

- Holding a "High-Level Workshop on International Finance" for Japan's Regional Banks -

Mitsuhiro Matsunaga Takuo Hishinuma

On April 12, 2017, JBIC held the "High-Level Workshop on International Finance" for Japanese regional financial institutions, where approximately 100 executives from over 60 across the country were present. This workshop is intended to further strengthen the cooperative relationship between those regional financial institutions and JBIC in providing financial support to mid-tier enterprises and small- and medium-sized enterprises (SMEs) who wish to start or expand their businesses abroad in the fields of manufacturing and infrastructure and in participating in JBIC's financial schemes by purchasing liquidated loans of JBIC.

It has been five years since JBIC realigned its organization to strengthen the support for the businesses of mid-tier enterprises and SMEs. This is our first event to invite most executives of Japanese regional financial institutions with an aim to further deepen the cooperation with them.

SPOTLIGHT

Hirohisa Yoshino

Ishibashi

> Yoshino We established special teams that are dedicated to supporting mid-tier enterprises and SMEs in the Head Office in Tokyo as well as in the West Japan Office in Osaka in April 2012. Since then, we have continued to develop our business by making efforts to: i) visit regional banks and Shinkin banks (literally, "cooperative credit banks") to provide them with the information about our financing tools and co-financing scheme, or ii) join, as a speaker, the seminars they give to their customers. As a result of these efforts, the total number of loans that JBIC provided to mid-tier enterprises and SMEs exceeded 100 in FY2014 for the first time. Given that the total number of loans provided to mid-tier enterprises and SMEs annually before FY2012 is less than 20, we feel that our business to support mid-tier enterprises and SMEs entered a new stage of development and that our efforts on enhancing partnership with regional banks and Shinkin banks are gradually taking a positive shape. Through this workshop, attended by presidents of regional banks and Shinkin banks as well as directors of their international business units, we believe that we were able to clearly communicate to them our intention and efforts to enhance the cooperation with them.

Ishibashi Long-term loans in foreigr currencies to mid-tier enterprises and SMEs are the most conventional financing instruments JBIC introduces to regional financial institutions. In this workshop, we also explained our other financial products and services that we provide in addition to those conventional loans, such as providing loans to overseas infrastructure projects in cofinancing with private-sector financial institutions or releasing the information about overseas investment climate. I believe this workshop had great significance in communicating to regional banks and Shinkin banks about our various financing support that is available to not only mid-tier enterprises and SMEs, but also other business segments.

JBIC

What was the main message about the partnership between regional financial institutions and JBIC in the workshop?

Hishinuma Although some regional banks and Shinkin banks may not know much about JBIC yet, we showed their management, through this workshop, about our proactive efforts to enhance cooperation with them in recent years. Recognizing the need to expand into overseas markets due to the shrinking domestic market, regional banks and Shinkin banks with no overseas offices face the challenge in meeting the needs of mid-tier enterprises and SMEs of their customers to start overseas business. by providing necessary financing support or information about the country or region where their customers consider starting business. In this respect, I believe this workshop gave regional banks and Shinkin banks a good opportunity to know that they can further support mid-tier enterprises and SMEs who wish to enter into overseas markets, by providing a loan in co-financing with JBIC or delivering the information about countries and regions which is obtained through JBIC's overseas network.

How would you like regional banks and Shinkin banks to utilize JBIC's financing services in assisting mid-tier enterprises and SMEs to expand their businesses aborad?

▶ Ishibashi We hope regional banks and Shinkin banks will supplement their services with the diverse products we offer in supporting mid-tier enterprises and SMEs. For example, it may be challenging for regional banks and Shinkin banks alone to provide loans in local currencies, but they can do so more easily by collaborating with JBIC. During the workshop, we explained about Japanese companies' overseas projects where JBIC had recently provided funding support, includuing: i) the solar power generation project in Mongolia that has also been accepted as a project to be implemented under the joint crediting mechanism program led by of Japanese Ministry of the Environment, ii) the loans provided in local currencies, for example, Mexican peso and Thai baht, and iii) the project in Indonesia where JBIC's guarantee assisted regional banks and Shinkin banks to provide finance to mid-tier enterprises and SMEs do-

ing business in the country.

Matsunaga In fact, when we talk to staff members in regional banks and Shinkin banks they often say, "we wish we had known about these financing schemes much earlier." While they are familiar with companies in the loca areas, JBIC is familiar with the local situation in developing countries through our connections in their governments or participation in international financial transactions. We would like to make further efforts to meet the needs of regional banks and Shinkin banks by collaborating the mutual strength of regional financial institutions and JBIC.

How is JBIC going to support mid-tier enterprises and SMEs in future?

▶ Yoshino The number of financial commitments JBIC made to mid-tier enterprises and SMEs significantly rose in FY2016, accounting for approximately 44% of its total number of commitments. We, in collaboration with regional financial institutions, will support mid-tier enterprises and SMEs who wish to enter into overseas markets, both on the financial and informational fronts, such as by providing long-term loans in foreign currencies including local currencies, or by giving information about investment climate in countries and regions while or ganizing investment seminars

I recognize that the relationships between regional banks and Shinkin banks, and JBIC have grown deeper over the last several years as a result of our efforts to support mid-tier enter prises and SMEs. Based on our closer relations with regional banks and Shinkin banks, we wish to have even more opportunities to work with them in other fields than supporting mid-tier enterprises and SMEs. Amid shrinking domestic market, Japanese companies are expanding their overseas operations. We hope that we play a role in providing financial instruments and services that will be helpful to regional financial institutions when they assist Japanese business abroad. At the same time, we would like to continue to seek a way to further expand and strengthen our support for mid-tier enterprises and SMEs, while always thinking about new financial services that we can offer in collaboration with regional financial institutions.





