JETRO Invest Japan Report 2019

.....





Message from the Chairman

In the midst of major changes in the socioeconomic structure engendered by phenomena such as declining birthrates, an aging society and a decreasing population, and hopes pinned on the creation of innovations such as IoT (Internet of Things) and AI (Artificial Intelligence) that will significantly change the state of present-day industry and society, the Japanese government is making efforts to attract outstanding human resources and technologies from abroad. The government aims to increase inward foreign direct investment (FDI) stock to 35 trillion yen by 2020, and steady progress is being made toward achieving this policy goal, with FDI stock achieving a historical high for the fifth consecutive year by the end of 2018 at 30.7 trillion yen.

In addition to quantitative expansion, the trend in attracting inward FDI in recent years has been shifting to more qualitative contributions, with concepts such as "creating innovation" and "revitalization of local economies" as keywords. As digital transformation and other transborder new businesses and technologies take on an ever-greater share of global business, Japan's position as a global center of innovation must be consolidated and sustained vitalization of local economies realized by expansion of inward FDI, which up to now has been mainly concentrated in some big cities, such as Tokyo, to regional areas.

In order for Japan to be chosen as an investment destination by international companies in the midst of global locational competition, "ease of doing business" is the key. As the shape of future society that Japan should aspire to, the government advocates Society 5.0 (A human-centered society that uses means such as IoT and AI both to achieve economic advancement and resolve social issues). To realize this undertaking, the government is coming up with various policies under its growth strategy (decided by the Cabinet on June 21, 2019) to contribute to attracting inward FDI. The government is also pushing forward with reforms from the perspective of business operators, including a system that allows one-stop processing of online corporate establishment procedures to make steady improvements to Japan's investment environment.

As Japan's central organization for attracting inward FDI, JETRO has used its network of more than 120 offices at home and abroad to provide support for foreign companies entering the Japanese market and expanding their business in Japan. Since the start of the "Invest Japan" campaign in 2003, JETRO has supported more than 19,000 projects and led over 2,000 of those projects to success. Experienced staff members who serve as "Personal Advisor" work closely with foreign companies to address the challenges they face starting up in Japan, including those related to language, business practices and rules and regulations, in order to realize more projects. Furthermore, under the "Support Program for Regional Foreign Direct Investment in Japan," launched in FY2018, our organization has placed the vitalization of local regional economies through FDI as an important pillar and is working hand-in-hand with the central government to assist regional governments proactive in attracting investment.

With the aim of giving readers a broad view of the topic of investment into Japan in a single volume, this report is a compilation of information on the activities of foreign affiliates and their perception of the Japanese business environment, related government policies and statistics, and JETRO's own activities. We hope this report will be a useful resource for anyone considering starting business in Japan or supporting foreign investment into the country.



Nobuhiko Sasaki Chairman and CEO Japan External Trade Organization (JETRO)

CONTENTS

Recent Trend of Inward FDI in Japan

| 1. Recent trend of inward FDI in Japan since 2018 ····· | | | | | | |
|---|-----|--|---|--|--|--|
| | (1) | Inflow of inward FDI \therefore Inflow of more than 2 trillion yen for the second consecutive year \cdots | 2 | | | |
| | | ①General overview · · · · · · · · · · · · · · · · · · · | 2 | | | |
| | | 2)Overview by region/country and industry | 2 | | | |
| | (2) | Inward FDI stock : Reaching 30-trillion-yen mark for the first time | 2 | | | |
| | | ①General overview · · · · · · · · · · · · · · · · · · · | 2 | | | |
| | | 2 Overview by region/country and industry | 4 | | | |
| 2. | Lat | est success stories of inward FDI | 4 | | | |
| | (1) | Finding business opportunities in addressing social issues unique to local regions and Japan through innovation | 5 | | | |
| | (2) | Diversification of the ways foreign-affiliated companies form ecosystems | 7 | | | |

2 Business Environment Improvement Efforts

10

2

| 1. | Construction of innovation ecosystem toward realization of Society 5.0 ····· | 10 |
|----|---|----|
| 2. | Utilization of project-based "Regulatory Sandbox" system | 10 |
| 3. | Initiatives toward expanding Japan's inward FDI into regional areas | 11 |
| 4. | Smart public service - movement toward realization of the easiest country in the world for companies to do business | 11 |
| 5. | Promotion of active participation of foreign professionals | 11 |
| 6. | Progress of "Mega FTAs" in which Japan joins | 12 |
| | | |

Perception of the Business Environment in Japan among Foreign-affiliated Companies 14

| 1. | Positive about open innovation with universities, research institutions and Japanese companies, and placing expectations on "State-of-the-art technology and R&D" | 16 |
|----|---|----|
| 2. | 70% of target locations for their secondary investment/expansion are areas outside of Tokyo \cdots | 18 |
| 3. | Greatest appeal lies in the Japanese market, with the spotlight on its huge and stable market \cdots | 20 |
| 4. | Challenging issue of doing business is "difficulty in finding human resources" | 21 |
| 5. | Japan's business environment heading for improvement | 23 |

4 JETRO's Efforts to Promote Investment in Japan

24

| 1. | Achievements of JETRO: the total number of success stories exceeded 2,000 ····· | 24 |
|----|---|----|
| 2. | JETRO's efforts to promote investment in Japan: focusing on assistance for innovation creation and expansion of regional investment | 26 |
| | (1) Toward innovation creation by foreign companies | 27 |
| | (2) Strengthening support to regional foreign direct investment in Japan | 29 |
| | (3) Comprehensive support of JETRO | 31 |
| | | |

Reference period : Unless otherwise specified, the statistics data are accessed at the end of October, 2019.

