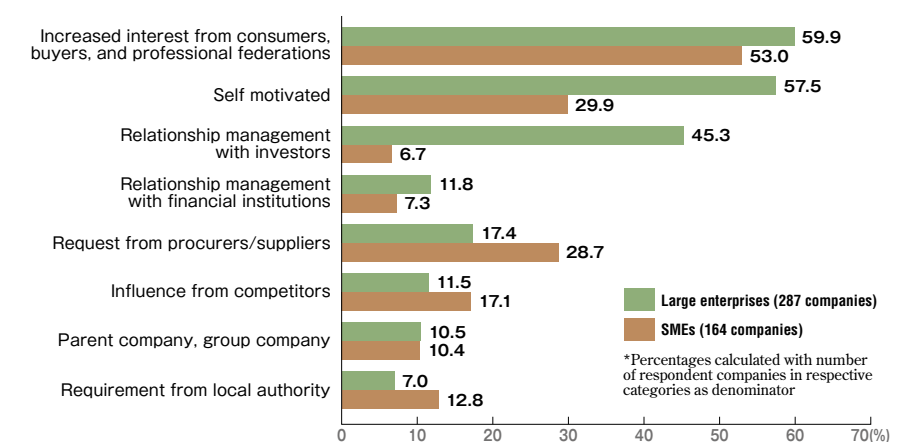
**Rising expectations for Japanese companies' potential**  
**SDGs initiatives expanding through supply chain**

Japanese companies' interest in the SDGs was thought to be low, but in this survey, approximately three-fourths of all respondent companies answered that they were either working on or considering the SDGs in some way or another.

The analysis by company size was particularly interesting. Company size was irrelevant in the top two motivations for efforts toward the SDGs, but there was a clear difference in the third motivation, with large companies citing "relationship management with investors" while SMEs cited "Requests from procurement sources/delivery destinations." For this reason, it could be said that large companies dealing with investors on a daily basis are taking the initiative in their efforts toward the SDGs and that the SDGs are starting to spread among SMEs through actual business (namely, the supply chain).

By industry sector, growing awareness of the SDGs through supply chains can be seen in the automotive industry in particular. Requests from business partners are very influential. A certain SME was even told by its European

**Motivations behind Efforts towards SDGs**



\*Percentages calculated with number of respondent companies in respective categories as denominator

partner that it would be excluded from the partner's supplier list if it did not make efforts toward the SDGs. In Japan as well, it is evident that awareness of SDGs is increasing, particularly among large companies.

There are 17 goals in the SDGs, and it is quite understandable that they may seem too lofty to feel any affinity toward them.

Therefore, in order to make them seem more real to the respondent companies, JBIC prepared a list of examples of efforts being made overseas to achieve the 17 goals and attached it to the survey as a reference. Our hope is that Japanese companies will refer to that list as they reflect on their business activities and become aware of their potential.

**JBIC Survey Report on Overseas Business Operations by Japanese Manufacturing Companies can be found from the following website.**

<https://www.jbic.go.jp/en/information/research.html>





# COVID-19 Renews Spotlight on Importance of BCP Next Moves Anticipate Development of Overseas Production Bases

Sumitomo Corporation leverages its strengths as a major trading and business investment company to develop and operate industrial parks overseas. We interviewed NAKANISHI Eisuke, General Manager of Sumitomo Corporation's Overseas Industrial Park Department about the signs of change that only a company that has supported manufacturers for about 30 years can sense.

**Decentralization of bases attracts renewed attention as BCP measure  
Thinking about the ideal vision of overseas industrial parks in the future**



**NAKANISHI Eisuke**

General Manager, Overseas Industrial Park Department, Sumitomo Corporation

—I imagine the COVID-19 pandemic has impacted on overseas industrial parks in various ways.

**NAKANISHI** Since the development of our first industrial park in Indonesia in 1990, Sumitomo Corporation has developed eight industrial parks in six countries. There are 552 tenant companies in those parks in total as March 2021. The distinctive feature of our business is well express in the catchphrase that concluding a contract means commencing the relationship. We also provide high-quality infrastructure, such as water and electricity, to support tenant companies in the stable operation of their businesses. With pandemic countermeasures varying from country to country, we did struggle to respond, and when rules that foreign companies were not happy with were established, we compiled the opinions of tenants in the industrial parks and made submissions to the authorities.

—Have there been moves such as the re-examination of supply chains?