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Special Feature: M&A

Cross-border M&A : the Most Feasible Way for Japanese Companies to Grow

- To the center of the growth strategy -

Our Global Challenges

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POTLIGHT 💹

JBIC Strengthens Partnership with Japan's Regional **Financial Institutions in Supporting Japanese Companies Overseas Business Expansion**

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JAPAN BANK FOR

December 2017



日本の力を、世界のために。 Supporting Your Global Challenges

Cross-border M&A : the Most Feasible Way for Japanese Companies to Grow - To the center of the growth strategy -

Recently, Japanese companies have been actively engaging in M&A with overseas companies as an important growth strategy. According to data released by Recof Corporation, cross-border M&A by Japanese companies increased six-fold in 10 years by value, exceeding 10 trillion yen in 2016. Target industries and areas have been growing more diverse, showing that M&A has become an established way of strengthening overseas business.

Since the start in fiscal 2011, JBIC's cross-border M&A support scheme has assisted 184 M&As amounting to approximately USD 43.5 billion by the end of fiscal 2016. It supported not only large acquisitions but also M&As by midtier enterprises and SMEs, in diverse sectors from manufacturing to services. The backgrounds and purposes of these M&As also ranged widely: if there were 100 companies, there could be 100 different backgrounds and reasons for crossborder M&A. Each company has its own growth strategy, and draws up its own acquisition strategy for developing overseas markets to realize that strategy. JBIC supports these efforts to expand overseas through M&A.

Cross-border M&As : the most feasible way for Japanese companies to grow

Shigeto Hashiyama Officer and Director General Corporate Planning Department (then Director General of Corporate Finance Department)

-Please share with us the background of JBIC's M&A supports.

Hashiyama As companies regained their financial strength after the financial crisis and as yen appreciated in early 2010s, Japanese companies came to increasingly seek for M&A opportunities of foreign companies. With this background, Enforcement order for the Japan Bank for International Cooperation Act, came into force in July 2011, which enabled JBIC to launch its financial support for M&As. The yen is no longer appreciating as rapidly as it was, but

up of a relatively strong yen is becoming one of the most feasible ways for Japanese companies to grow. Companies can, of course, select a corporate strategy of developing overseas markets slowly over time, beginning with purchasing land and plant and building sales channels from scratch. But they can also choose a strategy of "buying time through M&A," and this way of expanding efficiently by acquiring stable overseas companies has become widespread in Japanese industry. In the "Infrastructure System Export Strategy" (revised

acquiring foreign companies with the back

in May 2017), the Japanese government suggests the policy, that Japanese companies may utilize JBIC's M&A supports to develop business for promoting collaboration with overseas companies as the size of Japanese domestic market is limited.

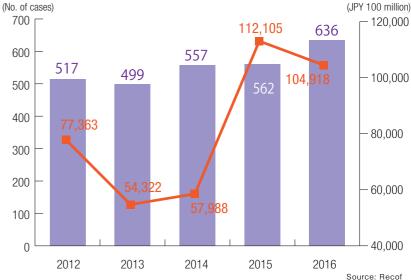
-Please tell us about JBIC's M&A supports.

Hashiyama It can be classified roughly into two patterns in terms of money flow. One is direct financing in which JBIC co-finances with private financial institutions to

support funding of Japanese companies for M&As. The other is indirect financing whereby JBIC sets a credit line for private financial institutions who on-lend to Japanese companies for their M&A transactions (Figure 3 on page 4). Private financial institutions have many branches across Japan, while JBIC has two domestic offices only, one in Tokyo and the other in Osaka. Therefore JBIC should naturally cooperate with private financial institutions so that a wide variety of Japanese companies can use JBIC's functions.

One example of a prominent loan scheme is the subordinated loan (Note) that Suntory Holdings Limited utilized to acquire Beam Inc. for about USD 16 billion in 2014 (see page 5 for details). Borrowing a huge amount for the acquisition loan at one time reduces a company's capital ratio drastically and may cause a downgrade of its external rating. To avoid this, Suntory chose financing through a hybrid loan. Even though this was the first attempt, we wish to keep

Figure 1 Cross-border M&As by Japanese companies



providing tailor-made support that satisfies the requirements of Japanese companies in cooperation with private financial institutions.

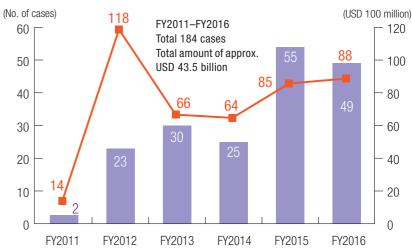
Large enterprises focus on Europe and America, and mid-tier enterprises and SMEs select Asia

---How do you see the trend of overseas expansion by companies supported by JBIC?

Hashiyama Since starting our support program for cross-border M&A in FY2011, the number of successful M&As reached 184 cases totaling USD 43.5 billion as of the end of FY2016. We have supported a variety of businesses including finance, insurance, automobiles, electricity and electronics, steel, chemicals, maritime traffic, pharmaceuticals, food and trading. One characteristic is that large enterprises, mid-tier enterprises and SMEs have branched out into different areas. Large companies mostly acquire companies in Western countries like the US, Germany and France. This is presumably because Western companies have built business models, constructed value chains made up of sales channels, manufacturing, and R&D, and established governance, compliance and accounting systems that meet the standards of advanced countries. Even though acquisitions of Western companies may not necessarily provide great growth potential, they give Japanese companies a sense of confidence in the hope that synergies will have positive effects. In this sense, focusing on Western companies may be a sound acquisition policy.

