

28 May 2020 (No. of pages: 12)

Japanese report: 22 May 2020

Japan's Economy: Monthly Outlook (May 2020)

Analyzing *Corona Disaster* using input-output table: comprehensive analysis of data on economic impact, and outlook for future

Economic Research Dept.
Shunsuke Kobayashi
Yutaro Suzuki

Summary

- A little light has begun to shine on the future of Japan's economy with the partial lifting of stay-at-home orders due to the slowing of the pace of increase in COVID-19 infections. However, recovery is likely to be gradual. Social distancing will continue to be a requirement, and precautions will continue to be taken due to the possibility of a second and even third wave of infections. We will have to assume that the level of economic activity will remain lower than it was before the COVID-19 pandemic began, and that changes in industrial structure will continue.
- Looking at economic statistics in March, which provide useful material for grasping the extent of the decline and its fundamental characteristics, we see that household consumption recorded a decline of around 3%, while corporate activity declined by around 5%. Meanwhile, looking in more detail we find that commodities associated with going out performed poorly, while those consumed at home remained firm. Also notable was the fact that businesses located in the city center did poorly, while those in local areas were favorable. The same can be seen in high frequency data collected in April and beyond.
- Of course, this reveals only the primary effects of the *Corona Disaster*. When these effects continue into the midterm, they multiply, creating a ripple effect which hits related industries, employment and income. In this report, we use an input-output table to provide a comprehensive estimate of influence on the economy, including secondary effects.
- If the change in the level of economic activity as of March continues into the long-term, GDP in annual terms is estimated to lose 29.5 trillion yen (-5.4%), while employment is estimated to decline by -2.91 million persons (-4.2%). Looking at performance by industry, the impact is especially notable in personal services, transport & postal activities, commerce, transport equipment, business services, food & beverages, production machinery, and business oriented machinery. On the other hand, demand is expected to grow for electronic parts, electrical machinery, and medical, healthcare & welfare.

A little light shines on Japan's economy as hope arises for bottoming out by end of May

Japan's economy has experienced an unavoidable contraction since February due to the practice of voluntary restraint of economic activity for the purpose of preventing the spread of COVID-19 infections. However, the rate of increase in new infections has fallen off since entering the month of May, leading to a partial lifting of stay-at-home orders, and hopes that the economy will soon bottom out at least in the short-term.

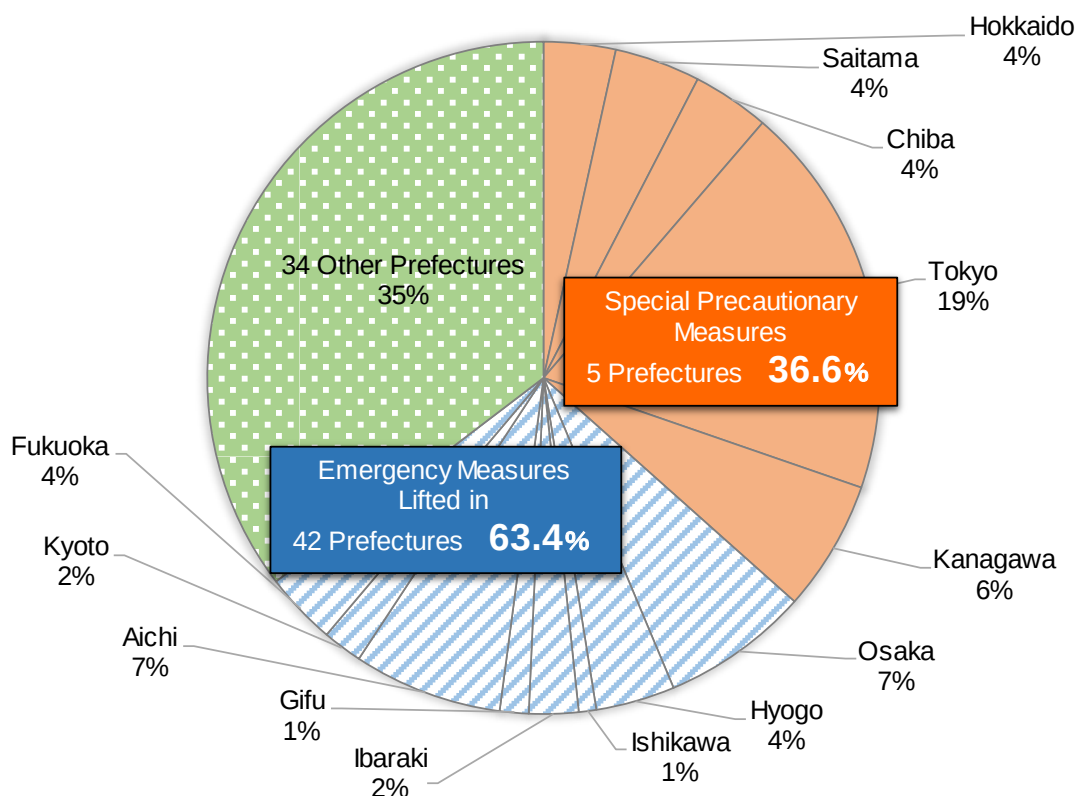
Let's take a look now at a simple time-series. Until February, the *Corona Disaster* was largely a problem for business in China as far as Japan's economy was concerned. The decision to close the city of Wuhan on January 23, followed by stay-at-home orders nationwide in China, brought downward pressure on Japan's economy mostly via the influence on trade. Then, affecting inbound tourism in Japan, entry into the country from Hubei Province was restricted on February 1, followed by restrictions on entering the country from Daegu, South Korea on the 27th. On March 9 the decision was made to strengthen restrictions on entering the country from anywhere in China or South Korea. This led to a decline in the number of foreign tourists visiting Japan.