**NAKANISHI** Our overseas industrial parks have attracted attention from the perspectives of business continuation planning (BCP) in the past as well. In particular, the Great East Japan Earthquake and the Thailand Floods in 2011

had a great impact. Manufacturers learned that having only one production base or supplier could put production continuity at risk in the event of an emergency, which made them start considering measures such as decentralizing their bases and searching for new suppliers. The number of tenant companies at our industrial parks in the Philippines increased between 2012 and 2014. I think that this was because, in the aftermath of 2011, companies that had business operations in Thailand and China evidently focused on the Philippines as a location for decentralization.

Recognition of the importance of BCP measures continued, and I think that the global COVID-19 pandemic has cast a new spotlight on that importance and accelerated that trend. However, as COVID-19 is not yet under control, even if manufacturers want to set up a new factory in another location, they are not able to visit potential sites. Changes that involve investment are probably still some way off.

—Have you sensed any change in things other than the supply chain?

**NAKANISHI** This is not something that is due to the pandemic, but because our customers' needs are continuously changing, we also need to evolve ourselves alongside them. Recently, the introduction of green energy is attracting increased attention. This may be due to the influence of the SDGs trend, and we have launched a solar power generation project at our Thang Long Industrial Park II in Vietnam to meet the demands of the tenants companies. Based on the knowledge that we acquire from that project, we intend to deploy it in our other industrial parks as well.

—How do you see the overseas businesses of Japanese companies evolving in the future?

**NAKANISHI** Large-scale investment may take some time, but I think it is possible that Japanese companies will re-organize the roles of their bases. When the U.S.-China friction boiled over, the growth of the Chinese market also factored into the decision by some companies to convert their factories in China to production exclusively for the Chinese market and move their export production lines to their

factories in Vietnam for export to the United States and other markets.

There also seems to be some talk about repatriating production bases to Japan, but given that the reasons for Japanese manufacturers venturing overseas in the first place were cost and labor issues, until those issues are resolved, I believe that the global production will be maintained. Having said that, while we are still feeling the effects of the pandemic, we will continue to communicate with our customers to consider how to update our industrial parks to meet future demands.

On the other hand, manufacturers without the know-how for venturing overseas need support, so we are developing more factories for rent, in which we set up the factory building, and the customer only needs to provide the necessary machinery and equipment. This business enables companies to save money on their initial investment and lowers the hurdle to making overseas moves, making it suitable for pilot projects. Going forward, we will strive to expand our services further to support our customers' overseas expansion.



Thang Long Industrial Park II in Vietnam, with a total development area of 346 hectares



A total of 220,000 people work at Sumitomo Corporation's overseas industrial parks in various countries.

## How Should We View the COVID-19 Pandemic? Global Economic Trends as Seen from Companies' Awareness of Issues

While the factors that affect the economy are many and varied, unlike issues that are limited to certain nations or regions and disasters such as earthquakes, the novel coronavirus (COVID-19) pandemic is a truly global factor that has spread across the entire world. We interviewed international economics expert ITOH Motoshige, Professor Emeritus of the University of Tokyo and Professor of the Faculty of International Social Sciences, Gakushuin University, on how we should view future economic trends.

—What was your view of the results of the Survey of Overseas Direct Investment by Japanese Companies conducted during the pandemic?

**ITOH** In the global economy, trends are decided by major turning points, such as the global financial crisis in 2008. The COVID-19 pandemic is also likely to become such a turning point. In that regard, the results of the survey give us a great deal to think about. Information such as what individual companies were thinking, how they acted, and what their awareness of the issues was like in the current critical circumstances, give us an opportunity to think about future trends. The three keywords I am focusing on at the moment are "supply chain," "U.S.-China relations," and "SDGs."

Before I explain these matters, I would like to point out that, while it is true that various changes have been occurring because of the pandemic, not all of them were actually caused by it. In my view, the pandemic accelerated some changes that had already started, and brought other changes that had already occurred into the light.

—Are you saying that these changes did not happen spontaneously, but that they occurred as part of an ongoing process or based on a build-up of things that had occurred previously?

**ITOH** That's right. Events that occurred around the time of the fall of the Berlin Wall in 1989 are believed to be the turning point that led us to the present. It was around then that the globalization of the economy really started to take off. Today, more than 30 years later, some people describe the developments of those days as "hyper-globalization." This term does not refer merely to the increase in the volume of trade. It also includes how globalization prompted the division of labor beyond national borders and caused supply chains to expand and become increasingly complex. In fact, there are many people who have started to express doubts and sense risks in the supply chains that have evolved to this extent, and I think the pandemic has brought those doubts to the surface.