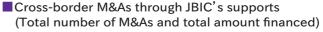
On the other hand, mid-tier enterprises and SMEs mostly target Asian companies. When a Japanese automaker builds a value chain in Indonesia, China

Figure 2



Note : Hybrid Ioan: Although it is classified as a liability in accounting, rating companies approve it as part of the capital when assessing the financial condition of the borrower

or Vietnam, its suppliers, which are mostly mid-tier enterprises and SMEs, also gain big business opportunities. However, they cannot expand their business abroad easily because they do not necessarily have enough human resources and equipment. This is why they branch out to a foreign country by acquiring a small local company or part of its business.



JBIC's activities

----What are the purposes of crossborder M&A by Japanese companies ?

Hashiyama The objectives of cross-border M&A are diverse. One typical reason is that a company wishes to expand overseas by acquiring a company in almost the same business. For example, a logistics company may acquire a company specialized in the adjustment system of logistics, and a communications company may acquire a data center. These two cases can create synergies easily because one company acquires another in almost the same business.

Another objective is to expand sales channels or increase the product lineup. The strategy is to increase the presence of the lineup of the company ahead of other companies by developing sales channels by acquiring a company with a high market share in under-developed areas. Other acquisitions may seek to gain state-of-the-art technologies or drugs in the early stage of development, or acquire a stable company with solid future prospects even after entrusting of management to the local company after acquisition, or acquisi-

tions of top companies in niche fields with fewer competitors. Each company has its own acquisition strategy most suitable for its growth strategy. Although some cross-border M&A by Japanese companies are said to have failed, such failures fall on companies that paid too much for the acquisition. In most cases, Japanese companies engage in acquisitions strategically with a longterm perspective, and work on them seriously and cautiously. It is necessary to analyze acquisition results in the medium to long term.

Supporting cross-border M&A as a government-affiliated financial institution

-What is the role of JBIC in the private financial institutions it works with?

Hashiyama As the Suntory case shows, our main role is to support to provide the large amounts of long-term foreign currency which private financial institutions alone cannot always provide. [BIC's basic position on policy of supporting crossborder M&A is to devise the most appropriate system by which Japanese companies can develop foreign markets effectively and efficiently. Smoothly merging the specialties of the public sector and the private sector is important to achieve this objective, and we believe that IBIC should play the fundamental role to support the private sector exhibit its abilities to the fullest.

and how will you address them?

Hashiyama M&A is certainly now not a local trend limited to Japanese companies but a global trend. One recent interesting characteristic is mergers between global giants. For example, business groups separated off from these global giants in the screening process conducted by the regulatory agency supervising antitrust in foreign countries can be interesting M&A targets opportunities.

However, in recent years, the pace of cross-border M&A by Japanese companies is slowing down. This is presumably due to changing industrial policies in the world amid the new policies of Trump administration and Brexit and because investment in the Middle East is getting slower following the decision of the Gulf Cooperation Council to break off diplomatic relations with Oatar.

Nevertheless, Japanese companies have been accumulating reserves and may step up cross-border M&A again after the temporary lull. There are always cases where investment by M&A is effective rather than investing in a foreign market from scratch, and indeed, M&A

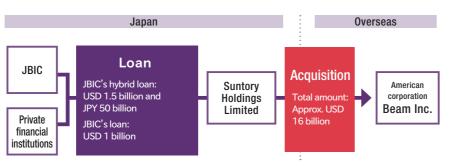
prospects. IBIC will continue to support strategic expansion by Japanese companies in foreign markets including cross-border M&A in accordance with the policy of the Japanese government. While monitoring the trends and influences of geopolitical risks in the world, from the perspective of a public financier we will keep monitoring customers faithfully even after they have completed acquisitions.

remains active in fields with bright

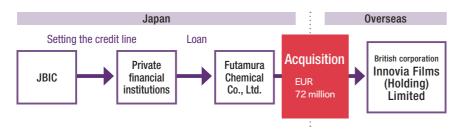
Figure 3

Direct finance for M&A in collaboration with private financial institutions (Case of acquisition of Beam Inc., an American corporation, by

Suntory Holdings Limited)



Indirect finance through private financial institutions in accordance with the credit line set for them (Case of acquisition of Innovia Films (Holding) Limited by Futamura Chemical Co., Ltd.)



Cases of JBIC's support for cross-border M&A by large and mid-tier enterprises and SMEs

Suntory's acquisition of Beam in the US: First case of support for a large cross-border M&A following JBIC's financing scheme

Suntory's acquisition of Beam Inc. of the US, a manufacturer and seller of spirits, is a typical example of JBIC's supports for cross-border M&As. This huge acquisition amounted to approximately USD 16 billion in the Japanese food and beverage industry, and multiple financial institutions including JBIC provided co-financing in July 2014. The total amount of JBIC's financing was approximately JPY 300 billion, of which some JPY 200 billion (JPY 50 billion and USD 1.5 billion) was financed by JBIC's first subordinated loan (hybrid loan) scheme. The subordinated loan is a hybrid loan with characteristics between debt and equity, and aims to quantitatively facilitate the financing of huge amounts to supplement private financing. It is also the first hybrid loan denominated in US dollars ever issued in the Japanese market.

This acquisition allowed Suntory to become the world's third largest spirits manufacturer and gain an excellent portfolio and know-how in the world, with brands from the world's five largest whisky markets: Scotland, Ireland, the US, Canada and Japan. While the Japanese alcohol market is expected to shrink as the population declines and turns away from alcohol, Suntory has successfully developed the brewed beverage market worldwide, including the U.S. where sales continue to increase.