Recent Trend of Inward FDI in Japan

Inward foreign direct investment (FDI) in Japan in 2018 saw the inflow (net) reaching the two-trillion-yen mark as in 2017 and the stock exceeding 30 trillion yen for the first time. Although mega investment deals like tourist facilities used to attract attentions, there is now higher expectation on foreign-affiliated companies to create innovation through introduction of new technologies/services. Foreign-affiliated companies engaged in R&D and assistance for startups are expanding their fields of innovation across Japan. Among foreign-affiliated companies including startups, a trend has been observed where companies develop their business in Japan through addressing social issues unique to Japan or local regions in collaboration with Japanese companies/organizations.

1. Recent trend of inward FDI in Japan since 2018

The inflow of 2018 inward FDI exceeded two trillion yen and was the second largest, after 2016. By region, investment from Europe increased more than 30% from 2017. The stock of inward FDI at the end of 2018 exceeded 30 trillion yen for the first time. By region, Europe accounted for about a half of the stock, 49.5%. The stock at the end of the second quarter of 2019 is estimated to be 33 trillion yen. The amount is approaching 35 trillion yen, the target the Japanese government set to reach by the end of 2020.

(1) Inflow of inward FDI: Inflow of more than 2 trillion yen for the second consecutive year

[1] General Overview

The inflow of 2018 inward FDI (balance of payments basis, net) was 2.9 trillion yen, a 24.5% increase from the previous year (Chart1-1). It exceeded two trillion yen as observed in 2017, and was the second largest, after 2016, among comparable years since 1996. By investment type, equity capital¹ accounted for 545.9 billion yen (61.9% increase from the previous year), reinvestment of earnings for 1.6 trillion yen (2.5% increase), and debt instruments for 755.1 billion yen (71.8% increase).

[2] Overview by region/country and industry

By region, the inflow of inward FDI from Europe in 2018 was 804.9 billion yen, a 30.4% increase from the previous year. Although the UK recorded a large curtail (negative 400.3 billion yen) in 2017, it turned to net inflow of 487.6 billion yen in 2018. As a result, the net inflow from the UK was the largest among European countries and the second largest in the world only after the US. By industry, the inflow from the UK in electric machinery more than doubled.

Although inward FDI from North America declined for the second consecutive year to 668.1 billion yen, its rate of decrease (4.0% compared with the previous year) improved from the previous year (7.3%). The inflow from the US was 661.9 billion yen, a 5.7% decrease from the previous year; however, it remained the largest source of FDI by country.

The inflow from Asia recorded 552.2 billion yen, an 11.9% decrease from the previous year. The decrease was primarily due to Singapore, the inflow which turned negative after the country recorded net inflows for years until last year. On the other hand, investment from Thailand accounted for more than 100 billion yen, showing its presence. All countries/areas (China, Hong Kong, Taiwan, and South Korea) in Northeast Asia recorded an inflow excess.

Among major M&A deals targeting Japan after 2018, the acquisition of Toshiba Memory by Bain Capital (US), SK Hynix (South Korea), and others was worth more than two trillion yen and was by far the largest deal during the period (Chart 1-2).

(2) Inward FDI stock: reaching 30-trillion-yen mark for the first time

[1] General Overview

Inward FDI stock at the end of 2018 was 30.7 trillion yen, an increase of 1.8 trillion yen from the end of the previous year (Chart 1-3). It marked a record high for five consecutive years and exceeded 30 trillion yen for the first time. The proportion of inward FDI stock to nominal gross

Chart 1-1 Changes in net flow of inward FDI into Japan by country/region

| | | | | (Billion Yen) |
|---------------|-------|-------|-------|---------------------|
| | 2016 | 2017 | 2018 | 2019 Jan-Aug (P) |
| Asia | 950 | 627 | 552 | 485 |
| China | -11 | 110 | 89 | 99 |
| Hong Kong | 161 | -38 | 86 | 131 |
| Taiwan | 259 | 95 | 44 | 50 |
| Korea | 67 | 127 | 216 | 52 |
| ASEAN | 475 | 331 | 117 | 154 |
| Singapore | 404 | 359 | -33 | 80 |
| Thailand | 71 | -50 | 132 | 50 |
| North America | 751 | 696 | 668 | 631 |
| US | 748 | 702 | 662 | 580 |
| Latin America | 171 | 313 | 478 | 355 |
| Oceania | 87 | 27 | 210 | 104 |
| Europe | 2,508 | 617 | 805 | 1,328 |
| EU | 2,411 | 457 | 737 | 1,268 |
| World | 4,492 | 2,296 | 2,859 | 2,981 |

[[]Note] Figures for 2019 are preliminary.

