

3 Changes and Business Opportunities Brought to the Japanese Market by COVID-19

(1) Impact of COVID-19 on the World and Japan

① Impact of COVID-19 on the world

■ Health Damage and Economic Impact of Unprecedented Infectious Diseases

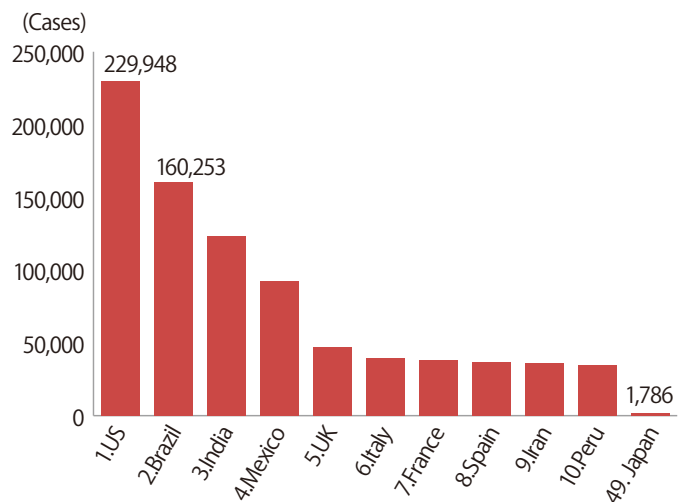
According to the World Health Organization (WHO), approximately 47 million infectious cases and more than 1.2 million deaths were reported in 219 countries and regions worldwide (as of November 5th, 2020) because of the novel coronavirus disease (hereafter, COVID-19) that was identified as the first "disease of unknown cause" in Wuhan, China, in December 2019. Countries with the large number of casualties show how widespread infections have been (Chart 3-1). The number of deaths in the top 10 countries is about 70% of the global total. Japan was the second country outside of China to have found infections, but the number of deaths is about 1800, which is relatively small, compared to the other countries and regions.

The trends of the new infections show that the number of new infections in the US, which has the largest number of infections, increased from mid-March, leveled off from April to late May, increased further from mid-June, and saw a decline from late July. However, the number of infections has increased again since mid-September (Chart 3-2). In major European countries, the number of new infections has been on the increase again since late July, especially in France and the UK, although the first wave infections

have been curbed since mid-April (Germany and France) or early May (UK). Compared to these major countries, the number of infections per 100,000 population in Japan has remained at extremely low levels (detailed below).

The impact of COVID-19 is already reflected in the GDP growth rates of major economies. The growth rate fell sharply in the first quarter of 2020 in China, where the spread and containment of infections

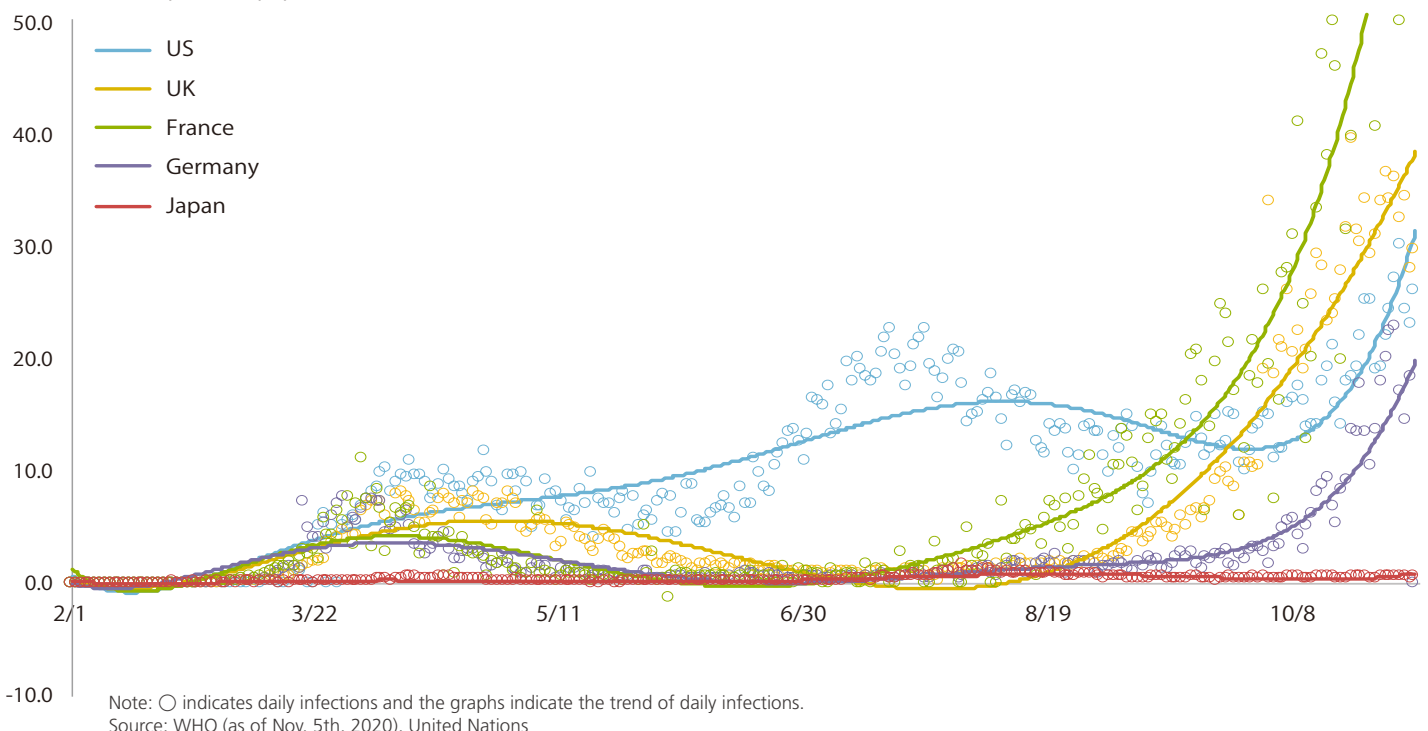
Chart 3-1: Number of Deaths Caused by COVID-19



Source: World Health Organization (as of Nov. 5th, 2020)

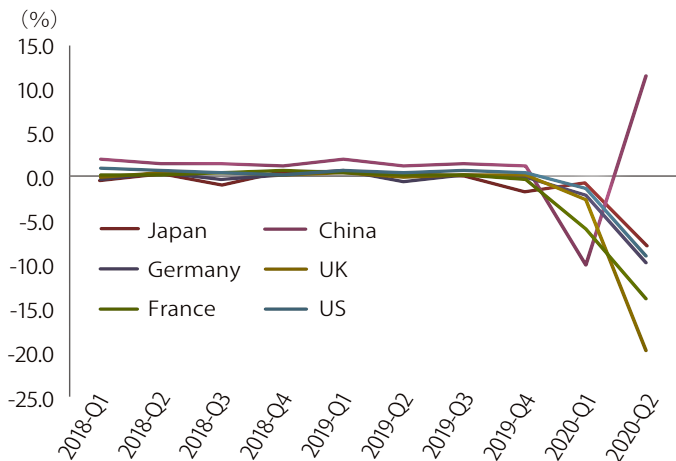
Chart 3-2: Number of New Infections of COVID-19

(new infections per 100K population)



were faster than in other countries, and in the second quarter of the year in other countries (Chart 3-3). Economic forecasts released by international organizations, including IMF and OECD, expect the global economy will experience a slowdown in 2020 (see Chapter 1 (1) "Macroeconomic Trends in the World and Japan" for details).