However, the biggest impact on Japan's economy overall was the request that domestic business practice voluntary restraint in economic activities. On February 26, Prime Minister Abe declared that restraint should be practiced as concerns major events. Then on February 27, schools were closed and the public mood shifted increasingly in line with the government's recommendations. On March 25 Tokyo Metropolitan Government led the nation in urging its citizens to avoid going out to crowded places on the weekend, and then a declaration of emergency was delivered on April 7 requesting a restraint of activities affecting seven key prefectures (Tokyo, Kanagawa, Saitama, Chiba, Osaka, Hyogo, and Fukuoka). This was extended nationwide on April 16. Around the same time, the US and many of the European countries implemented a lockdown, which resulted in a drastic deterioration of both domestic and overseas demand directly impacting Japan's economy during the months of March and April.

Now the tide has begun to turn. In response to the slowing pace of increase in new infections, the emergency measures were lifted for in 39 prefectures. Measures were lifted for three more prefectures on May 21. Special precautionary measures remained in place in five prefectures (Tokyo, Kanagawa, Saitama, Chiba, and Hokkaido), and it has been suggested that emergency measures will be lifted in those prefectures as well, depending on whether infections have been brought under control. Chart 1 shows GDP figures for the 42 prefectures where emergency measures have been lifted. GDP in these prefectures accounts for 63.4% of Japan's overall GDP. Lockdown measures in the US and Europe, mentioned earlier, are also showing signs of being gradually removed.

GDP Share by Prefecture

Chart 1



Source: Cabinet Office; compiled by DIR

V-Shaped Recovery not Likely, Risk of 2nd and 3rd Waves Remains

Of course, the latest developments mean only that the deterioration of the economy has halted. It does not mean that we can expect a V-shaped recovery. Even after the lifting of emergency measures Japan's citizens will be expected to follow the government's guidelines for the "new post-corona lifestyle." This new measure strongly urges continued awareness of social distancing. Hence it is possible that most of the industries which were hardest hit by the *Corona Disaster* will continue to experience limitations in their business activities.

Meanwhile, there is also movement toward lifting lockdown measures in countries which are major trading partners of Japan, and this is good news for the economy. However, it will still take quite a bit of time for demand to bottom out for one of Japan's major exports – capital goods, since factory operating rates are still low.

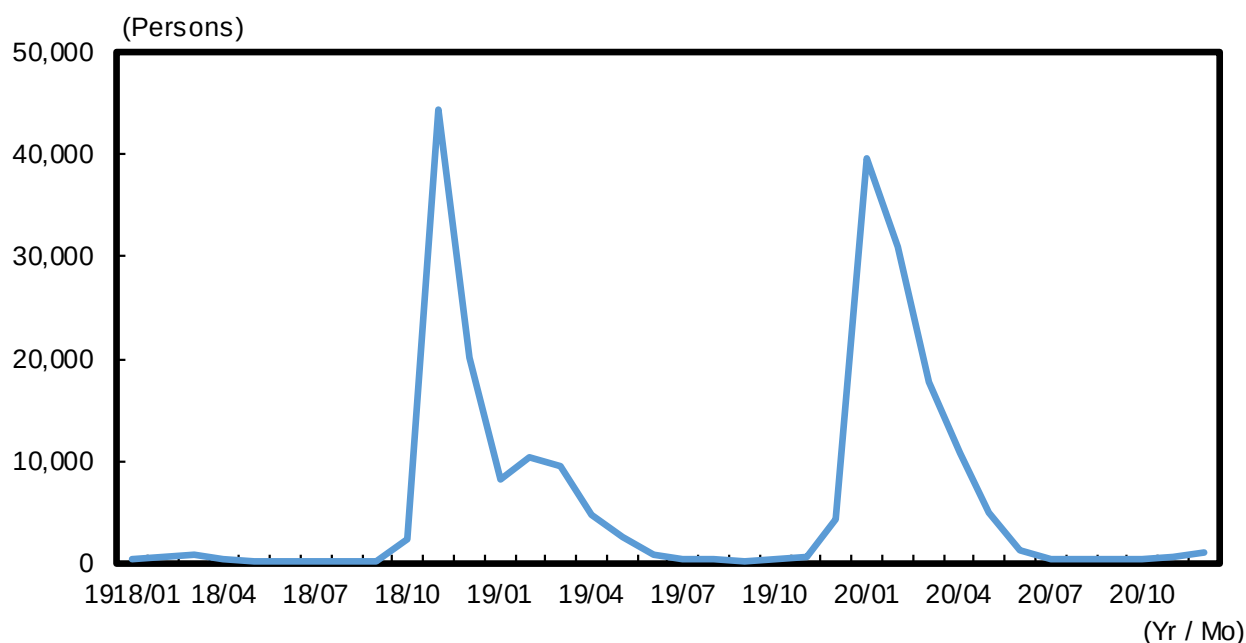
Another factor is that precautions will continue to be taken due to the possibility of a second and even third wave of infections. The basic reproduction number has fallen below 1 in most parts of Japan, and this is primarily due to voluntary restraint measures having held down the number. There is still danger that the virus could begin to spread again after measures have been lifted. According to WHO, a resurgence of COVID-19 infections can easily occur if the basic reproduction number is allowed to reach around 2.5 and nothing is done about it.