[Source] "Balance of Payments" (Ministry of Finance, Bank of Japan)

¹As "equity capital," share purchases or capital expenditure with a value of at least 10% of voting rights, equity interest on investment to a branch, and other capital expenditures by a foreign company are recorded. As "reinvestment of earnings," proportion of undistributed earnings from a Japanese business or local subsidiary with foreign ownership corresponding to the level of foreign investment are recorded. As "debt instruments," cash loans exchanged between parent and subsidiary and acquisition/disposal of bonds are recorded.

domestic product (GDP) also expanded to 5.6%.

Chart 1-2 Major M&A deals in Japan since 2018

Breaking down by the stock, equity capital was 16.5 trillion yen, reinvestment of earnings for 7.3 trillion yen, and debt instruments for 6.9 trillion yen.

According to the Ministry of Finance, a major contributor to the increase in the stock from 2017 to 2018 was overall transaction flows during

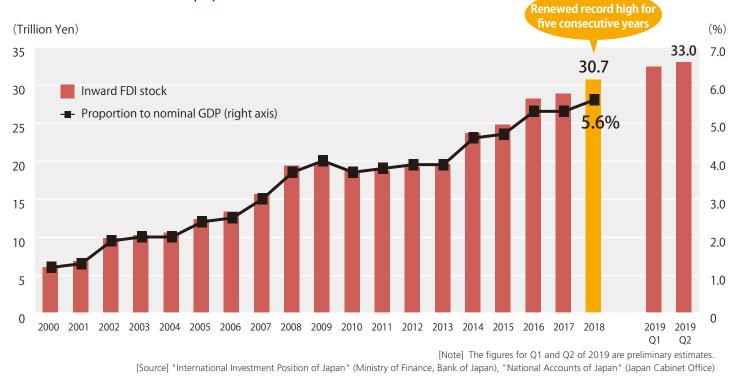
2018, commensurate with the inflow of inward FDI in the international balance of payments (2.9 trillion yen increase), while exchange rate fluctuations (108.0 billion yen reduction) and other adjustments² (967.0 billion yen) subdued the increase.

As of September, the preliminary estimate of the stock at the end of second quarter of 2019 was 33.0 trillion yen.

| Date | é | T | | A | | | Value |
|---------|-------|-------------------------------------|-----------------------------|--|-------------|-----------------------------|-----------|
| (Comple | tion) | Target Company | Industry | Acquirer | Nationality | Industry | (Bil.Yen) |
| | Jun | Toshiba Memory | Electronics | Bain Capital (US), SK Hynix (Korea), and others | - | Investors Group | 2,000 |
| 2018 | Apr | Takata | Transportation Equipment | Joyson Electronics | China | Transportation Equipment | 175 |
| | Mar | ASATSU-DK | Advertising Agency | Bain Capital | US | Investment Firm | 152 |
| | Apr | Ci:z Holdings | Cosmetics | Johnson&Johnson | US | Healthcare | 150 |
| | Mar | Clarion | Electronics | Faurecia | France | Transportation Equipment | 141 |
| 2019 | Jun | Godiva (Asia Pacific) | Food | MBK Partners | Korea | Investment Firm | 111 |
| | Jan | 6 logistics facilities owned by ESR | Real Estate | Axa IM (France), and others | - | Investors Group | 109 |
| | Mar | Pioneer ① | Electronics | Baring Private Equity Asia | Hong Kong | Investment Firm | 102 |

[Note] ①The list contains M&A deals valued over \$1Billion per transaction since 2018, except for the acquisition of Pioneer, the value of which is the sum of two transactions taken place in the same month. ②"Acquirer" is the ultimate acquirer (including corporate group). [Source] Thomson Reuters (data accessed on October 21st, 2019)

Chart 1-3 Inward FDI stock and its proportion to nominal GDP

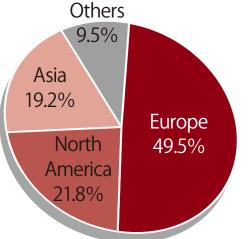


² "Other adjustments" reflect movements such as fluctuations in share and debenture prices and movements owing to discrepancies of calculation method between balance of payment figures and foreign asset and liability balance figures.

[2] Overview by region/country and industry

By region, the stock of Europe was 15.2 trillion yen, nearly a half of the total, with an increase of 779.1 billion yen from the end of 2017 (Chart 1-4). The proportion of the manufacturing sector was particularly high in Europe, three of which, namely transportation equipment, electric machinery, and chemicals/pharmaceuticals, accounted for nearly 60% of the stock. The UK, however, was an exception. For the UK, which holds the third largest stock among European countries, the proportion of the finance/insurance industry was high, and the non-manufacturing sector accounted for nearly 70%.