Chart 3-3: Quarterly GDP Growth Rate



Source: "OECD Data" (OECD) (as of Oct. 20th, 2020)

② Impact of COVID-19 on Japan

■ Spread of Infections within Japan and the Japanese

Government's Responses

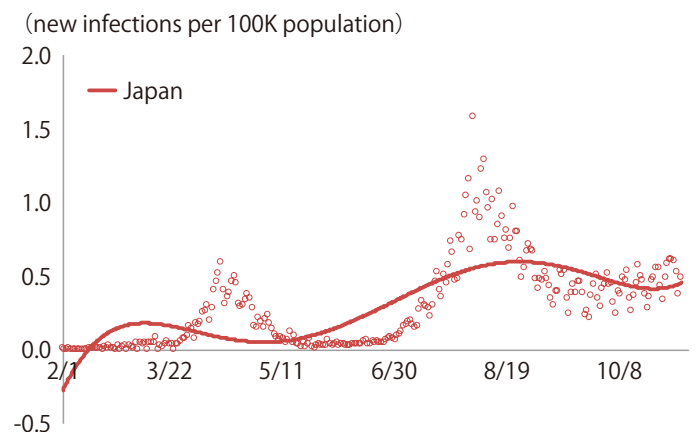
Trends in the number of new infections per 100,000 population in Japan shows that the spread of infections started after late March (Chart 3-4). Though the number of infections increased toward mid-April, it decreased toward mid-May and remained at an extremely low level until around the end of June. In July, the number of new infections increased again, and the number of infections per day continued to exceed the level seen in mid-April. Since mid-August, the number of people infected has leveled off, although it remains at a high level compared with April.

In view of the spread of COVID-19 in Japan, the Japanese government has taken measures such as containment of the virus and economic measures. In order to contain the outbreak of COVID-19 in Japan, the Japanese government issued a state of emergency

on April 7th based on the Act on Special Measures for Pandemic Influenza and New Infectious Diseases Preparedness and Response (Chart 3-5). Domestically, based on the state of emergency, businesses were requested to suspend operations for certain industries, such as restaurants, and to cancel events that require gathering of people. In addition, citizens in the target prefectures were requested to refrain from going out unnecessary or nonurgent and to avoid contact with others. The state of emergency originally issued to the seven prefectures in the Kanto, Kansai, and Kyushu metropolitan areas was expanded nationwide in mid-April in light of the state of domestic infections and other factors. The nationwide state of emergency was lifted on May 14th and it was lifted for all prefectures by May 25th.

As a measure to prevent the spread of the infectious disease, the government encouraged its citizens to be cautious about going outside Japan, and in February 2020 introduced a border measure to refuse visitors from a certain countries and regions to enter Japan. Travelers from designated countries and regions, except for those who are Japanese national or have special circumstances, became unable to enter Japan. The target areas increased based on the situation of the spread of COVID-19 in each country and region.

Chart 3-4: Number of New Cases of COVID-19 in Japan



Note: ○ indicates daily infections and the graph indicates the trend of daily infections.

Source: WHO (as of Nov. 5th, 2020), United Nations

Chart 3-5: Changes in State of Emergency Declaration

Date of Issue	Target Prefectures	Outline
04/07/20	7 prefectures	A state of emergency was declared for seven prefectures in the Kanto, Kansai, and Kyushu, for a period from April 7 to May 6.
04/16/20	47 prefectures	To prevent the nationwide spread of infections during the consecutive holidays in May, a state of emergency was declared for all 47 prefectures until May 6.
05/04/20	47 prefectures	The state of emergency declaration for all prefectures, which had been until May 6, was extended until May 31. The government to review the period by May 14.
05/14/20	8 prefectures	Reviewing the status of infections and medical systems, the state of emergency declaration was lifted in 39 prefectures, excluding eight prefectures in Hokkaido, Kanto, and Kansai. The government to review the status of the remaining eight prefectures around May 21.
05/21/20	5 prefectures	The state of emergency declaration was lifted for the three prefectures in Kansai. The government to review the status of the remaining five prefectures in Hokkaido and Kanto, in the following week, around May 25.
05/25/20	Terminated nationwide	The state of emergency declaration was lifted for the remaining five prefectures in Hokkaido and Kanto.

Source: Documents from the Prime Minister's Office

The introduction of the border measure significantly restricted the re-entry of foreign nationals with permission to stay in Japan. In response, the foreign chambers of commerce and industry in Japan issued opinions to improve the situation, and JETRO, which supports foreign-affiliated companies, also communicated to the government concerns from the support companies.

As the Japanese government aims to balance its economic activities with containment of COVID-19, it has been strengthening the PCR testing capacity at major international airports and establishing certain requirements, such as inspections at airports and voluntary quarantine for 14 days from the day after entry, and gradually relaxing regulations on the entry into Japan for business persons. The government decided to let, in addition to business purposes, other statuses of residence, such as studying abroad and dependents, enter Japan from October, which, in principle, enables people with a visa status to be permitted for new entry from all countries and regions. In addition, trial measures to further ease restrictions on activities, namely, business tracks (mainly for short-term business travelers) and residence tracks (mainly for long-term residents by dispatch or rotation within business personnel), were introduced.

In response to the economic impact of COVID-19 and related measures, the government announced an urgent economic stimulus package in April and submitted to the Diet the first supplementary budget proposal, which was quickly approved (Chart 3-6). The breakdown of the supplementary budget added to the General Account shows that the largest was "Protect employment and sustain business continuity" for businesses whose sales declined significantly due to COVID-19 as well as for the continuation of employment.

It also included strengthening the medical system, accelerating the development of vaccines for COVID-19, and supporting businesses in anticipation of economic recovery.

In addition, the government submitted to the Diet the second supplementary budget draft in June to expand its economic support (Chart 3-7). Among the breakdown of the supplementary budget, the budget for "Enhancing financial support" for SMEs and micro-businesses was the largest. Other forms of business support included establishing a rent support draft for SMEs and support for employment and business continuity. In addition, as with the first supplementary budget, it included the strengthening of the medical system, securing the vaccine production system, and budgets for business development of companies and support for ICT adoption.

During the period of the state of emergency between April and May, the number of new domestic infections declined significantly. At the same time, the Japanese economy was significantly affected within the same period by restrictions on social and economic activities (detailed below). Following the lifting of the state of emergency at the end of May, the government gradually lifted requests for self-restraint of gatherings of people and movement across prefectural boundaries and raised economic activities in order to achieve economic recovery while containing the virus. Industrial associations have prepared and published guidelines for the prevention of COVID-19 infections in line with their respective business categories so that businesses can resume and increase their activities while implementing countermeasures against COVID-19. In response to the increase in the number of new infections since July, some metropolitan areas shortened the operating hours of restaurants and slowed down easing some

Chart 3-6: Breakdown of the First Supplementary Budget

Item	Supplementary Budget Breakdown	Outline
Protect employment and sustain business continuity	19.5 trillion yen	Measures to support businesses for cashflow and maintenance of employment to compensate for COVID-19's impact, etc.
Develop preventive measures against the spread of infection and medical treatment structures as well as pharmaceuticals	1.8 trillion yen	Strengthening the testing and medical care systems for COVID-19, accelerating the development of therapeutic drugs and vaccines, strengthening the system for accepting returners to Japan, and providing emergency support to other countries.
Recover economic activities through public-private efforts as the next phase	1.8 trillion yen	Support for tourism, transportation, restaurant, and event-related businesses, which suffer from a slump in consumption, as well as measures to revitalize regional economies.
Develop a resilient economic structure	0.9 trillion yen	Reviewing the supply chain by Japanese companies, facilitating the business of companies conducting overseas expansion, supporting the enhancement of export of agriculture, forestry, fishery products, and accelerating digital transformation.
Prepare for the future	1.5 trillion yen	New contingency funds to implement necessary measures per the future situation of COVID-19. etc.
Expenses related to Emergency Economic Package against the COVID-19	25.6 trillion yen	Sum of the above items

Note: Breakdown of the amount for the supplementary budget of the general account only. Source: Documents from Ministry of Finance

Chart 3-7: Breakdown of the Second Supplementary Budget

Item	Supplementary Budget Breakdown	Outline
Enhancing financial support	11.6 trillion yen	Financing to support cash flow of businesses, particularly SMEs and micro-businesses.
Other supports	4.7 trillion yen	Grants to local governments implementing the COVID-19 countermeasures and related projects. The expansion of the "Subsidy Program for Sustaining Businesses" and support for business development by enterprises and ICT adoption.
Supporting medical treatment providers	3.0 trillion yen	Grants to prefectures enhancing medical and nursing care and welfare systems. Expenses for securing vaccines production systems, and financing medical institutions, etc.
Establishing a rent support grant for SMEs	2.0 trillion yen	Expenses for subsidizing rent, a large fixed-cost item, to help continue businesses of small, medium-sized enterprises, micro-enterprises, proprietors, etc.
Enhancing the Employment Adjustment Subsidy	0.5 trillion yen	Support for businesses and their employees who are forced to suspend activities, etc.
Contingency funds for the COVID-19	10.0 trillion yen	Reserve fund for necessary measures depending on the COVID-19 situation and economic trends.
Expenses related to cope with the COVID-19	31.9 trillion yen	Sum of the above items

Note: Breakdown of the amount for the supplementary budget of the general account only. Source: Documents from Ministry of Finance

restrictions or requests. However, the central government did not declare another state of emergency. The government has stated that it would expand its medical care system and at the same time would strive to maintain economic activities.