Chart 2 presents a comparison with cases of the Spanish flu in Japan. The possibility that a new mutation of the virus could arrive from overseas and run rampant during the next peak season (fall and winter) cannot be ruled out. Along these lines, it is worrisome that the Novel Coronavirus is still spreading rapidly in many parts of the world, including the southern hemisphere.

In light of the above, there is much skepticism regarding predictions that Japan's economy will bottom out after the end of May. On the other hand, it is also highly possible that recovery will be gradual. In addition, there will also likely be skepticism regarding the sustainability of such a recovery. As was pointed out in our previous month's report ([“Japan's Economy: Monthly Outlook \(April 2020\): Industrial implications of an era with COVID-19,”](#) by Shunsuke Kobayashi and Yutaro Suzuki), we will have to assume that the level of economic activity will remain at a lower level than it was before the COVID-19 pandemic began, and that changes in industrial structure will continue.

Number of Fatalities in Japan due to Spanish Flu

Chart 2



Source: Tokyo Metropolitan Institute of Public Health; compiled by DIR.

Economic impact of an era with COVID-19: Comprehensive interpretation of hard data

How low will the level of economic activity fall, and what kind of changes in industrial structure will occur? Various news broadcasts and research organizations have come up with their own estimates, including some that were merely wild guesses. Random guessing tended to occur where there was no hard data available on which to base such a conclusion. As of this point most of the important economic statistics have come in at least as far as the month of March. Especially notable as a factor which most have assumed will be highly influenced by the current situation is household consumption. The Family Income and Expenditure Survey and the Current Survey of Commerce are considered to have influence on household activity, while the Indices of Industrial Production and the Indices of Tertiary Industry Activity are useful in getting a grasp of corporate activity.

First we take a look at household consumption, which is given a comprehensive analysis in Chart 3. Consumption was found to have declined on both of these surveys in comparison to January before the *Corona Disaster* hit – it was -2.2% on the Family Income and Expenditure Survey and recorded -3.3% on the Current Survey of Commerce. Looking at results by component, we can conclude from the findings of the Family Income and Expenditure Survey that the influence of stay-at-home orders was especially notable. Components such as eating out, travel, entertainment, and apparel suffered declines, while telecommunications fees and foods & ingredients for eating at home experienced growth. The same components showed similar results on the Current Survey of Commerce, while at the same time, businesses located in the city center, including department stores and convenience stores, exhibited poor

performance, while relatively speaking, businesses located in local areas, including supermarkets and home centers were notably favorable.

Influence of Corona Disaster on Consumption by Component

Chart 3

Family Income and Expenditure Survey		Current Survey of Commerce	
Overall Amount of Decline in March in Comparison to January	-2.2%	Overall Amount of Decline in March in Comparison to January	-3.3%
20 Worst Performing Items	Contribution Rate (%pt)	20 Worst Performing Items	Contribution Rate (%pt)
General Eating Out	-1.48	Departmentstores, Food and Beverages	-0.38
Package Tour Fees	-0.94	Departmentstores, Others	-0.32
Gratuities	-0.43	Departmentstores, Women's and Children's Clothes	-0.30
Train Fare	-0.43	Convenience stores, Fast foods & Dailyfoods	-0.22
Equipment & Materials	-0.41	Departmentstores, Accessories	-0.19
Domestic College Expenses	-0.40	Convenience stores, Processed Foods	-0.11
Other Cultural-Entertainment Expenses	-0.39	Large-scale speciality retailers for home electric appliances, Information appliances	-0.10
Admission, Spectator, and Game Fees	-0.35	Convenience stores, Sales of Services	-0.10
Personal Computers	-0.34	Convenience stores, Non-Foods	-0.10
Accommodation Fees	-0.33	Departmentstores, Men's Clothes	-0.08
Women's Clothing	-0.28	Supermarkets, Women's and Children's Clothes	-0.08
Monthly Allowance Sent to Children	-0.22	Drugstore, Beauty care (cosmetic products and goods)	-0.06
Beauty Salon Expenses	-0.20	Drugstore, Health care (sanitary goods), nursing care, and baby products	-0.05
Monthly Tuition	-0.19	Departmentstores, Restaurants and Café	-0.05
Medical Fees	-0.17	Supermarkets, Others	-0.05
Allowance for Head of Household	-0.15	Drugstore, Over the counter medical products	-0.04
Airfare	-0.14	Supermarkets, Men's Clothes	-0.03
Vocational Training	-0.13	Large-scale speciality retailers for home electric appliances, Cameras	-0.03
Bags, Brief Cases	-0.12	Departmentstores, Household Equipment	-0.03
Accessories	-0.10	Large-scale speciality retailers for home electric appliances, Others	-0.03
Top 10 Growth Items	Contribution Rate (%pt)	Top 10 Growth Items	Contribution Rate (%pt)
Purchase of Automobiles, etc.	0.57	Supermarkets, Food and Beverages	0.63
Mobile Phone Charges	0.51	Drugstore, Food	0.16
Other Non-Whole Life Insurance	0.38	Drugstore, Household utensils, daily necessities, pet products	0.11
Fresh Meat	0.31	Home improvement stores, Household utensils and daily necessities	0.06
Spices, Seasonings	0.18	Supermarkets, Household Equipment	0.02
Water & Sewage Charges	0.18	Home improvement stores, D.I.Y. tools and materials	0.02
Private Sector Rent	0.17	Home improvement stores, Gardening and exteriors	0.02
Noodles	0.16	Home improvement stores, Electric appliances	0.02
Funerals	0.15	Home improvement stores, Others	0.01
Fresh Produce	0.15	Home improvement stores, Pet and pet products	0.01

Source: Ministry of Internal Affairs and Communications, Ministry of Economy, Trade and Industry; compiled by DIR.