In addition, globalization has accelerated people's movements across borders at a faster pace than ever before. While there may be nothing wrong with such movement by itself, if overseas workers are not handled appropriately, it has the potential to cause serious problems. If financial markets also overheat due to globalization, this could also become a risk factor, so we need to be careful in that regard as well.

—What is your view of the friction between the United States and China?

**ITOH** This is another issue that was not directly caused by the



**ITOH Motoshige, Ph.D.**

Professor Emeritus, the University of Tokyo, and Professor, Faculty of International Social Sciences, Gakushuin University

Professor ITOH is an expert in international economics, serves as an outside director for many companies, and is also a television commentator. He also serves in a number of public positions, including Chair of the Reconstruction Promotion Committee and Member of the Council for the Promotion of Social Security System Reform.

pandemic. It had already started around the time Donald Trump became President and has continued to accelerate to its current state. Essentially, there is a risk of politics having a major impact on the economy. This is certainly not limited to the United States and China. The same could also be said for Brexit, and it could also happen in other countries and regions.

However, it should be noted that China has been growing rapidly over the past 30 years, and particularly since it joined in the WTO in 2001. While China's growth in itself is not a bad thing, it has had no small impact on international politics and international organizations. The deterioration of the functions of the WTO is a typical example. Ultimately, this has led to trade friction with the United States, and I think it could affect the performance of individual companies.

—Could you give us your opinion on the SDGs?

**ITOH** Among the 17 goals of the SDGs, I am focusing on green-related issues such as climate change and environmental conservation. This is neither a direct result of the pandemic, nor is it an effort to reinvigorate economies that have cooled due to the pandemic. My view is that more attention is being given to themes that have been the subject of various activities for some time, including citizens' movements.

While I would not say that it is directly related to the hyper-globalization that I mentioned earlier, I do think that it is precisely because there are concerns about excessive globalization that it is attracting attention.

What changes will happen to international activities such as the SDGs going forward? How will the companies surveyed assess the magnitude of those changes? I think the survey was quite significant in that it has prompted us to think about these kinds of questions.



# Operating Automotive Components Factories in Three Asian Countries outside Japan Demonstrating Our Strengths to the World by Instilling the Spirit of “Wa (Harmony)” Shinko Kogyo Co., Ltd.

Shinko Kogyo Co., Ltd. manufactures automotive components at three factories in Okayama Prefecture's Soja City in Japan and at four factories in Thailand, China, and Indonesia. It realizes low cost and high quality by transferring Japanese manufacturing, such as building the company's original automatic production systems at its locations outside Japan as well.

## Manufacturing automotive components related to all aspects of driving motion Finding new opportunities through diversification since 2000

'As articulated in our company credo, "Wa Shite Nagarezu (Harmony without mindlessly following others)," which we have upheld since our foundation, we are taking on the challenge of manufacturing around the world while demonstrating teamwork.' These are the words of SASANUMA Yasunori, President of automotive components manufacturer, Shinko Kogyo Co., Ltd.

Headquartered in Soja City, Okayama Prefecture, Shinko Kogyo has three plants in the city and four plants in Thailand, China, and Indonesia. It has manufactured and marketed a wide variety of automotive components, responding to the trend toward local

procurement of client companies that have ventured into overseas markets, including major automotive manufacturers.

Shinko Kogyo is one of Japan's largest producers of propeller shafts, its core product line. It also handles some of the most important components involved in driving motion, namely driving, turning, and stopping. They include transmissions, engine components, power steering components, brake components, wheel hubs, and engine connecting rods.

The company's origins date back to 1948, when SASANUMA's grandfather founded Shinko Kosakusho and started trading with Mitsubishi Heavy Industries, Ltd. (Mitsubishi Motors Corporation since 1970), which was located in the Mizushima Complex in Kurashiki City, Okayama Prefecture. Initially, its business was the machining of various types of screws, bolts, and gears. The company subsequently changed its name to Shinko Seisakusho and expanded its business into sheet metal parts manufacturing and welding assembly. In 1966, to further develop the company in response to increases in orders, the company split up its sheet metal processing division and machining division into two separate companies. Shinko Kogyo came into being as the machining division, and, since then, it has built up its history as a supplier to Mitsubishi Motors Corporation.