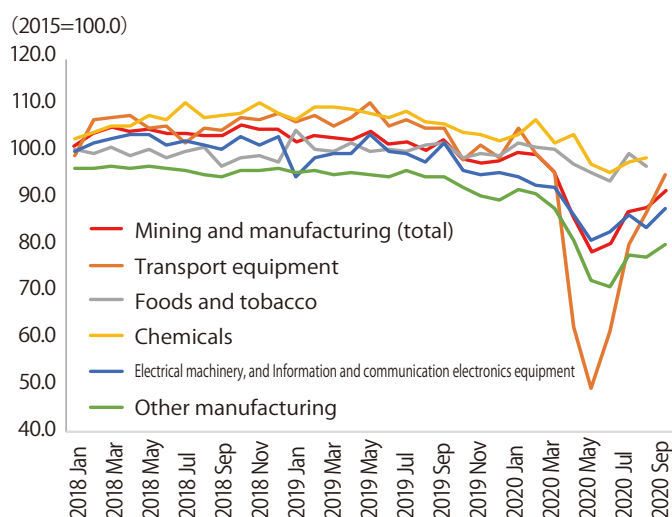
■ Impact of COVID-19 on domestic economic activity

As mentioned above, domestic social and economic activities were severely restricted by COVID-19 and the state of emergency. Japan's real GDP growth rate was negative 7.9% in the second quarter of 2020. The decline of the growth rate for the same period was smaller than that for the major European countries, but the economy witnessed an extremely sharp fall.

By industry, business activities declined in a wide range of industries, especially from April to May. The Indices of Industrial Production, which indicate the activities of the manufacturing industry in Japan, show that the production index declined for the fourth consecutive month from 99.8 in January 2020 to 78.7 in May of the same year (100.0 in 2015) (Chart 3-8). The production indices fell below 80.0 for the first time since February to March 2009. By item, the production index of the transport equipment industry, one of the primary industries, fell sharply from April to May. The May index was 49.4, the lowest since 1978, which is comparable. The transport equipment industry has the largest weight by industry, and its decline had a major impact on the decline in the overall index for the manufacturing industry.

The food and tobacco industry and the chemical industry (including pharmaceuticals), which account for the next largest shares after the transport equipment industry, declined in the index, although the rate of decline was small compared with the other items. Comparing indices between January and May 2020, production indices for almost all items also declined. The indices since June, after the lifting of the state of emergency, show that the production indices have recovered for many items, including those in the transport equipment industry, which had experienced a large slump. However, the indices are still low compared to the level before COVID-19, and it is expected that the production activity will see further recovery along with the future increase in economic activity.

Chart 3-8: Trends in Industrial Production Indices



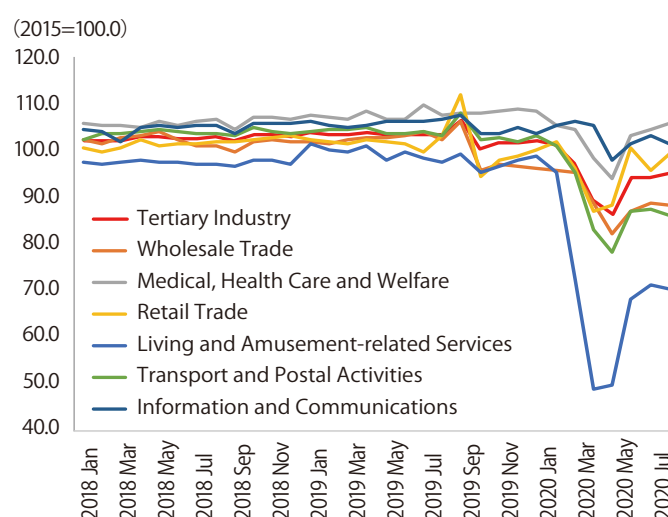
Note: The chart shows "Total" and the five largest industries by weight.
Source: "Indices of Industrial Production" (METI)

The Indices of Tertiary Industry Activity, which show the activities of the service industry in a broad sense, illustrate the service industry was also significantly affected by COVID-19. The overall index of the service industry, which was 101.9 in January 2020, dropped to 89.5 in April and 86.4 in May of the same year (100.0 in 2015) (Chart 3-9). The index in May 2020 was the lowest comparable since January 2008. Among the four industries whose weight account for more than 10% of the total (wholesale trade, medical, health care and welfare, retail trade, and living and amusement-related services), the indices fell by more than 10 points from January to May 2020. In particular, the index for living and amusement-related services, including restaurants and tourism, was less than half in April and May compared to January. Because of the slump in the domestic tourism industry due to self-restraint on unnecessary or nonurgent outings and the self-restraint on the operations of restaurants, the level of activities was the lowest for comparable statistics.

Among the industries with large weights, the decline in the information and communications industry was relatively small. Compared to January 2020, the index slightly increased in April and slightly decreased in May and June. By breaking down the information and communications industry, there was a remarkable increase in the index for the software industry, which is classified under the communications services industry. Because of the increase in "stay home" consumption, the game software services index reached a record high from March to April.

Similar to the activity index for the manufacturing index, the activity index for the service industry recovered in June. With the lifting of the state of emergency, the movement of people began to increase, and the index for living and amusement-related services improved significantly. In addition, the index for retail trade recovered to the level recorded in January 2020. By smaller items, motor vehicles retail sales, which fell sharply in April and May, improved. After June, the overall activity of the service industry has been rather slowly but gradually improving. As economic activity recovers, the activities of the service industry are expected to have a further increase. However, as Japanese consumers are particularly sensitive to the level of spread of the COVID-19 infections, the pace of recovery may slow down due to the future status of the spread of infections within the country.

Chart 3-9: Trends in the Tertiary Industry Activity Indices



Note: The chart shows "Total" and the five largest industries by weight.
Source: "Indices of Tertiary Industry Activity" (METI)

(2) Changes and Business Opportunities Brought to the Japanese Market by COVID-19

COVID-19 is affecting all aspects of the economy and society, and various changes have been observed in Japan's domestic market. This section reviews major changes in domestic businesses and consumers, taking into account the impact of COVID-19.

① Changes in Businesses in Japan

■ Negative impact on most domestic companies

COVID-19 has been influencing the business operations of many companies in Japan. According to the Business Outlook Survey, conducted by the Cabinet Office and the Ministry of Finance in August and released in September, business conditions for enterprises declined significantly in the second quarter of 2020 (Chart 3-10). Business conditions declined regardless of firm size, with the response of large firms being the second lowest after the first quarter of 2009, and medium-sized and small firms being the lowest since 2004. The assessment of the business conditions in the third quarter of 2020 shows that conditions have picked up for companies of all size, but the extent of recovery is lower for smaller firms.

A survey of domestic enterprises reveals that many enterprises were affected. According to the 8th Questionnaire Survey on COVID-19, conducted by Tokyo Shoko Research from August to September 2020, approximately 97% of the about 13,000 companies that responded said that they were or may be affected in some way.