This financing project is highly significant because in cooperation with private financial institutions, we provided a huge amount of financing that propelled a Japanese company to the third largest spirits manufacturer in the days when supporting M&A by Japanese companies is regarded as a national policy.

Increasing sales by introducing a system to boost the morale of the acquired company

Beam Suntory Inc. (name after the acquisition) has increased sales every year for the past three

years since the acquisition, and is now enjoying stable achievement. In particular, after the acquisition Suntory positioned Suntory Beam's spirit business ABOVE Suntory's own spirit business in the corporate structure. Usually, an acquired business is positioned lower down in the new organizational system, but Suntory boosted the morale and motivation of the management of former Beam Inc. by placing Beam Suntory Inc. higher up. In addition, all staff led by President Niinami made a concerted effort to support the new company, and both Suntory and Beam Inc., companies with a history of more than 100 years, respect each other's history and culture. This is an important reason for the success of Beam Suntory Inc.

Acquisition of British business by Futamura Chemical Co., Ltd.: Supporting cross-border M&As by a mid-tier enterprise SME aiming to be the leader of a niche market

Lately, there has been an increasing number of cross-border M&A not only by large companies but also by mid-tier enterprises and SMEs. In June 2016, for example, we financed the funds for the acquisition of the cellulose film business of Innovia Films (Holding) Limited of Great Britain by Futamura Chemical Co., Ltd., a SME with capital of JPY 500 million, through private financial institutions (total acquisition amount: EUR 72 million, JBIC's portion: approximately USD 55 million). Futamura Chemical is a leading company with the largest share in the production of cellulose films used for packaging for foods and medicine as well as for adhesive tapes. The company has about a 30% share of the world market, but it has never developed the European market. Therefore it focused on the business of Innovia Films, a producer and seller of cellulose films in Europe and the US and has a 40% share of the world market. In this case, we supported the strategic investment of Futamura Chemical, which aims to build a global production and sales system, in addition to gaining a customer base in Europe and the U.S. with a long-term foreign-currencydenominated loan.

Takayuki Sato Director Division 1 Corporate Finance Industry Finance Group



Acquisition approach taken by Japanese companies

These companies usually do not take an acquisition approach to increase profits promptly by reducing the costs of the acquired company They spend a great deal of time to select an excellent company, and then take much time to increase synergies with the acquired companies after acquisition. Many Japanese companies seem to acquire a company through planned action and to increase profits steadily through well-organized management. In this acquisition approach, large companies tend to expand in foreign markets through M&A in accordance with the strategy or medium-term plan, seeking synergies. Meanwhile, mid-tier enterprises and SMEs tend to gain production capacity and sales channels from the target company through M&A to complement for their weaknesses

JBIC wishes to support Japanese companies to conduct cross-Border M&As as part of their growth strategies in the most suitable way, in cooperation with private financial institutions. We will continue to support them to develop foreign markets by leveraging our strengths including procuring foreign currency and providing longterm loans.



Press conference at the completion of acquisition of Beam Inc.'s stocks

Nidec's Strategic Business Portfolio Transformation; Utilizing Cross-border M&A Opportunities in Growing Markets for Electric Motors

- Keys to successful M&A: fair price of acquisition, commitment to PMI process and assessment of long-term synergy effects -



Akira Sato Member of the Board of Directors. Executive Vice President & Chief Financial Officer Nidec Corporation

Using M&A effectively as a growth driver, Nidec Corporation (Nidec) continues to grow not only in the IT market but also in other growing markets, by expanding its product range in electric motors, from small precision motors to giant motors, and even to modulized and applied products. In particular, since the 2000's, with an increase in the overall strength of its group companies, the company has steadily gained share in growing markets by conducting M&A activities outside of Japan. We interviewed Akira Sato, Executive Vice President & Chief Financial Officer, about Nidec's M&A strategy and policy.

— Nidec has acquired 54 companies (as of the end of July 2017) in Japan and abroad. What is the underlying strategy behind those M&A deals?

► Mr. Sato Our basic growth strategic aims are to grow organically by 50% and by another 50% through M&A activities. Fluid dynamic bearing (FDB) motors installed in the hard disks of personal computers have driven our strong growth. However, we thought it was important to transform our business portfolio in order to invest in businesses that will grow into a new earnings pillar for sustainable growth in future. M&A is the best way to do this as it can achieve great results in a short time. Amid various new technologies that are developed and introduced, there is always demand for motors in growing markets. Motors consume 50–60% of the total electricity power generated worldwide. As the evolving auto industry continues its trend towards electrification, for example, using motors instead of oil pressure for braking, electric motors will continue to be used in various fields in future. To keep up with the trend of the electric motor market, we actively use M&A as a means of sustaining our organic growth momentum and constructing a new business portfolio.

— What are M&A deals that you have recently been involved?

► Mr. Sato We have identified four key growth markets: (1) small precision motors, (2) Automotive motors, (3) motors for home appliance, commercial and industrial uses whose demand is expanding in growing economies, and (4) motors for robots. While the internet is now spreading in our daily lives, we foresee considerable demand for motors because they are indispensable for developing Internet of Things (IoT) technologies, for example, the use of motors for the joints of robots.