A turning point in that history arrived when Mitsubishi Motors formed a capital alliance with DaimlerChrysler in 2000. SASANUMA recalls, 'Under DaimlerChrysler's policy, Mitsubishi Motors clarified its own direction toward global procurement. Hoping to overcome this situation, we broadened our product range, while expanding our business with major components manufacturers and major automotive manufacturers, a move that ultimately became very fruitful for Shinko Kogyo.'

Shinko Kogyo's strength in manufacturing is its ability to produce high-quality products at low cost. What makes this possible is the advanced automatic production system that it has designed and built for itself in-house. This system makes it possible to perform highly productive, flexible manufacturing that accommodates a wide variety of products. It also enables the company to recover quickly of its own accord in the event of a disaster or other emergency situation.

In the construction of the automatic production system, to keep costs down, Shinko Kogyo uses inexpensive general-use components on which their internally-designed, dedicated jigs are mounted. It also strives for thorough cost reductions by designing and manufacturing tools for machining in-house. SASANUMA says proudly, 'Amid increasingly intense global competition, we are able

to provide products of reliable quality at costs that satisfy our customers.'

The company's veteran craftsmen who have played a central role in manufacturing since the time of SASANUMA's grandfather have been committed to improving their technical abilities and have been instilling their expertise and culture throughout the company. In recent years, the company has been working on passing those veterans' skills on to younger generations through the establishment of an in-house workshop program called "Densho Juku," for which one of those veteran craftsmen serves as the principal.

## Building automatic production system even in Asia, a region of cheaper labor QC presentation events held in five locations in Asia including Japan

Shinko Kogyo first ventured into the overseas market in 1988. This was triggered by moves by Mitsubishi Motors' factory in Thailand, which had begun manufacturing pickup trucks, to procure components locally. Shinko Kogyo formed a partnership with a Thai industrial group, Thai Summit Group, to establish a joint venture company, Thai Summit Engineering Co., Ltd. (TSE).

With the aim of also providing forged products from Group companies, in 2009, Summit Group established Thai Summit Meiji Forging Co., Ltd. in a joint investment with Meiji Drop Forge Ltd., TSE, and Shinko Kogyo. In 2011, Wuxi Shinwashin Precision Machining Parts Co., Ltd. was established in Jiangsu Province with the aim of capturing demand in the massive Chinese market. Furthermore, PT. Shinko Kogyo Indonesia (SKI) was established in 2014 when Mitsubishi Motors decided to produce a compact-size mini-van, "Xpander," for the Southeast Asian market. At all its overseas locations, Shinko Kogyo manufactures components for major automotive manufacturers and major components manufacturers, with a focus on Japanese companies like Mitsubishi Motors that have expanded into local markets.

Like its production locations in Japan, the company has built its original automatic production system at these overseas locations, thus achieving low costs and high quality. TSE began pursuing automation in the early 1990s. 'Cheaper labor is one attraction of the Asian market. Back then, only a few companies were tackling automation. However, we felt that, if we were to achieve equivalent quality to the products we make in Japan, we should adopt the same production system and the same controls. We wanted to demonstrate our strengths by transferring the manufacturing of Shinko in Japan directly to other countries.' (President SASANUMA)

The company has also been actively engaging in improvement activities to ensure quality. It has implemented the same QC group activities at its overseas locations as it conducts in Japan. Prior to the COVID-19 pandemic, five teams in total, namely the top two teams from Japan and the respective top teams from Thailand, China, and Indonesia, gathered for presentation events annually in each country. SASANUMA described the effects of this initiative. 'If staff believe that, if they try hard, they might have a chance to go overseas, they will become more motivated toward the improvement activities to ensure quality and other activities to improve their own skills. As a result, these activities have re-invigorated the company and led to the global transmission of technologies.'