■ Domestic companies continue to invest in digital

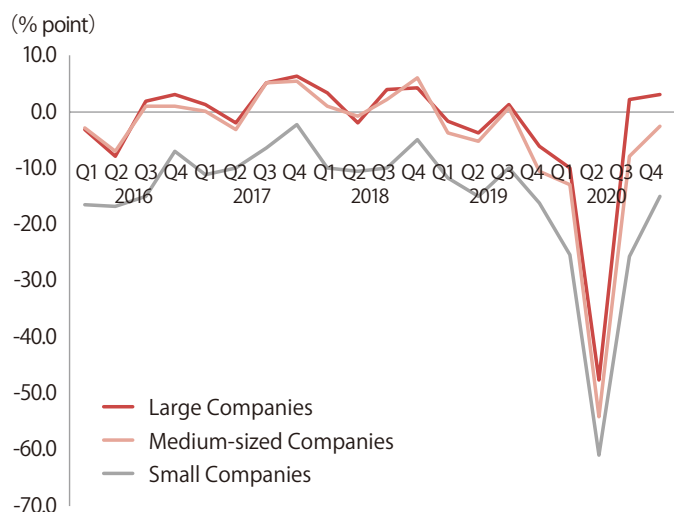
The slump in the economy caused by COVID-19 has also affected capital investment by domestic companies. According to the Financial Statements Statistics of Corporations published by the Ministry of Finance, capital investment per company in the second quarter of 2020 decreased by 9.2% over the same period of the

previous year (Chart 3-11). By size of enterprise, investment was sluggish, declining 9.5% year on year, among relatively large enterprises with capital stock of ¥1 billion or more.

While the whole amount of capital investment is decreasing, investment in the digital field, in which demand is further rising with COVID-19, is expected to increase. According to a survey of trends in capital investment conducted by Nihon Keizai Shimbun Inc. in August 2020 targeting listed companies and 948 companies with capital of at least ¥100 million, the planned amount of capital investment in fiscal 2020 in all industries fell 1.2% from the previous year, the first year-over-year decline in four years since fiscal 2016. On the other hand, investment for IT equipment (for 765 companies) is expected to increase by 15.8% y-o-y, representing a double-digit increase for the second consecutive year. According to the newspaper, investments to promote digital transformation through digitization are expected to be made across all industries.

The same trend can be seen in the Regional Economic Reports published by the Bank of Japan in July and October 2020. The assessment of business fixed investment in this report showed that the investment was declining or had been relatively weak, and was not favorable. In reality, the BOJ's interview reports to companies show that some companies, especially those whose performance are expected to deteriorate due to a decrease in orders, have stopped making investments. On the other hand, in many regions, demands for 5G, automation, and labor saving as well as online shopping and telework continue, and plans for expansion of investment in digitization have been reported (Chart 3-12). Despite the large negative impact of COVID-19 on the economy as a whole, digitization, in which large demand is expected domestically, continues to attract attention and market growth is expected.

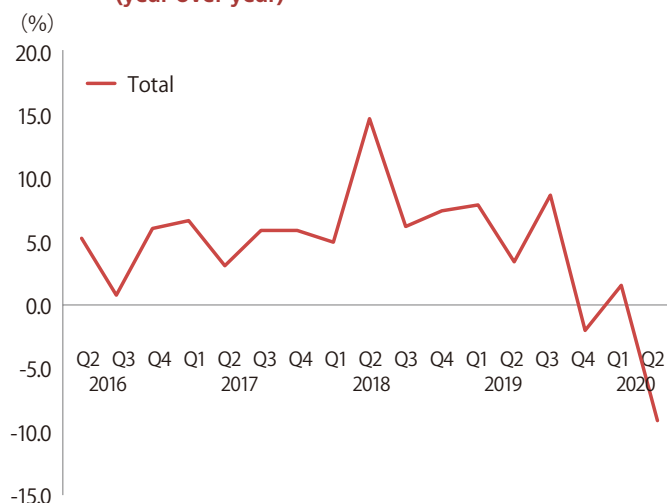
Chart 3-10: Business Conditions



Note: 1) % point is calculated by adding the percentage of companies answering their business condition is "rising" compared to the previous quarter minus that of those answering "falling." 2) Q4 of 2020 is an outlook.

Source: "Business Outlook Survey" (Cabinet Office/MoF)

Chart 3-11: Trends in Capital Investment per Company (year-over-year)



Note: Industries include all industries, except for insurance and finance.

Source: "Financial Statements Statistics of Corporations" (MoF)

Chart 3-12: Examples of Digital-Related Investments

Region	Industry Sector	Voices of Businesses
Hokkaido	Construction	To eliminate the chronic shortage of human resources, the company will continue to make ICT-related investments. In the future, it will actively make related investments toward the full-scale introduction of telework.
Tohoku	Retail	The company is reviewing its investment plans by reducing store facilities amid the COVID-19 crisis while strengthening digital-related investments in response to a growing demand for e-commerce.
Hokuriku	Textile	Because of the increasingly challenging business environment, it is the time to improve productivity through aggressive labor-saving investment, such as automation of inspection processes and introduction of information systems to indirect departments.
Kanto, Koshinetsu	Transportation machinery	Due to deteriorating earnings, we have halved the investment amount for this fiscal year from the initial plan. Nevertheless, since it is essential to develop products that respond to new technologies to stay competitive, we will continue to invest in R&D.
Tokai	Production machinery	We have streamlined capital investment projects to secure cash reserves and decided to reduce them compared to the previous year. However, we will maintain R&D expenditures on 5G-related and manufacturing machinery for utilizing AI as before.
Kinki	Chemicals, electrical machinery	We will continue to make capital investments and R&D investments in the areas with medium- to long-term growth prospects as planned.
Chugoku	Information and communication	As cloud services continue to expand over the medium to long term, the volume of data communications will continue to increase in the future, reflecting the spread of telework and other factors. Therefore, we are expanding our data centers.
Shikoku	Lodging	As a measure against the COVID-19 infections, we have introduced a system to measure congestions in restaurants and bathrooms using AI and provide the information to guests.
Kyushu, Okinawa	General-purpose machinery	Despite the uncertainty with the future, we do not plan to revise our capital spending plans at this time, given the continuing strong 5G-related demand.

Note: The above opinions include those from businesses positive with digital-related investments in each region. They may not represent an overview of capital investment sentiments in the region or the industry.

Source: "Regional Economic Report" (July and October 2020) (Bank of Japan)

■ Expected continuity of telework

COVID-19 has had various impacts on many businesses. In the midst of digitalization advancing in various forms in order to reduce the contact with other people, work from home attracted the attention in the world. Compared to other countries, teleworking is of particular interest in Japan. According to a survey conducted by PwC targeting CFOs in 23 countries and regions around the world, 88% of CFOs of Japanese companies responded that they would work to "Make remote work a permanent option for roles that allow it" and 68% would "Improve remote work experience" as tasks to be undertaken after on-site work is resumed (Chart 3-13). Compared to the global response rate, the above two response rates were high in Japan.

In order to prevent the spread of COVID-19, the Japanese government asked the citizens to avoid unnecessary or nonurgent

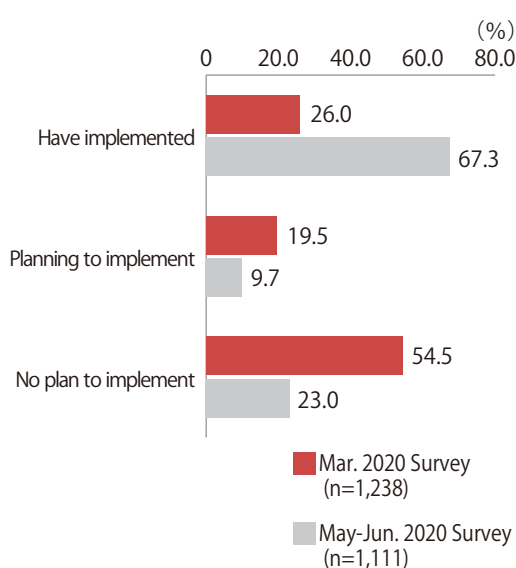
outings, and at the same time, it asked companies to reduce the rate of on-site workers by 70% by encouraging telework. According to a survey conducted by Tokyo Shoko Research, Ltd. from the end of June to early July 2020, of the approximately 15,000 companies that responded, 57.8% answered they had been implementing or had implemented work from home or remote work (the sum of 31.0% that had had been implementing and 26.8% that had implemented it since COVID-19 but have now stopped). According to the Tokyo Chamber of Commerce and Industry, only 26.0% of the companies conducted telework as of March 2020, but the response rate increased by more than 40% in the May to June survey to 67.3% (Chart 3-14). According to the survey, more than half of the companies that responded that they were "implementing" began telework after the government issued the state of emergency in April 2020.