In the course of transforming our business portfolio according to our prospects for future business, we have received financing support from JBIC regarding four cross-border M&A deals. For example, in 2012, we acquired an Italian company Ansaldo Sistemi Industriali S.p.A. in which the solution business of energy storage systems with renewable energy sources has been produced. This M&A deal aimed to expand our product range of large industrial motors and electric generators by taking over products manufactured by the Italian company. In the same year, we purchased an American company Kinetek Group Inc. to gain a foothold in the commercial motor market. The company was attractive for us because of their large global market

share in commercial and industrial motors used for elevators, escalators, and material handling vehicles.

Furthermore, we acquired the European motor drive and electric generator business from Emerson Electric (Emerson) in January 2017. Having lots of excellent customers mainly in North America and Europe, Emerson is involved in a wide range of businesses besides manufacturing and selling electric and electronics devices. By acquiring Emerson's technologies and customer bases in the motor drive and electric generator business, we can expand our product range of industrial motors. At the same time, instead of selling motors by itself, we can also sell drives that run motors, as a packaged product with the motors. In this sense, this M&A helped us achieve vertical integration and become a solution provider in the field of industrial motors. As demonstrated by these cases, the focus of our M&A strategies is shifting from merely obtaining technologies and sales channels from acquired companies.

-----What are the key factors you consider important based on M&A experiences of Nidec to achieve successful M&A deals?

► Mr. Sato We have three basic principles for M&A. The first principle is to buy at an appropriate price, not buying at a higher price. We never approach a company that does not satisfy our internal criteria for M&A targets. We clarify what we need for our growth strategy before starting to look for candidate companies. Then, staff members in our M&A department identify about 20 companies that look attractive to approach, without support from an M&A intermediary company. When we approach a target company at a very early stage, they often refuse to negotiate with us about selling their businesses. As time goes by, however, their situation and strategic direction may change and they start to look for a buyer to purchase the businesses outside their core competence. Then, they approach us for discussions about selling their businesses because we have already contacted them in the past. This brings us an opportunity to negotiate with them about the sale of their businesses and agree to acquire at an appropriate price. I believe that the success of M&A is dependent on not only the acquisition price but also whether or not: i) the acquired company can find the strategic value of M&A and ii) they expect us to grow their businesses. To put the acquired company on a growth path, we set a clear profit target to strictly manage their businesses from the first year after acquisition.

The second basic principle is to successfully complete the post-merger integration (PMI) process (Note). We spend much time and effort to perform the PMI process by involving heads of business units such as Automotive and Home appliance, etc. in the processes from due diligence to management after acquisition. During the PMI process, the heads who know most about the businesses solve issues with employees of an acquired company. In the course of such efforts, the managers communicate with the staff members of the acquired company about our willingness to invest money reguired for future business growth, while encouraging each of them to consider what is necessary for the company's growth. In this

way, Nidec's spirit "Do it now; do it without hesitation; do it until completed" becomes deeply rooted in their minds.

The third basic principle is to thoroughly assess synergy effects through M&A when identifying companies targeted for M&A. We never select candidate companies in business areas that are not related to motors. We focus on companies in business areas close to the motor business. Company selection is not permitted without performing in-depth analysis of synergy effects. We move towards accomplishing our business vision and objectives by conducting M&A activities, with an emphasis on long-term synergy effects, as if putting together pieces of the jigsaw puzzle.

Under such direction, a system to push forward M&A strategies was internally established. As a result, we have achieved the desired results in all M&A cases where we were involved. Among companies that we bought, none of them has brought an impairment loss to Nidec group so far.

—— Please tell us your views and expectations of JBIC.

▶ Mr. Sato It is essential for Japanese companies to raise foreign currency funds when they conduct cross-border M&A, but they sometimes face limitations in steadily securing foreign currencies only from private-sector financial institutions. In this respect, JBIC, as a policy-based financial institution, plays a very important role in supplementing ordinary transactions performed by private-sector financial institution. We expect JBIC to continue to support the long-term supply of funds in foreign currencies on a stable basis.

There are some countries and regions that are less familiar to us but possess the potential of great business opportunities. Against this backdrop, we expect JBIC with close ties with many foreign countries to continue to provide us with information that we cannot gain from the private sector, including the political and economic trends in foreign countries and associated risk factors. I believe that those information and knowledge about the foreign situation will help Japanese companies to expand or start businesses outside of Japan without fear.

Note: PMI: Abbreviation of post-merger integration, which means the integration process after an M&A agreement is concluded.



Our Global Challenges

Farmdo Corp. (Maebashi City, Gunma Prefecture)

Solar Farm Business : Shaping the Future of World Agriculture

- Farmdo's efforts for farming business and solar power generation in Mongolia



With its corporate philosophy "Support agriculture; Make efforts towards an increase in farmers' incomes", Farmdo Corp. ("Farmdo"), an SME company that assists Japan's farmers and supports the country's agriculture sector, promotes the so-called Sixth Industrialization of Agriculture (Note 1) that aims to integrate the activities of sectors in the agricultural industry value chain from production to processing and sales. Having started the solar power business especially in Gunma Prefecture, the company also invests in the "solar farm business" to generate solar power on a farming land while growing crops, which is a new form of agriculture. The company has installed solar panels at about 100 places in Japan, which generate a total power capacity of 56,000 kW, including the power capacity generated through solar panels installed on farm lands where crops are not grown. Farmdo started its business in Mongolia in 2012 and Myanmar in 2013. In the fall of 2017, the company will launch a solar farm business in Mongolia using the accumulated know-how on the business in Japan, with an aim to: i) assist Mongolia in achieving its target for renewable energy capacity and ii) provide fresh and safe agricultural products which are expected to see increased demand in the country.