Chart 1-4 Share of inward FDI stock in Japan by region (as of end of 2018)



[[]Source] "International Investment Position of Japan" (Ministry of Finance, Bank of Japan)

North America contributed 6.7 trillion yen to the stock of FDI in Japan, a decrease of 202.8 billion yen from the end of 2017. Although it was a decrease for the second straight year, the stock of the region remained over 6 trillion yen. Among the non-manufacturing sector, which accounted for more than 80% of the North American stock, industries such as finance/insurance and wholesale/retail decreased while the communications industry maintained a steady increase. The stock of the US was 6.5 trillion yen and remained as the largest investor to Japan by country (Chart 1-5).

The stock of Asia was 5.9 trillion yen with an increase of 548.2 billion yen from the end of 2017. The stock of all countries/regions³ excluding Indonesia increased. The stock of Hong Kong went below one trillion yen at the end of 2017 but regained the level at the end of 2018. The proportion of the non-manufacturing sector was high in Asia, accounting for more than 80%. In particular, the stock of industries such as finance/insurance (about 35% of total) and services (about 10% ditto) constituted large shares.

2. Latest success stories of inward FDI

A trend has been observed where foreign and foreign-affiliated companies develop their business through addressing social issues of Japan or local regions by introducing innovative technologies or services. According to JETRO's survey on foreign-affiliated companies in Japan, about 20% listed "Opportunities for innovation due to Japan's status as a frontrunner in addressing global challenges" as an attractive factor when doing business in Japan (see Chapter 3). Not only major foreign-affiliated companies but also overseas startups have been entering Japanese market, and various foreign-affiliated companies are developing their business in different parts of Japan.

Chart 1-5 Inward FDI stock in Japan by country/region and by industry (as of end of 2018) Top 10

| <by country="" region=""></by> | | | | | |
|--------------------------------|----------------|------------------------|-----------|--|--|
| Rank | Country/region | Stock (Billion yen) | Share (%) | | |
| 1 | US | 6,529 | 21.3 | | |
| 2 | Netherlands | 4,625 | 15.1 | | |
| 3 | France | 3,761 | 12.2 | | |
| 4 | Singapore | 2,638 | 8.6 | | |
| 5 | UK | 2,606 | 8.5 | | |
| 6 | Cayman Isl. | 1,673 | 5.4 | | |
| 7 | Switzerland | 1,458 | 4.7 | | |
| 8 | Germany | 1,094 | 3.6 | | |
| 9 | Hong Kong | 1,012 | 3.3 | | |
| 10 Luxembourg | | 837 | 2.7 | | |

-By country/regions

[Source] "International Investment Position of Japan" (Ministry of Finance, Bank of Japan)

<By industry>

| | | Stock | |
|------|-------------------------------|---------------|-----------|
| Rank | Industry | (Billion yen) | Share (%) |
| 1 | Finance and insurance | 7,693 | 33.9 |
| 2 | Electric machinery | 3,743 | 16.5 |
| 3 | Transportation equipment | 3,456 | 15.2 |
| 4 | Chemicals and pharmaceuticals | 1,624 | 7.2 |
| 5 | Services | 1,258 | 5.5 |
| 6 | Communications | 666 | 2.9 |
| 7 | General machinery | 596 | 2.6 |
| 8 | Real estate | 550 | 2.4 |
| 9 | Transportation | 438 | 1.9 |
| 10 | Glass and ceramics | 358 | 1.6 |

[Note] In the statistics of inward FDI stock by industry, the investment made by a subsidiary to its parent company is counted as the withdrawal of investment by the parent company. The calculation method differs from that of the statistics for inward FDI stock by country/region.

[Source] "International Investment Position of Japan" (Ministry of Finance and Bank of Japan)

³ Comparison among the 11 countries and regions in Asia whose figures are individually reported in balance of payments statistics by the Ministry of Finance and Bank of Japan: China, Hong Kong, Taiwan, South Korea, Singapore, Thailand, Indonesia, Malaysia, the Philippines, Vietnam, and India.

(1) Finding business opportunities in addressing social issues unique to local regions and Japan through innovation

i) Foreign-affiliated companies to expand business addressing regional social issues

Various foreign-affiliated companies find opportunities for research and development (R&D) or pilot projects of new technologies/ services in unique social issues and characteristics of local regions in Japan. Establishing business bases, they are aiming to work with local companies/organizations interested in open innovation (Chart 1-6).