Chart 3-13: Businesses that will be Undertaken After Work is Resumed at the Workplace



Source: "COVID-19 CFO Pulse" (Conducted between Jun. 1st - 11th) (PwC)

Chart 3-14: Implementation Rate of Telework



Source: "Emergency Questionnaire on the Implementation Status of Telework" (Tokyo Chamber of Commerce and Industry)

The effects of telework have been also recognized. According to the above survey by the Tokyo Chamber of Commerce and Industry, many of the companies reported "progress in work style reform" (50.1% of the total) and "review of business processes" (42.3% of the total) as the effects of telework implementation. These responses were ranked high, regardless of when the companies started telework.

Even after the termination of the state of emergency, the government calls on the use of telework to maintain the rate of on-site workers at about 70%. A survey conducted by the Japan Association of Corporate Executives from the end of May to the beginning of June 2020 revealed that many companies were aware of the importance of digitization through telework amid the demand for so-called "new lifestyles."

■ Issues in teleworking and the business development of foreign-affiliated companies

While continuing operation of telework is expected in the future, its sustainable operation entails challenges. Some issues have been pointed out by various questionnaire surveys (Chart 3-15). Besides the development of the basic infrastructure environment, such as the necessary equipment and network environment, internal communications, progress management of operations, and the handling of paper documents can be major issues that affect sustainability and internal productivity in the future as work in the office and telework are to be implemented in parallel.

Some foreign-affiliated companies are contributing to address these issues through their business development in Japan. Lenovo Japan, a Japanese subsidiary of Lenovo in China, which engages in ICT equipment and related services, provided telework support to domestic SMEs (with 300 or fewer employees) by providing free three-month rental of notebook PCs and free Microsoft Teams accounts for efficient internal communications and other activities in April 2020.

One of the issues related to telework implementation is progress management of operations and employees. According to a questionnaire survey conducted by the Persol Research Institute, work from home raises concerns about the business management of employees and the evaluation of them. Asana, which established its Japanese base in March 2019, attracts global attentions for its work management platform, Asana. Founded in the US, the company has been offering its platform since 2012 and have had Japanese clients from 2013, since when the number of clients in Japan has been increasing. According to the company representative, there is "more demand for work management" than ever before, following the introduction of telework due to COVID-19. Asana's contribution to the digital transformation and work style reform of companies in Japan is a prime example of foreign-affiliated companies that contribute to address social issues as well as improve productivity in the country.

DocuSign from the US, which provides an electronic signature service, is known for its service which enables companies to remotely carry out the seal, an often cited problem of remote work in the Japanese business custom. Dropbox Japan, a Japanese subsidiary of Dropbox in the US, which provides cloud services, also started providing electronic signature services to Japan in October 2020. As remote work expected to continue, business development of these foreign-affiliated companies is also expected to continue through solving the problem of remote work.

■ Search for new business models

COVID-19 brings about changes in various aspects of the economy and society. In response to COVID-19, the World Economic Forum has set the theme for 2021 as "Great Reset," and the Japanese government has expressed a society that has passed through COVID-19 as "New Normal." They predict that socioeconomic and economic trends from 2020 onward will bring different lifestyles and business forms than in the past.

Chart 3-15: Issues Related to Telework

Social issues	Outline
Improvement of infrastructure environment	According to a survey conducted by the Tokyo Chamber of Commerce and Industry, more than half of the 732 companies that introduced telework for employees faced challenges in "improving the network environment" (56.7% of the total) and "securing devices such as PCs and smartphones" (55.9%).
Internal communications	According to a survey conducted by the Tokyo Chamber of Commerce and Industry, 55.5% of the 732 companies that introduced telework cited "internal communications" as a telework issue. Also, according to a survey of 500 teleworkers conducted by Persol Research and Consulting in May to June 2020, 32.2% of respondents, the most frequent response, had communication concerns, saying that "non-face-to-face interactions make it difficult to understand other party's feelings."
Progress management of operations	According to a survey of 700 managers who have been managing teleworking staff before December 2019, 46.3% pointed out "occasionally feeling uneasy due to the difficulty of monitoring work progress." According to a survey of 500 teleworkers conducted in May to June 2020, the second-highest 31.4% had "concerns for fair evaluation from superiors."
Document check and seal-affixing	According to a survey by Adobe, of the 500 business persons who experienced telework, 64.2% of the respondents had to go to the office for document checks or affixing seals. According to a questionnaire survey conducted by the Tokyo Chamber of Commerce and Industry, 49.9% of the 732 companies that operated telework cited "affixing seals to documents" as an issue. In particular, the response rate was high among enterprises implementing telework before April 2020.
To ensure security	50.9% of the 732 companies surveyed by the Tokyo Chamber of Commerce and Industry and 50.5% of the 210 SMEs surveyed by the Osaka Chamber of Commerce and Industry cited security concerns as an issue.

Source: "Emergency Questionnaire on the Implementation Status of Telework" (June 2020) (Tokyo Chamber of Commerce and Industry), "Quantitative Survey on Uncertainty and Isolation in Telework" (March 2020) and "Third Survey on the Impact on Telework from the Measures against the New Corona Virus" (June 2020) (Persol Research and Consulting), "Survey Results on the Merits and Issues of Telework" (March 2020) (Adobe), "Emergency Questionnaire Survey on Telework in Small and Medium Enterprises" (June 2020) (Osaka Chamber of Commerce and Industry)."

In the changing economy and society, many domestic businesses are aiming to seek new business models. According to a questionnaire survey of global executives conducted annually by the US Conference Board since 1999, 58.7% of Japanese CEOs (n=92) responded that the most important long-term impacts and changes resulting from COVID-19 is to "Cause a rethink of our business model as customer preferences shift." Together with the response that collected second highest response rate, "Speed up the pace of transformation into a digitally driven organization" (54.4%), the response rate exceeded 50%. According to a survey on foreign-affiliated companies by JETRO, the largest number of companies responded that they would "seek new business areas" for their future business operations.

In Japan, collaboration and cooperation with other companies, such as open innovation, have been attracting attention as a method of searching for new business models. A variety of companies, primarily large enterprises, have been actively holding acceleration programs and pitch contests, aiming to collaborating with startups. The government is also focusing on promoting the creation of innovation, and has launched the Digital Transformation Promotion Team in JETRO to support the creation of new businesses through collaboration between foreign companies and Japanese companies. With these efforts made by both public and private sectors, further progress in business development through collaboration between foreign and Japanese companies in a new economy and society is expected.