Understanding the needs of farmers through sales by truck

Mr. Masayuki Iwai, President of Farmdo, recalled, "Since my early 30s, when I was working for a leading distribution company, I had planned to run my own business in the future. When I opened a store to sell agricultural materials, I had the idea of building a "department store for farmers" that sells seeds, fertilizers and agricultural machinery. This idea led me to the current business.'

Mr. Iwai continued to say, "Back then, farmers purchased agricultural machinery and materials, such as fertilizers, from Japan Agricultural Cooperatives ("JA") and also sold all agricultural products to JA. Under such distribution system, farmers have limited access to the source of information about consumers' needs, so I thought I could create a new business by establishing new distribution channels (direct sales system) without using the normal circulation markets, which would directly bring in more incomes

and information about consumers' needs to farmers". Based on this strong belief, Mr. Iwai established Farmland Corp., the former company of Farmdo, in 1994. Unfortunately, the launch of his company was delayed by 10 months because the site where he planned to do business became subject to land use restrictions. Facing the serious situation without any income, he decided to drive a sales truck loaded with agricultural materials. "This decision turned out to be very successful. I could understand the needs of farmers by directly talking with them," Mr. Iwai recounted. He traveled across the country, purchasing as many as 20,000 agricultural products and pricing them one by one by himself. As a result, he earned the support of farmers and doubled sales in the second year. In the third year, he obtained a license of an agricultural production corporation and founded another company called Farm Club as a private limited company. This enabled him to start a business to produce and sell vegetable seedlings. The turning point came about 10 years after foundation. Farmdo was in a slump due to competition and the declining number of farmers. Mr. Iwai said, "To overcome the slump, I decided to sell fresh vegetables that had sustained steady sales. To satisfy the needs of customers who wish to eat fresh vegetables, I built "Shoku no Eki" shops as a sales network of agricultural products that connects farmers and consumers. This market-in idea became popular with consumers and also welcomed by farmers because it allows them to secure sales channels. This idea was a hit, and sales increased by 2.2 times year-on-year".

Launching the solar power generation business and developing foreign markets

Thereafter, sales continued to increase steadily, which formed a foundation towards the Sixth Industrialization of Agriculture. However, the reputation of vegetables produced in Gunma was hit by the Great East Japan Earthquake in 2011, which significantly dragged down sales of vegetables. Furthermore, the gasoline shortages after the earthquake



Solar panels under construction (Mongolia)

significantly hurt the household incomes of farmers. While finding a way to enable farmers to secure a source of income, Mr. Iwai conceived the idea of gaining an income by selling electricity generated through solar panels installed on the roofs of plastic greenhouses. Based on this idea, he acquired fallow land and started a solar farm business in 2013 to generate solar power on an agricultural land while growing crops in a plastic greenhouse. Supported by a government's program to purchase renewable energy at a fixed price that started in the previous year, the solar farm business expanded further to install solar panels at about 70 places across Japan. This paved the way to further expand the solar farm business into Mongolia.

Mr. Iwai explained, "Farmdo established a joint-venture company, Everyday Farm LLC (EDF), with a local Mongolian company in 2012. I focused on Mongolia because local eating habits are diversified especially in urban areas, and the demand for fresh and safe vegetables is growing and is expected to continue to grow".

In addition, air pollution in the city of Ulaanbaatar in Mongolia is worsening and the city is implementing various measures to cut air pollution, including the use of renewable energy sources. As this project is expected to spread innovative low carbon technologies in Mongolia, it is accepted as one of the projects that is supported under the joint crediting mechanism (JCM) (Note 2) program led by Ministry of the Environment, Government of Japan. In Mongolia where a vast agricultural land is available, Farmdo can fully utilize its knowhow in the solar farm business which produces stable income by selling electricity generated through solar panels installed on farming land while growing crops there in more efficient way by adjusting sunlight. "Needless to say it was important to earn the trust in our solar farm technology from Mongolia, but it was also important to make our own efforts to build relationships of trust with local people. As a result of these efforts, we developed deep relationships with the local administrative chief and receive encouraging support from him", said Mr. Iwai, with a smile.

> Relationship with JBIC

Focusing on educating young people to build the future of Japan's agriculture

Now, Farmdo plans to expand the solar farm business more broadly in Asian emerging countries. At the same time, the company is making efforts to create the future of Japan's farming industry, particularly together with the next generation of young people. Mr. Iwai said, "we are planning to introduce and practice the Japanese version of the dual system (Note 3) in agriculture in partnership with local universities beginning in fiscal 2018. This system is intended to develop human resources who will contribute to the world in the agriculture industry, providing courses of lectures and training for both the Sixth Industrialization of Agriculture and agricultural production. We hope that agriculture will be a growing industry in 10 years. To realize our hopes, we believe that our mission is to develop young people who will support the future farming industry and overseas agricultural businesses, and to proactively create new ways of farming". In April 2017, Farmdo recruited 17 young members of staff, the largest number since the company was established. The company continues to move forward to further increase the potential of Japan's farming industry.

Note 1: Sixth Industrialization of Agriculture Integration from the upstream to downstream of the agriculture industry, by combining its primary sector (agricultural production), secondary sector (processing) and tertiary sector (distribution and sales). The term "Sixth Industrialization of Agriculture" is an invented term, in which "Sixth" is derived by summing the numbers 1 for primary industry, 2 for secondary industry, and 3 for ertiary industry

Note 2: Joint crediting mechanism (JCM) An initiative of Japanese government aimed at quantitatively evaluating Japan's contribution to curbing greenhouse gas emissions by providing Japanese emission reduction technologies, products, systems, services and infrastructure to developing countries and taking account of the above quantified contribution as a part of achievement towards Japan's own target for emission reduction

Note 3: Dual system A practical vocational training system that combines on-the-job (OJT) training programs, and educational and vocational training courses.