Case [1] Aizu-wakamatsu City, Fukushima Pref.: Attracting foreign-affiliated companies as a site for pilot projects

More and more companies, whose business include a social business aspect, come to Aizu-wakamatsu City, Fukushima Prefecture. In the process of reconstruction from the Great East Japan Earthquake, the city incorporated the "Smart City" initiative. Under the initiative, the city aims to improve the efficiency of city administrations and the convenience of everyday life of its citizens by introducing IT technologies through collaboration with Accenture, a foreign general consulting firm, and the University of Aizu (established in 1993 as the first university in the country dedicated to computer science). In April 2019, as a further policy measure to invite more companies to the region, the city established "Smart City AiCT," an office facility complex, to facilitate for ICT (Information and Communication Technologies) companies to start a business in the city and carry out smart city-related pilot projects. Seventeen domestic and foreign companies expressed their intention to move into the office at the time of its opening.

Aizu-wakamatsu City is an attractive field for local companies, including foreign ones, to conduct pilot projects. Mr. Shojiro Nakamura, Manager at Accenture Innovation Center in Fukushima, states that as depopulation advances, urban and depopulated areas have been mixed within the city, which makes the city suitable for social business pilot projects. Also, the city has been actively working on making its citizen data more open. More than 30 social business pilot projects have been carried out through collaboration with various companies. So far, about 20 of them have already become available as official services. One of the examples is a system to provide location information of snow removing vehicles through a web portal for its citizens. Another is a system to send notifications of vaccination reservation, etc. through digitized maternity health records. In FY2019, the city is planning to implement pilot projects of drones for agriculture and online medical care services.

Major foreign IT enterprises have been starting to choose the city for its unique environment. Among companies at Smart City AiCT in addition to Accenture, **SAP Japan** and **Japan Microsoft** are planning to implement their pilot projects. Mr. Nakamura finds the significance of being in local regions, saying that "it is the local regions which urgently requires solutions to social challenges Japan faces. Setting up business in these regions enables the company to conduct fruitful pilot projects." Growing out of conventional types of regional revitalization such as inviting manufacturing factories, the city's initiative aiming to promote high added-value industries can become a new model to induce innovation through regional social issues.



| Place | Social issues | Foreign-affiliated companies | Characteristics | Efforts/business development |
|--|---|---|---|---|
| Aizu-wakamatsu City, Fukushima Pref. | Reconstruction from earthquake Depopulation | Accenture, SAP Japan, Japan Microsoft, etc. | Environment suitable for social business pilot projects (Combination of urban and depopulated areas) (Open data of its citizens) | In the process of reconstruction from a massive earthquake, the "Smart City" initiative was implemented. In April 2019, "Smart City AiCT," an office facility complex, was established. More than 30 pilot projects have been carried out so far, about 20 of which have become official services. |
| Sendai City, Miyagi Pref. | Declining birth rate and aging population Shortage of healthcare professionals Soaring medical expenses | | Research and development in the field of healthcare | Philips Japan established "Co-Creation Center" as the first R&D center in Japan. Its aim is to collaborate with entities from different industries. The company has already concluded more than 60 partnership agreements in the field of healthtech with local enterprises/ organizations. |

Chart 1-6 Regional social issues × Efforts of foreign-affiliated companies

[Source] Interviews by JETRO, press release, and media reports

Case [2] Sendai City, Miyagi Pref.: Collaboration between foreign-affiliated companies and local enterprises/ organizations to tackle local social issues

Philips Japan established its "Co-Creation Center (CCC)" in Sendai City, Miyagi Prefecture in May 2019, as the first innovation R&D center in Japan. Philips has been accelerating to become a healthcare business enterprise on a global scale, and the Co-Creation Center is to function as an innovation hub in the health-tech field in Japan. At CCC, a variety of facilities are set up to enable, for instance, to quickly produce prototype products with 3D printers or to simulate arrangement of large medical equipment utilizing augmented reality (AR) technology for installing cutting-edge technologies. In 2018, before the establishment of CCC, Philips Japan set up a joint research center within Tohoku University Hospital. Mr. Hiroyuki Tsutsumi, the President of Philips Japan, explains the establishment of CCC in the Tohoku region that "social issues of the region, such as a declining birth rate and aging population, lack of healthcare professionals, and soaring medical expenses, are more severe, compared to the other parts of Japan. At the same time, however, this is the region that can lead the social change (through addressing these issues)."

The Co-Creation Center is to become a "meeting place for different industries." With that concept, the company intends to accelerate collaboration with local enterprises and governments, in addition to Tohoku University, to create medical services, incorporating needs and challenges from the field. The company has already concluded partnership agreements in the healthtech field with more than 60 local enterprises/organizations. With CCC at its core, the company aims to increase the number of partnerships up to 100.

ii) Collaboration between foreign startups and Japanese enterprises to develop business through addressing social issues

Some overseas startups are starting to enter the Japanese market with new technologies and business models through collaboration with Japanese enterprises/organizations active on open innovation (Chart 1-7).