② Changes among Consumers in Japan

■ Consumption declined sharply due to COVID-19

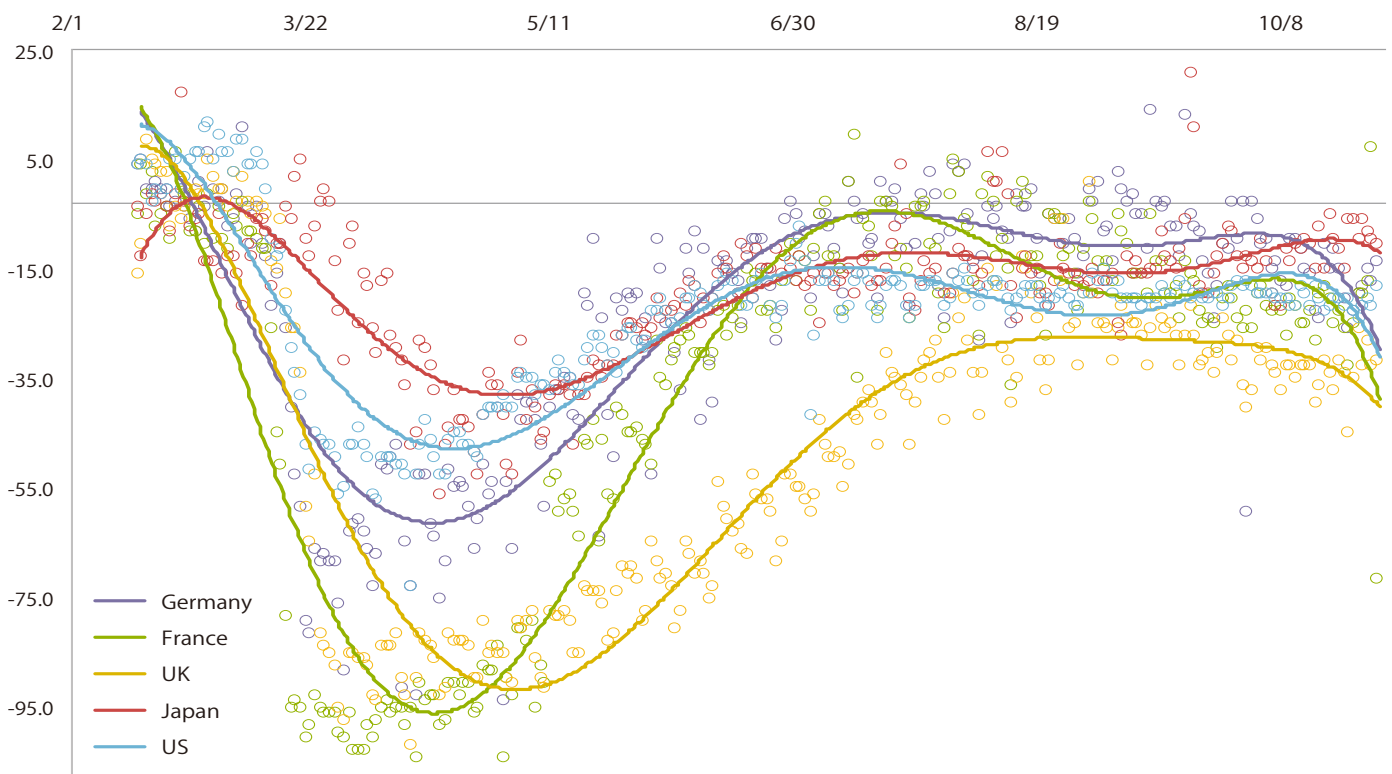
To prevent the outbreak of COVID-19, governments around the world adopted policies such as bans on outings and requests for self-restraint. As mentioned earlier, the Japanese government requested its citizens to refrain from going outside when the state of emergency was issued. According to the Google Mobility Report, there was a decline in the movement of people from the latter half of March to around May, when the spread of infections was observed in developed countries (Chart 3-16).

Even in Japan, where the spread of infections was relatively restrained, a decline in movement of people was observed, as was the case in other countries. In particular, from mid-April to mid-May, when the state of emergency was issued, there was little movement of people. According to a questionnaire survey conducted by the Boston Consulting Group (BCG) in April 2020, 82% of respondents said "I'm trying to avoid public spaces as much as possible due to the coronavirus" despite no penalties for going out in Japan. Movement of people within the country recovered to some extent by late June and has leveled off since then.

Concerns about COVID-19 have also led to concerns about the economic impact of infectious diseases. According to the above-mentioned BCG survey, 89% of Japanese respondents said, "There will be an economic recession due to the coronavirus," which is higher than the results of Western European countries, China, India, and other countries during the same period.

Chart 3-16: Trends in Movement of People at Retail and Recreational Facilities

(0=Median value between Jan.3rd - Feb. 6th 2020)



Note: The ○ indicates daily movement of people and the graph indicates the trend.
Source: "Google Mobility Report" (Google) (As of Nov. 5th 2020)

Japanese consumers' concerns about COVID-19 are also evident in domestic consumption trends. The Consumer Confidence Index, compiled by the Cabinet Office, shows a sharp decline from the previous month in March, when the number of the COVID-19 infections began to increase in Japan, and again in April, when the number of new infections had a more increase (Chart 3-17). The Consumer Confidence Index for April 2020 was 21.6, the lowest since comparable data was first recorded in June 1982.

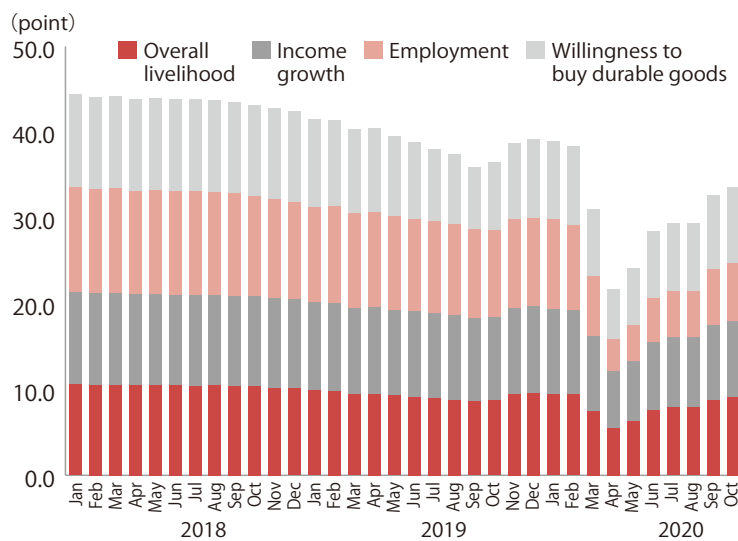
The Consumer Confidence Index is calculated by a simple average of four items: 1) overall livelihood, 2) income growth, 3) employment, and 4) willingness to buy durable goods. In April 2020, all four items were the lowest ever. In particular, in 1) overall livelihood and 2) income growth, the month-over-month rate declined 8.1 points and 8.5 points, respectively, the largest decline ever. In May and June, when there were few new infections nationwide, the index recovered, but in July, when the number of infections began to increase again, the recovery in the index slowed, and in August, the overall index declined compared to the previous month. Among the four items of the month, the indices declined from the previous month for three items other than willingness to buy durable goods. As Japan aims to have economic recovery, improving consumer motivation to support domestic demand will continue to be an important issue.

■ Increased domestic online spending

The expansion of the COVID-19 infections has led to an increase in the number of consumers refraining from going out, which has led to a sharp increase in online consumption of goods and services worldwide. According to a survey conducted by the Consumer Agency in July 2020 on the attitudes towards online services and eating out/having prepared meals at home, 78.2% of the respondents indicated that they performed online shopping in the last 1-2 months (Chart 3-18). By age group, the response rate exceeded 75% for people from 20s to 60s, and the rate for people in their 70s also exceeded 50%.

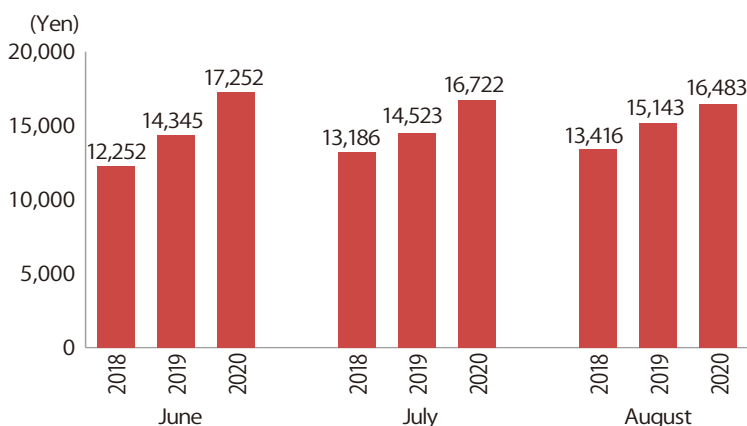
Consumption by households also shows an increase in spending online. The Survey of Household Economy conducted by the Ministry of Internal Affairs and Communications shows spending on the Internet was ¥17,252 in June 2020 (up 20.3% from the same month of the previous year), and ¥16,722 in July (up 15.1%) and ¥16,483 in August of the same year (up 8.8%). From April 2020, each month spending on the Internet was the highest for respective months after 2015, since when the data can be compared (Chart 3-19). Simple comparisons of amounts also show that June 2020 was the second largest month after December 2019, which was the highest since 2015.