Next we take a look at the corporate sector as shown in Chart 4. Industrial Shipments suffered a decline of -4.8%, while the Indices of Tertiary Industry Activity was down by -4.9%. During a normal recession the Indices of Tertiary Industry Activity tends to maintain a relatively steady undertone, but in the current situation it is showing the same impact as other indices or even worse. Here is where we are given a glimpse of the special characteristics of the *Corona Disaster*.

Looking in more detail at the content, in Industrial Shipments, which indicate the general condition of the manufacturing industry, the decline in shipments of goods associated with passenger vehicles is especially notable¹. Sales activities of passenger vehicles stopped completely due to the curtailing of the

¹ Automobile purchases exhibited growth on the Family Income and Expenditure Survey. This is thought to be due to the sampling bias on that survey.

usual vacation activities during the long holiday in domestic Japan, and lockdowns occurring in major export destinations. On the other hand, shipments of items used at home, such as PCs and LCD panels used in televisions and other devices, exhibited growth. Looking at the Indices of Tertiary Industry Activity, which indicates the condition of the services industry, major declines were recorded by industries associated with leisure activities, including eating out, travel, and accommodations. This is consistent with the findings of the Family Income and Expenditure Survey and the Current Survey of Commerce. On the other hand, finance, software, telecommunications, food & beverages, welfare and medical services performed favorably.

Influence of Corona Disaster on Corporate Activity

Chart 4

Industrial Shipments		Indices of Tertiary Industry Activity	
Overall Amount of Decline in March in Comparison to January	-4.8%	Overall Amount of Decline in March in Comparison to January	-4.9%
20 Worst Performing Items	Contribution Rate (%pt)	20 Worst Performing Items	Contribution Rate (%pt)
Large passenger cars	-0.89	Eating and Drinking Places, Take Out and Delivery Services	-1.05
Drive, transmission and control parts	-0.20	Railway Transport	-0.95
Flat-panel display products machinery	-0.19	Road Passenger Transport	-0.50
Jet fuel	-0.14	Accommodations	-0.49
Interchangeable lenses for cameras	-0.12	Laundry, Beauty and Bath Services	-0.35
Engines for motor vehicles	-0.12	Travel Agency	-0.28
Semiconductor products machinery	-0.09	Retail Trade (Dry Goods, Apparel and Apparel Accessories)	-0.26
Machining centers	-0.09	Amusement Parks and Theme Parks	-0.23
Chassis and body parts	-0.08	Services Incidental to Transport	-0.18
Notebook computers	-0.08	Sports Facilities	-0.14
Steam turbines for industry	-0.08	Video Picture, Sound Information, Character Information Production & Distribution	-0.14
Large trucks	-0.08	Retail Trade, General Merchandise	-0.14
Planography printing (offset printing)	-0.07	Pachinko Parlors	-0.12
Desktop computers	-0.07	Air Transport	-0.11
Cosmetic products such as emulsion and lotion	-0.07	Professional Sports Performances (Professional Sports Companies)	-0.09
Printing machinery	-0.07	Employment and Worker Dispatching Services	-0.08
Internal combustion engines for industry	-0.06	Other Retail Trade	-0.07
Compressors	-0.06	Wholesale Trade (Food and Beverages)	-0.06
Terminal equipment	-0.06	Bicycle, Horse, Motorcar and Motorboat Race Track Operations and Companies	-0.06
Gasoline	-0.05	Ceremonial Occasions	-0.06
Top 10 Growth Items	Contribution Rate (%pt)	Top 10 Growth Items	Contribution Rate (%pt)
Active matrix LCDs (Liquid Crystal Devices) Middle and small	0.44	Financial Products Transaction and Futures Commodity Transaction Dealers	0.37
Water tube boilers	0.25	Computer Programming and Other Software Services	0.11
Turbine generators for general use	0.23	Retail Trade (Food and Beverages)	0.10
Parts and accessories of boilers	0.15	Life Insurance Institutions	0.08
Small sized sealed lithium ion rechargeable batteries	0.12	Social welfare	0.07
Heavy fuel oil	0.10	Communications	0.06
Small passenger cars	0.07	Banking and Financial Institutions for Cooperative Organizations	0.05
Semi-finished steel	0.07	Production, Transmission and Distribution of Electricity	0.04
Network connection equipment	0.06	Pet Clinic	0.04
Conveyors	0.06	Medical and Other Health Services	0.02