Case [1]: Manpower shortage at retail business

While Japan's retail market is one of the largest in the world, the manpower shortage has been a serious challenge to the industry in the recent years. **Standard Cognition**, a startup founded in the US in 2017, finds a business opportunity in the challenge. Establishing a Japanese subsidiary in June 2018, the company provides retail stores with a payment software system, with which the stores no longer need cash registers. The system runs with artificial intelligence (AI) and recognizes items selected by customers with cameras installed on the ceiling, which automatically charges the customers for the items once they leave the store. Since the software does not require items tagged, retail stores bear little burden at the time of its installation. Also, data obtained through the system can be utilized for customer relationship management (CRM). On the other hand, it has superior privacy protection compared to the existing technologies, because it does not use face recognition technology.

The company opened its first demonstration store in San Francisco, US, in September 2018, and was aiming to realize the first overseas introduction in Japan. PALTAC, a large wholesaler of cosmetics/daily necessities/medicine, decided to adopt the software system as the first attempt in Japan and plans to conduct pilot projects at drugstores in Miyagi Prefecture. The COO of Standard Cognition plans to expand the number of stores installing the software to 3,000 in the country by 2020. At the same time as the outlook of the company draws attentions, there is a high hope that a wider use of "retail-tech," the concept which has already been popular in countries like the US, will contribute to increase productivity in the Japan's retail industry.

Case [2]: Disaster prevention/mitigation

One Concern, a US startup founded in 2015, develops a software system to predict damages that natural disasters can cause. The system makes AI learn data on the natural environment and infrastructures in advance and carry out simulation of potential damages expected in case of natural disasters. This information is useful for companies to formulate long-term business plans at specific areas or for municipalities to review disaster prevention plans. Furthermore, the software and its simulation

| Foreign-affiliated company | Business overview | Social issues | Cooperation partners | Efforts/business development in Japan |
|-------------------------------|--|--|---|---|
| Standard Cognition | Providing a payment software system, with which retail stores no longer need cash registers | Manpower shortage | PALTAC | Planning to start pilot projects to install the software at drugstores in Miyagi Prefecture |
| One Concern | Development of damage prediction system for natural disaster utilizing AI | Disaster prevention/ disaster mitigation | Sompo Japan Nipponkoa Weathernews | Starting pilot projects of disaster prevention/ disaster mitigation system utilizing AI in Kumamoto City. Planning to start trial operation of the damage prediction system for floods and earthquakes from September 2019. |
| StreetScooter | Manufacturing of electric vehicle (EV) | Work-style reform Manpower shortage Reduction of burdens on environment | Yamato Transport | Jointly developed of first Japanese small EV truck for parcel delivery. Yamato Transport announced it would introduce 500 units of them during FY2019. |
| Wind Mobility | Providing service of shared electric scooters | Last one-mile between public transportation and a destination | Saitama Railway Corporation | Providing an electric scooter sharing service in Saitama City and Kawaguchi City. |

Chart 1-7 Social issues in Japan × Efforts of foreign-affiliated startups

[Source] Interviews by JETRO, press release, and media reports

enables stakeholders to precisely grasp damages when natural disasters occur. The system has been already in use in US cities, such as Seattle and Los Angeles.

The company concluded a business alliance agreement with Sompo Japan Nipponkoa and Weathernews in March 2019 and started pilot projects of disaster prevention/mitigation system utilizing Al in Kumamoto City. Kumamoto City reportedly plans to start the trial operation of the damage prediction system for floods and earthquakes from September of the year.

Entries of foreign startups into Japan are expected to accelerate open innovation of Japanese companies and entrepreneurs' growth. The more businesses are born out of these innovations, the more cases will be observed where they lead to addressing social issues in Japan.

(2) Diversification of the ways foreign-affiliated companies form ecosystems

At the time of startups growth and trend toward forming ecosystems to induce innovation in Japan, some foreign affiliated companies are playing an active role in forming Japanese startup ecosystems. Some programs for startups makes the best use of characteristics of individual regions, whereas open innovation programs by foreign-affiliated companies as well as investment through establishment of corporate venture capital (CVC)⁴ have been recently observed.

i) Foreign-affiliated accelerators forming regional ecosystems

With the aim to create innovation through supporting startups, foreignaffiliated accelerators⁵ have been expanding their fields to all the places of Japan (Chart 1-8). Rainmaking Innovation and Plug and Play, for example, support both domestic and overseas startups and existing enterprises, taking advantage of unique characteristics of local enterprises and universities/research institutions in the region/cities.

Case [1]: Rainmaking Innovation

Rainmaking Innovation, an international innovation service provider, who has run over 55 programs around the world, started their business in Osaka City in March 2019. In June 2019, the company held "Startupbootcamp" for the first time in Japan with partner companies, such as Hankyu Corporation and JR West Innovations. Held in over 21 cities in the world, the program sets up a specific industrial cluster as a theme for each host city and invites promising startups in the field from all over the world. In Osaka, under the theme of "Smart City & Living," participating startups were selected from Australia, Hong Kong, and Israel, among others.