In March 2017, JBIC signed a loan agreement with Everyday Farm LLC (EDF), the Mongolian subsidiary of Farmdo, under a co-financing arrangement with Towa Bank, Ltd. for the amount up to USD 12.1 million equivallent, of which JBIC will provide up to USD 8.5 million. This financing is to provide capital necessary for the solar power generation project conducted by EDF in Ulaanbaatar. Monoolia, EDF will sell electricity to Monoolian National Transmission and Distribution Company for the next two decades.



Vegetables sold at stands along a trunk road (Mongolia)



Masayuki Iwai President

Farmdo Corporation



Company Profile

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Name	Farmdo Corporation
Established	1994
Capital	98 million yen (as of March 2016)
President	Masayuki Iwai
Business lines	Sales of agricultural materials, agricultural products, processed specialty products and electricity generated by photovoltaic generation
Headquarters	3rd floor, NF2 Bldg., 1-1-1 Tonyamachi, Maebashi-shi, Gunma Pref.
Shops	Six "Noen's" shops in Gunma Prefecture, 12 "Shoku no Eki" shops mainly in the northern Kanto region, and 14 "Local production Marché" shops mainly in Tokyo, and a farm restaurant "Saino Saien" in Saitama Prefecture
Overseas bases	Everyday Farm LLC (Mongolia) Five Stars Food Industry Co. Ltd. (Myanmar)

News in Depth

Behind the scenes of media coverage

Towards Stronger Relations with Argentina; Financing Export of Japan's Railway Technology

 \sim Second project under the newly established "Special Operations" \sim

After declaring default in 2001 and overcoming economic stagnation, the Argentine Republic returned to the international financial market for the first time in many years, after President Mauricio Macri took office in December 2015. Although not widely known, Japan and Argentina have a long history of mutual relations. For example, Japan studied the railway system in Buenos Aires, the capital of Argentina, when constructing its first subway in the early 20th century.

Though geographically far away, Argentina is on close terms with Japan. Taking the opportunity of President Macri's visit to Japan in May 2017, JBIC decided to financially support the export of Japanese automatic railway stop system to Argentina as a business bridge between the two countries. The staff in charge of the project explained aspects of this project behind the press coverage.

An article related to this project was published in the morning edition of The Yomiuri Shimbun on May 21, 2017.

—Firstly, please give us an overview of Argentina and the background of the decision on this financing

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Yasaka It may not be easy for Japanese to imagine Argentina because Argentina and Japan are located on the opposite side of the globe. Argentina used to be an economically advanced country. However, affected by the Brazilian financial crisis, Argentina's economy worsened in 2001. As a result, the Argentine government declared the suspension of foreign debt repayments, which deteriorated the economic relations between Argentina and Western countries or Japan.

After starting in December 2015, the Macri administration pursued an economic liberalization policy, resulting in bringing Argentina back to the international financial world. At the same time, the administration formulated an infrastructure improvement plan and started to consider drawing in foreign capital. This led Japanese companies to consider the entry into the infrastructure business in Argentina.

Japan and Argentina have strong relationships in the railway business, as evidenced by the following two historical facts: i) the Ginza Line, Japan's first subway line, was built based on the railway technology of the subway in Buenos Aires, and ii) Japanese companies contributed to the Argentine railway modernization project in the 1980s. This business opportunity to export Japanese infrastructure to Argentina has arisen as a result of the long history of relations in the railway sector between the two countries.

However, Argentina faced a difficulty when they tried to obtain funding from private-sector financial institutions, because the country has just returned to the international financial market. Under such circumstances, JBIC has approved a loan to finance the export of Japan's infrastructure to Argentina through the newly launched "Special Operations (Note 1)", in order to realize the business opportunity for exporting Japan's high-quality infrastructure.



Takayuki Yasaka Deputy Director General and Director Division 1 Mining and Metals Finance Department Energy and Natural Resources Finance Group

Soichiro Morimoto (then) Division 1 Mining and Metals Finance Department Energy and Natural Resources Finance Group

This is the first JBIC loan to be offered to Argentina after Paris Club creditors and Argentina agreed in 2014 on a debt-relief arrangement. At the same time, this loan to Argentina is the first loan to be provided by JBIC in 20 years. Prime Minister Shinzo Abe visited Argentina in November 2016, the first Japanese prime minister to do so in 54 years, and during his visit, Argentina expressed strong expectations for Japanese companies' participation in infrastructure development of Argentina including the railway sector. Japan also announced its policy to actively utilize JBIC and other government agencies for such purposes. We view this project as helping to strengthen economic relations between Japan and Argentina.

$- \mbox{Please tell}$ us about the background of this project in more detail.

Morimoto There has not been much investment in the railways in the suburbs of Argentina's capital for the last 30 years, but the Macri administration announced a plan to invest 1 billion US Dollars (100

Buyer's Credit for Government of Argentina Supporting Export of Automatic Train Stop System by Japanese Companies

The Japan Bank for International Cooperation (JBIC; Governor: Akira Kondoh) signed on May 19 a loan agreement on buyer's credit (export loan) with the Government of the Argentine Republic (Argentina). The loan is cofinanced with the Tokyo Branch of Deutsche Bank AG, with Nippon Export and Investment Insurance (NEXI) providing insurance for the portion cofinanced by this private-sector bank.