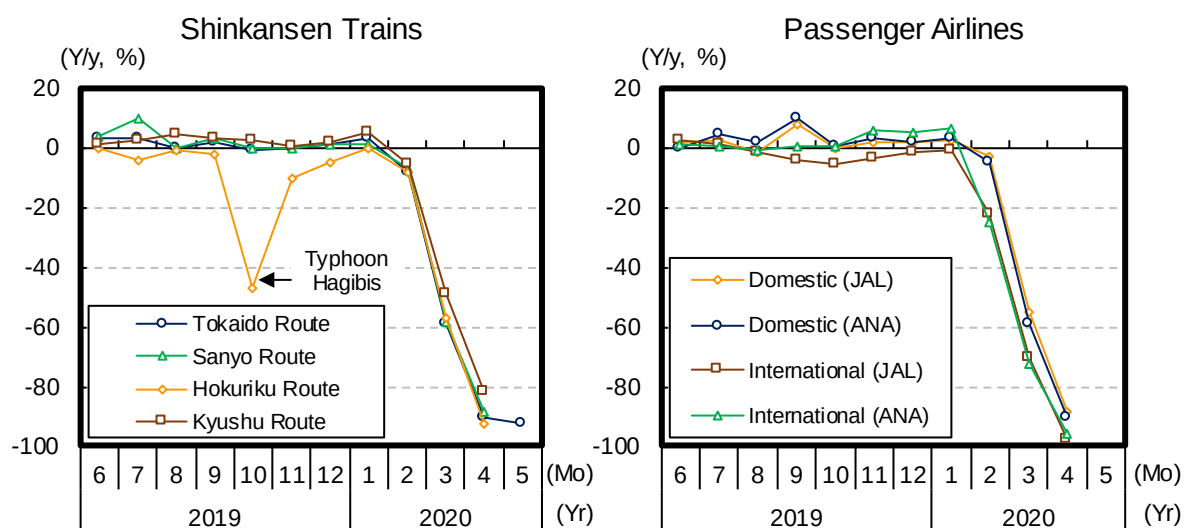
Source: Ministry of Economy, Trade and Industry; Compiled by DIR.

Of course, this is only an indication of performance as of March, and hence does not show the entire picture. Restrictions on activity were both stricter and more broad-ranging in April and May, hence it is not difficult to imagine the extent to which influence must have increased. When we look at data which is collected frequently, we see that most components and industries impacted in April recorded twice the impact during the month of March (Chart 5 & 6).

However, at the same time there is an interesting fact that draws our attention. That is the tendency for the question of good or bad performance to depend on the component and the industry continuing into April. And as was mentioned earlier, beginning in May and beyond, self-restraint and lockdown measures are being removed in stages both in Japan and overseas, hence we can consider, at least temporarily, April as the bottom, with economic activity showing some prospects for recovery. Considering these factors, there is little room for doubt that March performance values are extremely useful in predicting the level of economic activity in the midterm, as well as good and bad performance by component and industry.

Current Condition of Consumption of Services as Seen in High-Frequency Data

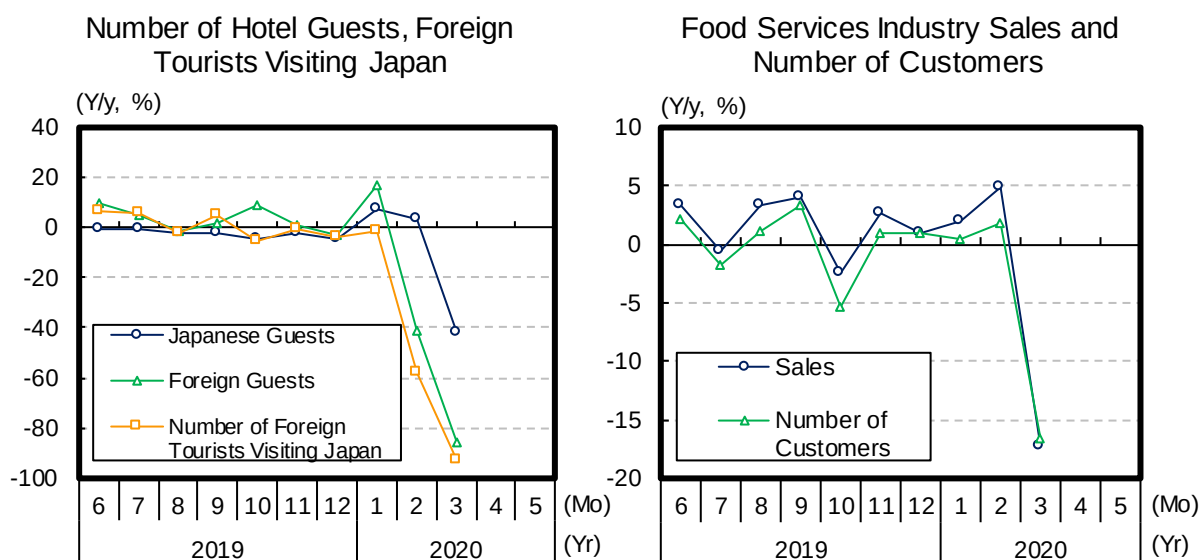
Chart 5



Source: JR Central, JR West Japan, JR Kyushu, JAL, ANA; compiled by DIR.