As the foundation for these activities, Shinko Kogyo has placed great importance on the "Spirit of Wa (Harmony)" embodied in its company credo. SASANUMA says, 'The most important thing is people helping people in their work. People might lack ability, but we place more importance on their working dependably in accordance with the rules. In the recruiting process, we communicate this spirit to candidates and employ people who can relate to it. For example, the general manager of SKI's administration department is an outstanding individual who has experience working for a major



(Above) Factory opened in Indonesia  
(Right) Production line at the factory in Indonesia

The same equipment as the Japanese factories has been installed there.



automotive manufacturer and a major automotive component manufacturer. He understood our company credo and felt that he wanted to take on the bold challenge of working in an environment where he has been given authority, which is why he agreed to come and work for SKI. The success of our overseas business depends on how well we can instill our philosophy.' (President SASANUMA)

In July 2019, SKI received a co-financed loan from JBIC and Chugoku Bank. 'We were introduced to JBIC by Chugoku Bank and were able to take advantage of a loan from JBIC for the first time to install machinery at the plant. The loan is offered at a long-term fixed interest rate and can be funded in local currency, which allows us to avoid both interest volatility risk and foreign exchange risk. I feel that this loan is supporting our business in Indonesia on the financial front. What we would really like going forward is a system that could be accessed easily for working capital loans,' said SASANUMA, hopefully.

With the wave of "CASE (Connected, Autonomous, Shared & Services, Electric)" sweeping across the automotive industry, the times are predicted to become even more turbulent. 'We want to learn new technology and take on the challenge of manufacturing the kinds of components that are required to have high-precision functions. We also hope to make use of our cutting technology in the fields of welfare and agriculture.' While continuing to pass on its passion for manufacturing, Shinko Kogyo will take on the challenge of change.

## Shinko Kogyo Co., Ltd.

Head Office  
129-46 Tonbara, Soja, Okayama  
URL  
<http://www.kogyo.shinko-grp.co.jp/>  
Founded  
November 1966  
Capital  
JPY80 million  
Sales Volume  
Approx. JPY14.4 billion (Year Ended March 2020)  
President  
SASANUMA Yasunori  
Employees  
427 (January 2021)  
Business  
Manufacturing components for automotive, farm equipment, and industrial machinery



President  
SASANUMA Yasunori



## Significance of project evaluation with anticipation of a post-COVID-19 future



(then)Director, Division 1,  
Marine and Aviation Finance Department

**SAEKI Taisuke**

I was in charge of the project financing for long-term FPSO (Floating Production Storage and Offloading system) chartering services to Petróleo Brasileiro S.A. (Petrobras), a state-owned oil company in Brazil, for the development of an oil field located off the coast of Brazil.

An FPSO is a type of floating production facility for oil and gas that uses the hull of an

oil tanker. MODEC, Inc. (MODEC) of Japan has the world's top share in this field. In recent years, oil developing companies in a number of countries have been actively developing offshore oil fields. In Brazil, in particular, abundant offshore oil fields have been discovered, and MODEC has been putting efforts into the FPSO business for Petrobras for some time. The FPSO projects in Buzios and Marlim oil fields are the 15th and 16th FPSO projects conducted by MODEC in Brazil. These projects involve a cutting-edge technology known as digital twin technology, which enables big data related to FPSO operations conducted more than 150 km offshore from Rio de Janeiro to be collected and analyzed for breakdown prediction and other purposes.

The active commitment of Japanese companies in the energy sector in the development of natural resources overseas and the outstanding track record that they are building up will help enhance Japan's international competitiveness in this sector. The technologies and expertise that have been cultivated through marine resource development overseas are expected to prove useful in coming years, when mining and production of offshore energy resources such as methane hydrate near Japan begin in earnest. It will also lead to the digitization of the entire oil and gas industry as an example of introduction of cutting-edge digital technology. In fact, MODEC's efforts have led to its recognition by the World

Economic Forum as a Lighthouse of the 4th Industrial Revolution in January 2020, the first Japanese company to receive such recognition. I believe that providing support on the financial front to these kinds of projects that will take us into the future is a significant step for JBIC as well.

JBIC has been involved in financing MODEC's FPSO chartering services for Petrobras since its very first project. In doing so, we had been accumulating diverse expertise with regard to the contemplation of FPSO projects. However, the situation changed completely due to the COVID-19 pandemic. As well as the inconvenience of having to negotiate with the relevant parties online, the turmoil in crude oil prices and other impacts of the pandemic made the business environment unclear, adding to the difficulties in evaluating the project.

We conducted verification and deliberation anew several times over to determine the bankability of the projects. In doing so, our emphasis was not on immediate economic and social trends but on the anticipation of energy demand. This was in light of the fact that, even if there is to be a temporary economic slowdown and fall in energy demand, the economy will continue to grow and the population increase in the medium to long term. Being able to take such long-term view and finalize the appropriate project structuring, even in such highly uncertain circumstances, was an invaluable experience for me personally.