The program focuses on supporting business collaboration, such as joint pilot projects, between participating startups and partner companies. In particular, special attention is given to collaboration between startups and large companies in order to raise possibility for pilot projects to become viable business. In Osaka, the program is to be continued for a minimum of three years with the plan to support over 30 domestic and foreign startups in total.

Mr. Joshua Flannery, the representative of the company in Japan, cites "market size" and "low cost (of business operations compared to Tokyo)" of Osaka as advantages of the city for startups to expand their business.

Case [2]: Plug and Play

Plug and Play, a US accelerator, established its second Japanese base in Kyoto in July 2019. The company has been supporting domestic and foreign startups in fields such as IoT, fintech, and mobility in Japan since it established its business in Tokyo in 2017. In Kyoto, the company focuses on the industrial clusters of manufacturing and life science and plans to develop a support program specialized in "Hard Tech & Healthcare." The company cites the startup ecosystem with local universities at its core as the advantage to develop the program in Kyoto. The company had concluded a partnership agreement with Kyoto City to cooperate in its formation of a global startup ecosystem as well. The program by Plug and Play in the city, therefore, will use "Kyoto Keizai Center," in which administrations and economic organizations have their office, as one of its primary locations.

Chart 1-8 Foreign-affiliated accelerators in Japan

| Foreign-affiliated company | Market to expand | Advantages of market | Characteristics of programs |
|----------------------------|----------------------------|---|---|
| Rainmaking Innovation | Osaka City, Osaka Pref. | Market size Low cost (compared with Tokyo) | Holding "Startupbootcamp," a startup support program, in over 21 cities around the world. The program sets up a specific industrial cluster for each host city and invites promising startups in the field from all over the world. The theme in Osaka is "Smart City & Living." |
| Plug and Play | Kyoto City, Kyoto Pref. | Startup environment with local universities at its core | Since entering Japan in 2017, assisted both domestic and overseas startups. Their program in Kyoto is to be specialized in "Hard Tech/Healthcare." |
| ImpacTech | Tokyo | - | Providing support exclusively to startups tackling social issues using technologies. Supported projects include a wireless electric car/robot charging service, an online medical consulting service for parents with children, etc. |

[Source] Interviews by JETRO, press release, and media reports

⁴ Venture capital set up by traditional companies for the purpose of investing in external startups.

⁵ Companies/organizations providing investment and support to startups to grow and accelerate their business.

ii) Open innovation programs by foreign-affiliated companies and collaboration of CVC with domestic startups

In addition to accelerators, traditional foreign companies are also interested in collaborating with domestic startups through their own open innovation programs or CVC (Chart 1-9). According to Japan Venture Research, the amount of investment to domestic startups from foreign-affiliated VC has increased since 2012, and its proportion in terms of the total amount of VC investment increased from about 5% in 2012 to about 12% in 2018.

Case [1]: Bayer Yakuhin

Bayer Yakuhin, a Japanese subsidiary of **Bayer**, a large German pharmaceutical company, held "G4A Tokyo Dealmaker 2018," an open innovation program, in November 2018. The company presented problems in the digital health field and accepted business proposals from companies including startups. This led the company to collaborating with 12 companies in various fields, such as productivity enhancement in pharmaceutical manufacturing. Also, the company concluded a partnership agreement to work on building a startup ecosystem with Kobe City and the Foundation for Biomedical Research and Innovation at Kobe in February 2019. In the spirit of the agreement, the company announced its plan to inviting companies to "CoLaborator Kobe," its

incubation facility opened by the company in Kobe City in 2018, and provide assistance to companies seeking overseas business expansion with overseas locations of the Bayer Group.

Case [2]: Cisco Systems

Cisco Systems, a US company in the field of network device development, established "Cisco Innovation Hub," to work on open innovation projects with startups in the space industry in Tokyo in April 2019. Together with partners like Japan Aerospace Exploration Agency (JAXA), the company invites startups and universities/research institutes and holds competitions of new business models utilizing satellite data, aiming to develop new products and services in the industry.

Case [3]: Salesforce.com

Salesforce Ventures, a CVC of Salesforce.com, which provides CRM softwares, announced to establish "Japan Trailblazer Fund" of 100 million dollars designated to invest in Japanese startups in December 2018. Having already invested in over 40 domestic startups, the company intends to provide startups through this fund with a variety of assistances, such as sales channel development and overseas business expansion, in the hope to realize positive effects on its own cloud service business at the end.