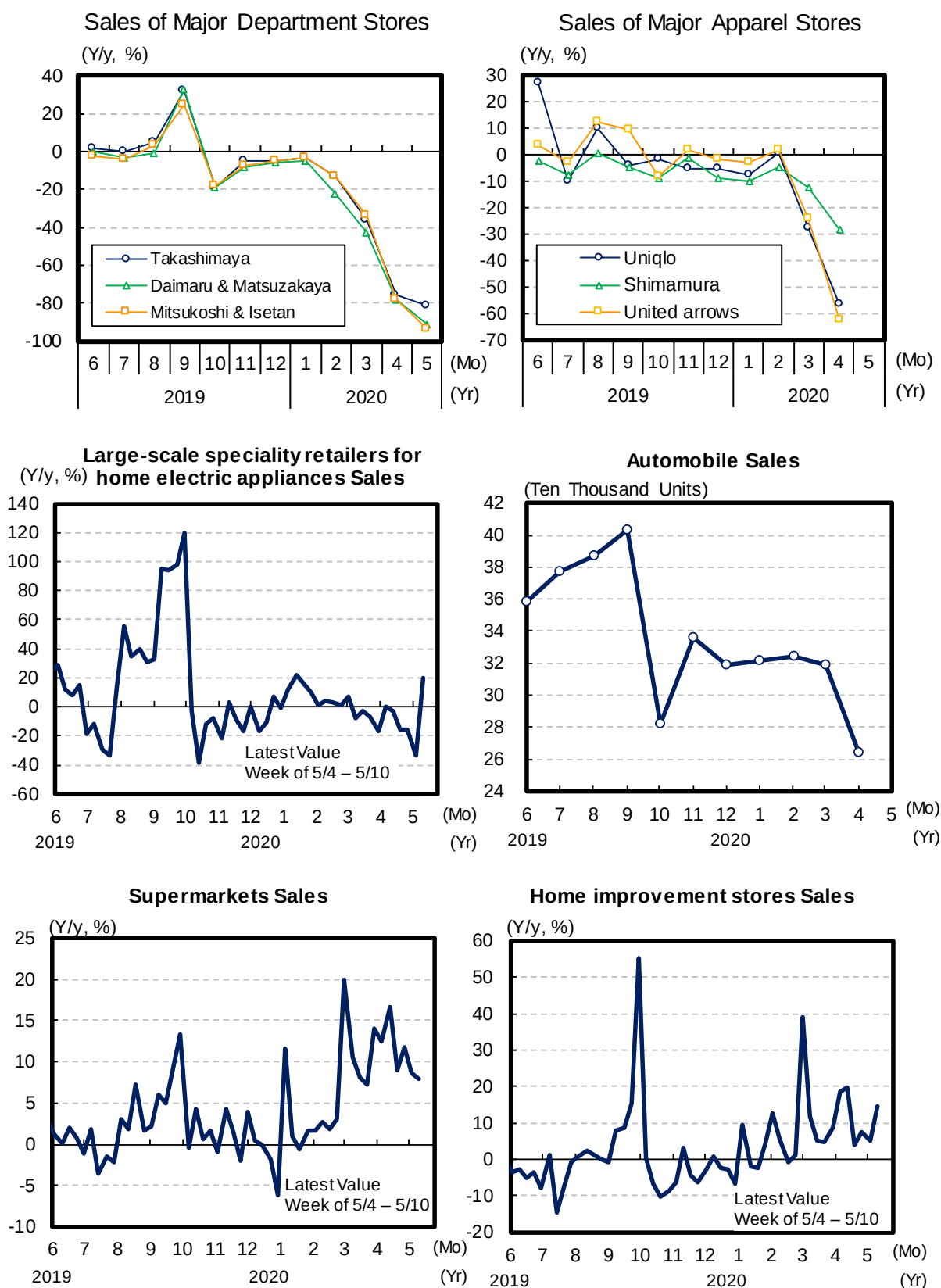
Notes: 1) May figures for the Tokaido Shinkansen line runs through the 14th.

2) Figures for JAL and ANA include group companies they are associated with.



Source: Japan Tourism Agency, Japan National Tourism Organization (JNTO), Japan Foodservice Association; compiled by DIR.

Note: Number of hotel guests based on number of days of stay.



Source: corporate data, Japan Automobile Dealers Association, Japan Mini Vehicles Association, Ministry of Economy, Trade and Industry; compiled by DIR.

Note: 1) Department stores: based on existing stores. May figures run through the 15th for Takashimaya and Mitsukoshi-Isetan, and through the 17th for Daimaru-Matsuzakaya.

2) Apparel: based on existing stores. Figures for Uniqlo and United Arrows include online sales. As for Shimamura, compilation of monthly figures runs from the 21st of the previous month to the 20th of the current month.

3) METI weekly data from POS retail sales index. Excludes consumption tax. Seasonal adjustment by DIR.

Outlook for economic impact including the multiplier effect: analysis using input-output table

Of course, the issues discussed in the previous section are only the primary effects of the *Corona Disaster*. If these effects continue into the midterm, they will multiply, creating a ripple effect which will hit related industries, employment and income. In this section, we use an input-output table to provide a comprehensive estimate of influence on the economy, including secondary effects.

The results are shown in Chart 7. As for primary effects, we use March performance as was discussed earlier in this report (both primary and secondary effects have the same changes in gross value-added amounts). Figures used assume that declines as shown in the Industrial Shipments index and the Indices of Tertiary Industry Activity as of March continue over the long-term². Using these figures we estimated influence on secondary effects and employment based on the input-output table. As for overall influence in annual terms, primary effects result in -18.7 trillion yen (-3.4%), while secondary effects are at -10.8 trillion yen (-2.0%), totaling 29.5 trillion yen (-5.4%) with employment at -2.91 million persons (-4.2%).

Looking at results by industry, the areas with the greatest amount in declines are personal services, transport & postal activities, commerce, transport equipment, business services, and food & beverages, while added to this considering rate of decline are production machinery, and business oriented machinery. On the other hand, demand is expected to grow for electronic parts, electrical machinery, and medical, healthcare & welfare. Areas where declines in employment are also a concern include the same industries. On the other hand, demand is expected to grow for electronic parts, electrical machinery, and medical, healthcare & welfare.

² These two economic indices cover approximately 80% of GDP (such as the public sector and construction are not included).