This loan is intended to finance the purchase of a set of railway signal systems from Marubeni Corporation in order for State Company of Administration of Railway Infrastructure (Administración de Infraestructuras Ferroviárias Sociedad del Estado) to carry out installation of automatic railway stop systems for eight Buenos Aires suburban rail lines. NIPPON SIGNAL CO, LTD. will manufacture the railway signal systems.

In Argentina, the Macri administration, inaugurated in December 2015,

billion yen equivalent) in transportation infrastructure for the four years from 2016 to 2019. This project is included in the government's infrastructure plan. The train lines to be covered by this project are important because commuters in the capital region use those train lines. However, due to the delay in capital investment, maintenance work has not been performed for railway equipment. As a result, train accidents were caused by failures of train brakes in 2011 and 2012. This became a social problem. In response to these train accidents, the government worked hard in finding a way to increase the railway safety, such as installation of an automatic train stop (ATS) system ^(Note 2).

Another reason for the launch of this project is because of Japanese companies' contribution to the railway sector of Argentina over the years by providing high-quality railway technologies. For example, when Argentina started a plan to electrify railways on a large scale in the 1980's, Japanese companies, including Marubeni Corporation and Nippon Signal Co., Ltd., participated in the plan. Furthermore, even at a phase when the Argentine economy stagnated and foreign investment decreased, Japanese companies continued receiving orders for railway infrastructure maintenance for 30 years. Thanks to these maintenance works, there has been no accident caused by the railway technology from Japan. Argentina highly evaluated the highquality Japanese railway technology. Their trust in the Japanese technology has led to launching this project.

—JBIC started the Special Operations in October 2016. This railway project is the second project that JBIC approved to finance under the Special Operations, following the financing to the Iraqi government in March 2017.

Morimoto We made efforts to build a close relationship with the Argentine government that allows us to have direct talks with them regarding the progress in economic reform, such as fiscal consolidation under the Macri administration and the macroeconomic conditions. Besides, we discussed with related parties both inside and outside of JBIC regarding how to respond to political and economic risks. Through these efforts, we finally determined to provide financing to this project. Going forward, we will continue to smoothly implement the Special Operations through policy dialogues with foreign governments as demonstrated by this project.

$-\mathrm{Do}$ you think Argentina will become an attractive business target for Japanese companies?

Yasaka Argentina is rich in resources like energy, minerals and foods. With little investment in infrastructure for many years, Argentina has high expectations for investment and technology of Japanese companies. The speed at which Japanese companies will grow their businesses in Argentina may vary according to sector. Some sectors might plan to make large and long-term investments from the beginning of entering into the Argentine market, while other sectors might see medium-term investments in a phased manner, after first being involred in the export business to Argentina. I believe that Argentina has a potential to become an attractive business target for Japanese companies seem to position Argentina as a base for expanding their businesses to

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took measures toward economic reform and brought the country back to the international financial market. At the same time, the government announced the infrastructure development plan, and is considering to invite foreign investment and to renew facilities in the infrastructure sectors such as the railway. In response to this initiative, Japanese companies aim to capture the opportunities to export their products to the Argentine infrastructure industry. Amid such circumstances, this loan will contribute to improving the safety of the Argentine railway sector by introducing quality infrastructure, as well as contribute to maintaining and strengthening the international competitiveness of Japanese industries. Furthermore, this agreement was made mention of at the Japan-Argentina Summit Meeting held on May 19 of this year, and is thus anticipated to further enhance the relationship between the two counties.

* Press release of JBIC, May 22, 2017

other South American countries, such as export business. We think this project has great significance in that we supported the business expansion of Japanese companies under the newly established Special Operations. We would like to encourage Japanese companies to expand or start their businesses in Argentine and other new markets in cooperation with private-sector financial institutions.

Note 1: Special Operations: Newly-launched operations that enable JBIC to finance overseas infrastructure projects with risks that are new to JBIC, for further encouraging Japanese companies to participate in overseas infrastructure business. The Special Operations started on October 1, 2016 with the enforcement of the Act for Partial Amendment of the Japan Bank for International Cooperation Act.

Note 2: Automatic Train Stop: Train protection device that automatically controls the braking system to stop the train right before a railway signal.

Voice from JBIC's Overseas Representative Office

This is my third time to work in JBIC's overseas representative office in Buenos Aires. When it comes to the news about Argentina reported in Japan for the last 20 years, unfortunately we have heard much negative news focusing on the financial crisis. However, from my experience after nine years of living here, the city always looks lively and energetic, and at least, general economic activities appear to have remained vibrant. For example, electric consumption has been increasing every year since 1990.



Masahito Suzuki Chief Representative Overseas Representative Office in Buenos Aires

In reality, however, most sectors in Argen-

tina suffered from supply shortages because they faced the difficulty in gaining access to funding due to the issue of Argentina's debt in arrears. Despite the strong demand for electricity, power generating capacity hardly increased, which resulted in frequently causing blackouts in the city. Public transportation services were interrupted by railway technological problems arising from the use of deteriorated equipment. There was also a fuel gas supply shortfall and companies had no choice but to import expensive LNG. These situations really made me feel uneasy when I worked here the last two times.

Nevertheless, Argentina has now taken a new step forward with an improvement in the funding environment. The demand and supply gap arising from supply shortfall turns into business opportunities. In this sense, Argentina has a great potential of business growth. I would like to support Japanese companies who seek business opportunities in Argentina, by proactively communicating the local information and attractiveness of the country.

Some people regard Argentina as a country that used to be advanced, but personally I would say that Argentina is still a culturally super-advanced country when I see local youths enjoying the piano performance by Daniel Barenboim, a native of Buenos Aires, in Teatro Colon, which is one of the world's three major opera houses.