Chart 3-17 Trends in the Consumer Confidence Index



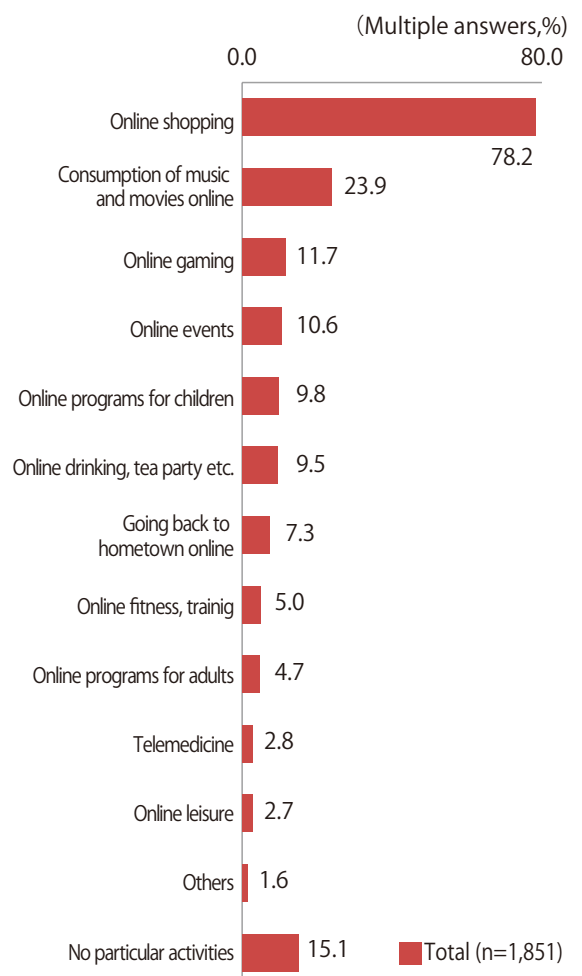
Source: "Consumer Confidence Survey" (Cabinet Office)

Chart 3-19: Trends in Internet-based Expenditures



Source: "Survey of Household Economy" (Ministry of Internal Affairs and Communications)

Chart 3-18: Consumer Online Activities



Source: "Survey on Attitudes towards Online Services and Eating out/Having Prepared Meals at Home" (Consumer Agency)

In August 2020, expenditures on food (12.8% of the total) and on home appliances (8.5%) were high by item (Chart 3-20). On the other hand, the amount of expenditure related to lodgings, including accommodation charges, fares, and travel packages, was ¥1,901 (11.5% of the total). While the share is relatively large among items, compared to the same month of the previous year, the amount decreased by ¥2,870 and the share decreased by 20.0% points, which made the expenditure the lowest for the item compared to the same month since 2015. The share of lodging-related expenditures was more than 30% of the monthly expenditures during the peak months, but fell sharply due to a drop in consumption in related industries. Similarly, ticket spending declined significantly due to the impact of the cancellation or postponement of large-scale events, and the share of ticket spending to the total online spending in August 2020 fell 2.9% points year-over-year to 1.7%.

Chart 3-20: Major Items of Internet-based Expenditures

Item	Expenditure (Yen)		Share (%)	
		YoY Change		YoY Change
Food	2,102	817	12.8	4.3
Home appliances	1,408	544	8.5	2.8
Women's clothings	814	199	4.9	0.9
Lodging	1,901	-2,870	11.5	-20.0
Tickets	273	-423	1.7	-2.9
Total	16,483	1,340	100.0	0.0

Note: "Lodging" includes those paid online and those paid in other methods.
Source: "Survey of Household Economy" (Ministry of Internal Affairs and Communications)

In considering the Japanese market after COVID-19, it is worth exploring whether the current high level of online consumption will be maintained. An analysis conducted by Watanabe and Yamamoto (2020) on the "JCB Consumption NOW" calculated by JCB and Nowcast based on credit card information compares the online and offline consumption data of January and April 2020, and outlines the factors of increase in online consumption. According to the analysis, the impact of COVID-19 on consumers online consumption is not an irreversible change, and when the spread of the virus is contained, the increase in online consumption may settle down. While COVID-19 has increased contactless consumer consumption, future changes in consumption channels continue to require close monitoring.

■ Increasing cashless payments

One of the changes seen in Japan's recent consumer behavior is the increase in the use of cashless payments. According to the Ministry of Economy, Trade and Industry (METI), in 2019, the share of cashless payments of the total payments in Japan was 26.8%, an increase of 2.7% points from the previous year (Chart 3-21). By category, credit cards accounted for 24.0%, followed by electronic money (1.9%). QR code payments, which were 0.05% in 2018, increased to 0.31% in 2019, but the share remains the smallest of the four items.

Concerns over the spread of COVID-19 are expanding the use of cashless payments that enable contactless payments. According to a questionnaire survey of cashless payment users conducted by the JCB, the number of respondents who said that online payments increased due to the COVID-19 crisis was 58.5% of the total (n=1000). In particular, 71.5% of the 20s (n=200) and 64.0% of the 30s (n=200) answered so. In addition, as many as 93.0% of the respondents said they would continue to use cashless payments in the future. The most common reasons for the answer were "because points (that can be spent at stores) are accumulated for cashless payment" (63.2% of the total number of people who want to use cashless (930 people) in the future), "because payment is speedy" (40.8%), and "because there are more stores that accept cashless payment" (39.9%). The top answers are related to the benefits and convenience as well as improvement of infrastructure realized after consumers utilizing cashless payment, suggesting the possibility that the use of cashless payments will continue to expand even after the containment of the virus.

Expanding the use of existing users may also affect consumers who have not used it until now. According to a survey released in March 2020 by the Payments Japan Association, among consumers who have positive attitudes towards cashless payment, there is a tendency that their acquaintances and friends are cashless payment users or that they feel cashless payment is prevalent in the public. According to the results of interviews on this survey, there are cases in which interest is heightened by the perception that use of cashless payments is popular around themselves.

The Japanese government also helps promote the use of cashless payments. The government aims to raise the share of cashless payments to around 40% by 2025 and to 80% in the future. To promote the use of cashless payments, between October 2019 and June 2020, the government implemented a project to return up to 5% of the use of cashless payments at registered stores to users. According to data from METI, the number of stores registered for the project reached around 1.2 million (as of June 11, 2020), well above the initial forecast of 0.5 million stores. In September 2020, the government launched the "My Number Point" project, which offers a 25% return of points (up to ¥5,000) for the use of cashless payments linked to My Number (individual, social security and tax number) card. The Ministry of Internal Affairs and Communications as well as other public entities expect the implementation of this project to further promote the use of cashless payments.

Chart 3-21: Trends in Domestic Cashless Payments

	2016	2017	2018	2019
Credit Card	18.0	19.2	21.9	24.0
Debit Card	0.3	0.4	0.4	0.6
E-money	1.7	1.7	1.8	1.9
QR Code	-	-	0.1	0.3
Total	20.0	21.3	24.1	26.8

Note: 1) Based upon the amount of money consumed by each tool. 2) No data is available for "QR Code" before 2017.
Source: Documents from METI

¹ According to the analysis, the increase in online consumption during the target period is largely attributable to further online consumption by consumers who had previously consumed online. Online consumption increased as these consumers shifted their offline spending to online. In contrast, although the use of online consumption by consumers who had not previously consumed online were also observed, the degree has been small. The research notes that the increase in online consumption by COVID-19 may not be an irreversible change due to the small size of the consumer base that has shifted from offline consumption to online consumption.
Tsutomu Watanabe & Yuki Omori, 2020. "Online Consumption During the COVID-19 Crisis: Evidence from Japan," CARF Working Paper Series-J-112, Center for Advanced Research in Finance, Faculty of Economics, University of Tokyo.