Simulation of Comprehensive Effects of Corona Disaster Using Input-Output Table

Chart 7

	Change in Gross Value-Added Amount (¥100 mil)			Change in Gross Value-Added Amount (%)			Effect on Employment (10,000 Persons)	Rate of Change in Employment (%)
	Primary Effects	Secondary Effects	Total	Primary Effects	Secondary Effects	Total		
Mining	41	-165	-124	0.9	-3.7	-2.8	0.0	0.9
Beverages and Foods	-3,304	-8,429	-11,733	-2.3	-5.9	-8.2	-5.0	-3.2
Textile products	54	-410	-356	0.4	-2.8	-2.5	0.1	0.2
Pulp, paper and wooden products	-1,054	-3,001	-4,055	-2.5	-7.0	-9.5	-1.2	-2.1
Miscellaneous manufacturing products	-3,502	-929	-4,431	-8.2	-2.2	-10.3	-1.8	-4.6
Chemical products	-1,711	-2,805	-4,516	-1.8	-3.0	-4.8	-0.2	-6.4
Petroleum and coal products	-1,250	-3,593	-4,844	-2.5	-7.1	-9.6	-1.3	-1.7
Plastic products and rubber products	-1,254	-2,634	-3,888	-2.3	-4.9	-7.3	-1.1	-3.4
Ceramic, stone and clay products	-906	-374	-1,279	-3.0	-1.2	-4.2	-0.4	-1.5
Iron and steel	-483	-4,518	-5,001	-0.7	-6.3	-6.9	-0.2	-1.6
Non-ferrous metals	-382	-945	-1,327	-1.8	-4.4	-6.1	-0.4	-0.5
Metal products	-272	-1,455	-1,728	-0.5	-2.8	-3.3	-0.2	-0.5
General-purpose machinery	708	-731	-23	1.5	-1.6	-0.1	0.6	0.8
Production machinery	-8,772	221	-8,551	-11.4	0.3	-11.1	-7.0	-26.9
Business oriented machinery	-4,716	1,042	-3,674	-16.5	3.6	-12.8	-3.6	-7.6
Electronic components	4,875	-2,633	2,242	9.6	-5.2	4.4	3.8	6.9
Electrical machinery	2,623	-1,187	1,436	4.5	-2.0	2.5	1.9	11.8
Information and communication electronics equipment	-2,548	1,578	-971	-13.2	8.2	-5.0	-1.8	-1.7
Transportation equipment	-11,310	-6,889	-18,199	-8.4	-5.1	-13.6	-14.8	-18.8
Electricity, gas and heat supply	1,234	-7,837	-6,603	1.4	-8.9	-7.5	0.4	1.9
Water supply	23	-1,263	-1,240	0.1	-5.6	-5.5	0.0	0.2
Waste management service	-647	-2,398	-3,044	-2.0	-7.4	-9.4	-0.8	-1.7
Commerce	-14,165	-10,869	-25,034	-2.1	-1.6	-3.8	-20.1	-1.8
Finance and insurance	4,066	-4,058	8	1.7	-1.7	0.0	3.4	1.9
Real estate	546	-3,215	-2,669	0.1	-0.5	-0.4	0.1	0.1
Transport and postal services	-56,417	-9,947	-66,364	-19.9	-3.5	-23.4	-59.0	-16.5
Information and communications	-1,686	-6,544	-8,230	-0.7	-2.5	-3.2	-1.4	-0.8
Medical, health care and welfare	2,390	-24	2,366	0.6	0.0	0.6	3.5	0.5
Business services	-8,136	-17,275	-25,411	-1.7	-3.7	-5.4	-11.0	-1.5
Personal services	-81,015	736	-80,279	-27.8	0.3	-27.5	-172.9	-20.0
Total of intermediate sectors	-186,970	-108,228	-295,198	-3.4	-2.0	-5.4	-290.5	-4.2

Source: Ministry of Internal Affairs and Communications, Ministry of Economy, Trade and Industry; compiled by DIR.

Some policy implications: striking a balance between controlling spread of infection and jumpstarting the economy

In closing, we consider the policy implications in light of the above arguments. First of all, the biggest concerns associated with the *Corona Disaster* were chain-reaction bankruptcies and mass unemployment. Luckily these have not been observed so far. This is due to the fact that corporations had plenty of cash on hand and in bank deposits, as well as the fact that corporations were aware that the *Corona Disaster* would be a temporary phenomenon. In addition, the government and the Bank of Japan provided support for financing, as well as employment adjustment subsidies.

As a result, deterioration of employment and income is currently limited. While it has been confirmed that was a decrease in overtime pay and bonuses for regular workers, and working hours and salaries for part-time workers, but positive figures have been maintained at least as of March, with employee

compensation growing somewhat on a year-to-year basis³. The situation is expected to worsen in April and beyond. On the other hand, a special benefit of 100,000 yen is also being paid to every individual citizen. The amount of benefits paid will come to a total of 13 trillion yen, or more than 15% of one quarter's worth of employee compensation and disposable income. In other words, there is a greater possibility of household income rising than falling in the immediate future.

To bring all this together, we can probably make an assessment that economic measures that have been implemented in the past have become more effective to an extent. However, some issues remain. One thing is the question of cost versus effectiveness. In the previous section we argued that since we now have more hard data available than we did several months ago, we can start discussing policy. In other words, it is now possible to narrow down which corporations and individuals have been placed in the most difficult situations and implement the necessary policy. From a macro point of view, rather than spreading cash benefits thinly over a broad range of recipients, it would be more cost effective to focus on needy households and be more generous with their benefits. This would also increase marginal propensity to consume.

Secondly, more than anything what is needed is investment that strikes a balance between controlling the spread of infection and jumpstarting the economy. Policies that have been decided on and implemented to date have been more like handing out painkillers. That may have been necessary in the early stages of this situation, but the same kinds of measures cannot be continued indefinitely. The necessity of promoting the reopening of economic activity will arrive at some point. But it will not be very meaningful to simply hand out travel coupons as a onetime deal in order to stimulate the economy. There will still be the problem of a trade-off between controlling the spread of infection and jumpstarting the economy.