### Project Financing for FPSO Projects in Buzios and Marlim Oil Fields of Brazil

On July 30, 2020, JBIC signed a loan agreement in project financing amounting to up to USD491 million (JBIC portion) with Dutch company Buzios5 MV32 B.V., which is incorporated by MODEC, Inc. (MODEC), Mitsui & Co., Ltd., Mitsui O.S.K. Lines, Ltd., and Marubeni Corporation. Also on October 9, 2020, JBIC signed a loan agreement in project financing amounting to up to approximately USD352 million (JBIC portion) with Dutch company Marlim1 MV33 B.V. under the same scheme. The purpose of these loans is to finance long-term FPSO vessel chartering services to Petróleo Brasileiro S.A. (Petrobras), a state-owned oil company in Brazil, for developing the Buzios and Marlim oil fields located off the coast of Brazil, in which Petrobras and others hold interests.



An FPSO under operations offshore Brazil  
(photography courtesy of MODEC)



<https://www.jbic.go.jp/en/information/press/press-2020/1012-013862.html>

## First financial support extended to local suppliers that underpin Japanese automobile manufacturers in India

The automobile industry in India is growing rapidly. In FY2019, the number of cars sold in India was the fifth largest in the world after the United States, China, Japan, and Germany. Japanese automobile manufacturers have built up a majority of market share in India through efforts such as localizing their supply chains as much as possible. This structure is in line with "Make in India," a key initiative to promote local manufacturing in India led by the Prime Minister Narendra Modi.

In 2020, economic activity in India stagnated due to lockdowns caused by the COVID-19 pandemic. JBIC's Representative Office in New Delhi regularly exchanges opinions with local Japanese companies. On this occasion as well, Japanese automobile manufacturers came to JBIC's representatives in New Delhi for advice about their local suppliers and dealers and about financial support for sales. They expressed concern that if Japanese automobile manufacturers' local suppliers, including SMEs, were to suffer serious damage from the lockdowns, it could have a major impact on their automobile production.

We started considering what JBIC could do to assist. Usually, we offer export loans and overseas investment loans to support Japanese companies, but in this case, the targets of support would be local businesses. The idea that emerged was to use untied loans. Until now, untied loans have

primarily been used for purposes such as global environmental preservation. However, with the COVID-19 pandemic, we have recognized anew the need to enhance supply chain resilience and support India's automobile industry, which has a wide range of supporting industries. As such, we began looking into untied loans as a means of assisting the supporting industries of Japanese automobile manufacturers.

There were many challenges, and coordination among stakeholders was not easy. However, after carefully identifying what was needed to assist those supporting industries and holding many discussions about a mechanism to meet those needs with the State Bank of India (SBI), the largest state-owned commercial bank in India with a wide range of customers, the decision was made to provide financing to SBI.

During negotiations, our main focus was to create a mechanism that would benefit Japanese companies. From that viewpoint, we asked SBI to keep talking to the Japanese automobile manufacturers that underpin the automobile industry in India. We hope that the loan will lead to the development of Japanese companies located in India and the country's automobile industry.

It was also good experience for our division to work together with our representative office to structure the project and to execute the loan, based on the needs garnered from the field. Moreover, the

concept of support for enhancing supply chain resilience has been incorporated into JBIC's new facility, which we hope will be used to provide similar support in many countries and regions going forward. We will strive to broaden the scope of our support to meet the needs on the ground, without being constrained by existing frameworks.



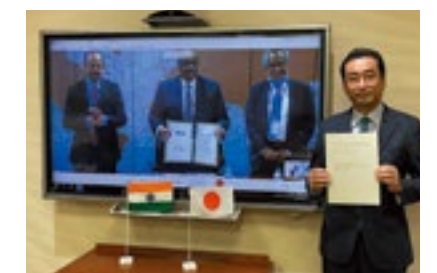
Director, Division 3,  
Social Infrastructure Finance Department

**YAMATO Yasuyuki**

### Untied Loan to State Bank of India Supporting Production and Sales of Japanese Automobile Manufacturers

On October 27, 2020, JBIC signed a loan agreement amounting to up to USD600 million (JBIC portion) with the State Bank of India (SBI). The loan is co-financed with Sumitomo Mitsui Banking Corporation, MUFG Bank, Mizuho Bank, the Shizuoka Bank, and the Bank of Yokohama. The total co-financing amount is USD1,000 million. The portion co-financed by the private financial institutions is guaranteed by JBIC. SBI is the largest state-owned commercial bank in India.