In the above-mentioned project that ended in June 2020, while the introduction of cashless payments at small-and medium-sized stores progressed, the amount of payments used varied depending on the scale of the business. As part of efforts to promote cashless payment, METI will hold study groups to improve the environment in order to overcome the impediments to cashless payments at these stores. The government also aims to review domestic transfer fees and system usage fees required for communication for credit cards.

COVID-19 triggered an increase in domestic use of online consumption and cashless payments, which had been expanding. Future digitization of consumption will enable the acquisition of consumer data more than conventional business-to-consumer (B2C) transactions. In the future, relevant industries are expected to expand, such as analytical tools for consumer data as well as consulting services for acquiring customers and expanding the market through the effective use of the data.

Initiatives of Public-Private Partnerships by Local Governments in the Time of COVID-19

COLUMN

With COVID-19 having a major impact across Japan, some local governments have tried to tackle new social issues by collaborating with startups (Chart). Since 2018, Kobe City has been developing Urban Innovation Kobe aimed at resolving local issues through cooperation between city officials and startups. In April 2020, as part of this project, the city began recruiting products and services that can solve the issues of COVID-19 in citizens' lives and work of the local government. The project is characterized by the speed of screening. The application process was completed online, with the primary examination scheduled to take two business days from application and the secondary examination scheduled to take two weeks from application. In addition, coordination with the relevant departments of the city for demonstrations was to take one week in the shortest, which enabled each project to move quickly from their application to demonstration or implementation. During the period from April 20, when the application opened, to August, a variety of companies were selected, such as a company engaged in the provision of daily life information portals, one providing funding support for restaurants, and one providing support for home learning for students during the school closure period.

Urban Innovation Kobe launched by Kobe City changed its name to Urban Innovation Japan in 2019, and not only Kobe City but also other local governments throughout Japan are recruiting businesses to solve the social issues in their respective communities. In 2020, cities such as Toyohashi City, Nagoya City in Aichi Prefecture, Fujieda City in Shizuoka Prefecture listed local issues and are soliciting business proposals from startups.

Some local governments have listed issues related to COVID-19, and there are high hopes that problem solving through the cooperation between local administrations and startups in each region will progress.

From 2016, Fukuoka City has hosted the Fukuoka City Full Support Project for Demonstration Experiments, which solicits demonstration projects that help solve social issues and improve the quality of life of its citizens. This project in 2020 was held on the theme of "Beyond Coronavirus," and seven companies were adopted in July 2020. Among foreign-affiliated companies, Gogolook, which was established in Taiwan in 2012 and subsequently established a base in Japan, has been selected. In the Fukuoka City project, the company will be building an information infrastructure to prevent telephone fraud and misinformation related to COVID-19, starting with demonstration experiments in the city.

Tokyo has held pitch-events of "Upgrade with Tokyo" since 2019 with the aim of collaborating with startups to solve problems raised in the operations of the Tokyo Metropolitan government. The fifth event, held in August 2020, featured pitches from five companies under the theme of the work style reforms amid a new daily life in light of the impact of COVID-19. At the event, a company that uses AI-based advanced water treatment technology to strengthen and promote public health through hand-washing, regardless of whether they are indoor or outdoor, or whether they have water supply systems, was selected. The company will proceed with negotiations with Tokyo Metropolitan government to push the project forward.

Chart: New COVID-19-related Public-Private Partnership Project by Local Government

Region	Program	Outline
Kobe City	Urban Innovation Kobe	In light of the impact of COVID-19, the city invites technologies and proposals for preventing the spread of infections and resolving new issues in citizen's lives and civil service operations. The city opened the program for proposals from April to August of 2020. The city government completed the first review in around two business days after the application and the second within two weeks to facilitate prompt screening. The city government coordinates relevant sections for service development, provides cooperation in conducting demonstration experiments, subsidizes service development (up to ¥500,000 per team), and early implementation support for successful demonstration experiments.
Fukuoka City	Fukuoka Demonstration Experiment Full-support Project	Together with related organizations, the city conducts the "Fukuoka Demonstration Experiment Full-support Project" to invite demonstration projects that use advanced technologies to solve social issues and improve citizens' quality of life. In 2020, under the theme of "Beyond Coronavirus," seven, including a Taiwanese startup Gogolook, out of 35 proposals were selected for projects aimed at resolving social issues posed by the infection. The selected companies will receive support such as providing a location for demonstration projects, public relations support, provision of administrative data, consideration of necessary deregulation, and grants.
Tokyo	Upgrade with Tokyo	The Tokyo Metropolitan Government holds "Upgrade with Tokyo" to host pitch events for startups with innovative products or services to address issues for the administration and to create venues for these startups to network with administrative agencies, VCs, and companies. The fifth session, held in August 2020, invited startups on the theme of "Aiming to Establish a 'New Normal' in a Society with COVID-19" - Metropolitan Government Work Style Reform 2." At the event, five startups made pitches. A company aiming to strengthen public health through water treatment technology using AI was selected.

Source: Information including press releases from each local government

(3) Post-COVID-19 Japanese Market

■ Emerging challenges and accelerated changes

COVID-19 has affected all aspects, both domestic and foreign. Although Japan is suffering from a relatively small number of infections compared to some other countries, it has not been damage-free. Despite its adverse effects such as health damage and economic downturn, the current economic and social crisis has some positive side-effects of revealing potential changes and issues and accelerating to find solutions to them.

In Japan, many companies have introduced telework, which had been sluggish. Even after the government lifted its request for outing self-restraint, many companies are developing a flexible work environment by maintaining systems such as teleworking. Reviews of management of work processes and progress, which are indispensable for the introduction of telework, are expected to contribute to solving the longstanding issues of work style reform and low labor productivity. Moreover, domestic companies' search for new business models, eyeing the new economy and society, could strengthen competitiveness through cooperation and collaboration with other companies.

One way to reduce contact with others has been the digitization of consumption, such as increasing online spending and cashless payments. In particular, the impact of COVID-19 is expected to attract attention to the promotion of cashless payments, which had been one of the government's objectives, and the medium- to long-term development of relevant industries.

The impact of the COVID-19 crisis on the government is not insubstantial either. To cope with the blow on the economy, the Japanese government has formulated the most massive supplementary budgets ever, not only for enhancing the medical system, but also for supporting business and employment continuity, and strengthening domestic businesses. On the other hand, the administrative procedure issues, which had been regarded as a problem for some time, have become increasingly apparent. Former Prime Minister Shinzo Abe instructed central government ministries and agencies to review the system. Prime Minister Suga intends to make more efforts to streamline administrative procedures than ever before, such as aiming to establish a new digital agency.

The digital transformation of businesses, consumers, and administrative organizations, and the search for and adoption of new models are not merely temporary shifts in response to the virus. Instead, they may lead to a medium- to long-term economic, social progress. It will continue to require close monitoring.

According to a questionnaire survey of foreign-affiliated companies in Japan conducted by JETRO, less than 10% of all companies plan to shrink or withdraw from the Japanese market due to COVID-19. Many companies intend to continue or expand their business in Japan. As the attractiveness of doing business in Japan, 67.4% of enterprises continuing business in Japan cited "current market size" and 64.7% answered "potential growth of relevant industries" (refer Chapter 2(3) ② "Latest Trends of Foreign-affiliated Companies").

Because of the world's third-largest GDP after the US and China,

and a high per capita GDP, Japan is often regarded as a mature market. On the other hand, some industrial sectors have higher growth potentials than in other countries. Some of the examples of the markets with growth potentials are telework, online consumption and cashless payments. Beyond these markets, the impacts of COVID-19 have shed light on relatively new markets, such as online education or telemedicine. In addition, in the process of economic recovery in the time of post-COVID-19, the renewable energy industries, including decarbonization, will remain as an important industrial sector.

Amid the COVID-19 crisis, domestic businesses, consumers, and administrations have been forced to quickly adopt to changes. For foreign and foreign-affiliated companies, the current changes in the Japanese society could provide opportunities for business development. Therefore, it is of utmost importance to have adequate understandings of the changes the society has been going through. Entries of foreign companies with new technologies and/or services and their business development in the Japanese market are expected to accelerate the digitalization and the improvement in the efficiency of the Japanese economy and society, thereby generating further growth of the country.