The highest priority in developing a policy that strikes a balance between public health and the economy is investment in the medical field. It goes without saying that development of a vaccine and drugs to treat the disease will limit the impact of the epidemic. In addition, strengthening health care capacity, thereby raising the threshold of "peak cut strategy", will help economic activity to get back to normal. The next policy that is required is an industrial policy that makes it possible to continue operating while maintaining social distancing. One concrete example is the promotion of working remotely by strengthening telecommunications networks. Other possibilities are the use of protective clothing and disinfectants, as well as the use of ventilating systems where personal services are provided and partitions. Software and transport equipment are also needed so that businesses can transform themselves into ones providing a non-contact service.

In conclusion, the prioritization of investment oriented toward structural transformation of the economy and healthcare as a means of curing current problems is most promising, while at the same time continuing targeted pain relief as symptomatic treatment of economic ills.

³ Despite the decline in sales, employee compensation has not declined, which means a decrease in corporate profits. In terms of support provided for corporations, currently benefits for businesses to keep going during these times has been provided for small to medium-sized enterprises and sole proprietorships. In addition, rental support is also being considered.

Japan's Economic Outlook No.205

	FY19 (Estimate)	FY20 (Estimate)	FY21 (Estimate)	CY19	CY20 (Estimate)	CY21 (Estimate)
Main economic indicators						
Nominal GDP (y/y %)	0.7	-4.4	2.7	1.3	-4.2	1.7
Real GDP (chained [2011]; y/y %)	-0.1	-5.5	3.0	0.7	-5.4	1.9
Domestic demand (contribution, % pt)	0.1	-4.6	2.3	0.8	-4.5	1.4
Foreign demand (contribution, % pt)	-0.2	-0.8	0.7	-0.2	-0.8	0.5
GDP deflator (y/y %)	0.8	1.1	-0.3	0.6	1.2	-0.2
Index of All-industry Activity (y/y %)*	-1.3	-7.1	3.1	-0.3	-7.3	1.8
Index of Industrial Production (y/y %)	-3.7	-5.3	3.8	-2.8	-6.3	3.0
Index of Tertiary Industry Activity (y/y %)	-0.7	-8.1	3.2	0.5	-10.8	1.6
Corporate Goods Price Index (y/y %)	0.1	-4.1	0.3	0.2	-2.8	-1.0
Consumer Price Index (excl. fresh food; y/y %)	0.6	-1.3	-0.8	0.7	-0.6	-1.2
Unemployment rate (%)	2.4	4.7	4.0	2.4	4.1	4.3
Government bond yield (10 year; %)	-0.12	-0.02	-0.02	-0.11	-0.04	-0.02
Balance of payments						
Trade balance (Y tril)	0.6	4.8	8.3	0.6	3.5	7.7
Current balance (\$100 mil)	1,818	2,324	2,741	1,840	2,156	2,674
Current balance (Y tril)	19.8	24.9	29.3	20.1	23.2	28.6
(% of nominal GDP)	3.6	4.7	5.4	3.6	4.4	5.3
Real GDP components (Chained [2011]; y/y %; figures in parentheses: contribution, % pt)						
Private final consumption	-0.6 (-0.3)	-5.9 (-3.3)	3.2 (1.8)	0.1 (0.1)	-5.8 (-3.2)	2.1 (1.2)
Private housing investment	0.3 (0.0)	-8.4 (-0.2)	-0.8 (-0.0)	2.0 (0.1)	-8.6 (-0.3)	-2.2 (-0.1)
Private fixed investment	-0.9 (-0.1)	-7.4 (-1.2)	1.3 (0.2)	0.7 (0.1)	-7.3 (-1.2)	-0.3 (-0.0)
Government final consumption	2.4 (0.5)	1.2 (0.2)	0.7 (0.2)	1.9 (0.4)	1.5 (0.3)	0.9 (0.2)
Public fixed investment	3.3 (0.2)	-0.9 (-0.0)	3.2 (0.2)	2.9 (0.1)	-0.8 (-0.0)	3.9 (0.2)
Exports of goods and services	-2.7 (-0.5)	-17.2 (-2.9)	12.1 (1.8)	-1.6 (-0.3)	-16.9 (-3.0)	8.5 (1.2)
Imports of goods and services	-1.7 (0.3)	-11.8 (2.1)	6.7 (-1.1)	-0.7 (0.1)	-12.3 (2.1)	5.3 (-0.7)
Major assumptions:						
1. World economy						
Economic growth of major trading partners	1.6	-2.2	5.4	3.0	-3.7	5.2
Crude oil price (WTI futures; \$/bbl)	54.7	28.5	30.0	57.0	32.5	30.0
2. US economy						
US real GDP (chained [2012]; y/y %)	1.7	-5.4	4.6	2.3	-4.8	3.2
US Consumer Price Index (y/y %)	1.9	0.7	2.5	1.8	0.9	2.3
3. Japanese economy						
Nominal public fixed investment (y/y %)	5.0	-0.5	3.1	4.5	0.2	3.7
Exchange rate (Y/\$)	108.7	107.1	107.0	109.0	107.5	107.0
(Y/€)	120.9	116.0	115.8	122.2	117.1	115.8

Source: Compiled by DIR.

Notes: 1) Index of All-Industry Activity Index: excl. agriculture, forestry, and fisheries.

2) Due to rounding, figures may differ from those released by the government.