Chart 1-9 Foreign-affiliated open innovation program/CVC by traditional companies

| Open innovation program/CVC | Investing foreign- affiliated companies | Efforts/investment |
|---|--|---|
| G4A Tokyo Dealmaker CoLaborator Kobe | Bayer Yakuhin | Held the "G4A Tokyo Dealmaker 2018" in November 2018 and led to collaboration with 12 companies in fields, such as productivy enhacement in pharmaceutical manufacturing. In 2018 announced to cooperate with Kobe City, etc. in inviting companies to "CoLaborator Kobe," its incubation facility established in the City, and in supporting their overseas business expansion. |
| Philips HealthWorks | Philips | Providing mentoring by its employees and opportunities for experiments for three months at its innovation centers located in various parts of the world, such as the Netherlands and India, to participating companies in "Philips HealthWorks," its global-scale acceleration program. |
| Samsung Venture Investment Corporation | Samsung Group | In June 2018, invested in a startup engaging in system development of electronic equipment such as night vision cameras originated from the National Institute of Advanced Industrial Science and Technology in Tsukuba City. |
| Cisco Innovation Hub | Cisco Systems | Established "Cisco Innovation Hub" in Tokyo as the facility for working on open innovation with startups in the space industry. Together with JAXA, etc., inviting startups and universities/research institutes and holds competitions of new business models utilizing satellite data, aiming to develop new products and services in the industry. |
| Google for Startups Campus | Alphabet | • Announced the establishment of "Google for Startups Campus" in Tokyo in 2019 as the second startup supporting base in Asia, following its location in Seoul, South Korea. |
| Japan Trailblazer Fund | Salesforce.com | Fund of 100 million dollars designated to support Japanese startups. Providing startups with a variety of assistances, such as sales channel development and overseas business expansion, in the hope to realize positive effects on its own cloud service business at the end. |

[[]Source] Press release and media reports

COLUMN Expanding cross-border e-commerce connects the inbound business with investment promotion

2018 saw the renewed record high number of tourists coming into Japan with the number reaching over 30 million. As introduced in "JETRO Invest Japan Report 2017," the more tourists experience Japanese goods during their stay, the stronger their demands for these products get, which has resulted in foreign companies, from countries like China, engaged in cross-border e-commerce (CBEC) investing in Japan. E-commerce sales from Japan to China have steadily expanded since and exceeded 1.5trillion yen in 2018. Other foreign companies in the field have been investing in Japan, some of which have established procurement centers in Japan in order to purchase goods directly from Japanese companies (Chart 1-10).

JETRO has also been implementing the "Japan Mall" project to promote Japanese goods on overseas e-commerce platforms since FY2018. During FY2018, items of nearly 150 Japanese companies were selected and sold through collaboration of JETRO with seven overseas e-commerce platforms in ASEAN as well as other regions.

Overseas sales on these e-commerce platforms can connect an inbound business in the country or regions with inward investment promotion, a trend of which has already been observed in the cosmetics industry. According to a study by the Japan Tourism Agency, among increasing Chinese tourists, 79.5% purchase "cosmetics/ perfume" as souvenirs when visiting Japan. Also, according to JETRO surveys on Chinese consumers, a certain number of people chose "Because of good experience when purchased during a trip in Japan" as one of the reasons to purchase Japanese goods through CBEC. The sales of Japanese cosmetics through CBEC have been attracting attention, and companies are trying to increase their production capability. Just in 2018, foreign-affiliated companies, such as P&G and Unilever, as well as domestic companies, such as Shiseido, reportedly decided to increase investment to enhance domestic production capabilities in order to meet stronger domestic and overseas demands. The increase of foreign tourists in Japan owing to inbound-related business has potential to promote overseas sales of products of Japan or regions on CBEC platforms, which could further lead to investment to increase production capacity. Considering the connection among inbound business, sales through CBEC, and investment for manufacturing, building more comprehensive strategies is required.

Chart 1-10 Recent operations of major foreign-affiliated e-commerce companies in Japan

| Company | Country/region | Activities |
|------------------|----------------|---|
| HQG | China | Operating "Kaola," a major cross-border e-commerce platform. Japanese goods, such as cosmetics, baby products, and daily consumable items, dominate the top sales on Kaola. The company established its business in Tokyo in April 2018 and started its operations to procure Japanese products. |
| Baibao New Media | | E-commerce company founded in 2016 with its headquarters in Suqian, Jiangsu Province, China. Although it used to procure Japanese baby products for the Chinese market through Japanese agencies, the company established a Japanese subsidiary in Yao City, Osaka Pref. in February 2019 in order to strengthen its procurement capacity in Japan to expand its sales in its home country. |
| Onion Group | | Operating a dedicated platform for cross-border e-commerce. Its business model is to conclude contracts with individuals called social buyers and sell goods through social media and events. It established a Japanese subsidiary in April 2019 in order to strengthen procurement capacity. |
| Alibaba Group | | In January 2018, collaborating with the National Federation of Agricultural Cooperative Associations (JA Zen-Noh) to sell Japanese rice in China. This was the first time for rice produced in Japan to be handled on its own platform. |
| Citiesocial | Taiwan | In July 2019, concluded business alliance agreement with Makuake, a cloud funding platform in Japan. The Japanese company is to introduce their clients to the e-commerce platform of Citiesocial, when the clients raise their target of amount fund on its cloud funding platform. Supports will be provided for sales promotion in four locations at most, namely, Taiwan, Hong Kong, Malaysia, and Singapore. |

[Source] Press release and media reports