This loan is intended to provide, through SBI, the funds necessary for the manufacturing and sales businesses of suppliers and dealers of Japanese automobile manufacturers, as well as for the provision of auto loans for the purchase of Japanese automobiles. The loan will help promote smooth funds flows for the whole range of business operations of Japanese automobile manufacturers in India, from production to sales, thereby serving to maintain and improve the international competitiveness of Japanese industry.



The loan agreement was concluded over an online connection between Japan and India.



<https://www.jbic.go.jp/en/information/press/press-2020/1028-013919.html>

# Trilateral Infrastructure Partnership Meets with Communist Party of Vietnam Central Economic Commission, State Bank of Vietnam, and Relevant Ministries

## Trilateral partners commit to supporting energy infrastructure based on openness, transparency, and fiscal sustainability

In November 2018, the Japan Bank for International Cooperation (JBIC) entered into a Memorandum of Understanding on the Trilateral Partnership for Infrastructure Investment in the Indo-Pacific (Trilateral Infrastructure Partnership (TIP)) with the U.S.'s Overseas Private Investment Corporation (now the U.S International Development Finance Corporation), Australia's Department of Foreign Affairs and Trade, and Export Finance and Insurance Corporation (now Export Finance Australia).

On October 30, 2020, representatives of the TIP held a virtual high-level conference with senior officials of the Communist Party of Vietnam (CPV) Central Economic Commission (CEC) and Central External Relations Commission (CERC), State Bank of Vietnam (SBV), and relevant ministries.

The trilateral partners noted that Vietnam is planning a number of infrastructure projects to meet its growing demand for energy. They appreciated the recent announcement of CPV Politburo Resolution No. 55 on the "Orientation of Vietnam's national energy development strategy to 2030, vision to 2045" regarding Vietnam's policy shift of reducing the share of electricity supplied from coal-fired thermal power generation and moving toward greater use of gas-fired power and renewable energies. The trilateral partners highly commended this approach and declared that they would commit to providing financial support based on international standards and principles for development such as openness, transparency, and fiscal sustainability. They agreed to cooperate further to advance to Vietnam's development goals.

The trilateral partners reiterated the importance of a bankable Public-Private-Partnership (PPP) scheme for securing private capital flows to Vietnam and promised to continue supporting the development of a strong regime in cooperation with the private sector. According to the CEC, USD150 billion in funding will be needed to meet Vietnam's domestic energy infrastructure demand by 2030. To assist in meeting that demand, the trilateral partners also stressed the importance of flexible and targeted support for the projects developed as an Independent Power Producer (IPP) project, while ensuring projects are developed in accordance with the G20 Principles for Quality Infrastructure Investment.

The aims of the TIP are to strengthen cooperation among like-minded countries in order to drive economic growth and promote sustainable infrastructure investment in the Indo-Pacific region, with the goal of achieving a "Free and Open Indo-Pacific." The virtual conference was a significant event in terms of further advancing those aims.



Participants from Vietnam



Participants from Trilateral Infrastructure Partnership

### The Socialist Republic of Viet Nam

#### Population

Approx. 97.62 million  
[2020, General Statistics Office of Vietnam]

#### Area

329,241 sq. km

#### Capital

Hanoi

#### Language

Vietnamese

#### GDP in 2020

Approx. USD340.6 billion [IMF estimate]

#### GDP per capita in 2020

USD3,498 (VND81.90 million) [IMF estimate]

#### Major traded goods

**Exports:** textiles and garments, mobile phones and parts thereof, computers, electrical products, spare-parts and components thereof, footwear, machines, equipment, tools and instruments, etc.  
**Imports:** machines, equipment, tools and instruments, computers, electrical products, spare-parts and components thereof, textiles and garments, iron and steel, telephones, mobile phones and parts thereof, etc.  
[2020, General Department of Vietnam Customs]

#### Trading partners and regions

**Exports:** United States, China, Japan, South Korea, Hong Kong  
**Imports:** China, South Korea, Japan, Taiwan, United States  
[2020, General Department of Vietnam Customs]

Information from Ministry of Foreign Affairs of Japan unless otherwise noted.

Visit the address below for Topics about this matter

<https://www.jbic.go.jp/en/information/topics/topics-2020/1112-013991.html>

