
Mizuho Economic Outlook & Analysis

September 3, 2020

“Corona special demand” offset by import hike *High dependence on China supply chains reconfirmed*

< Summary >

- ◆ Goods imports during the April to June quarter 2020 showed unexpected resilience amid an overall collapse of production and internal demand. Factors behind this resilient performance include the normalization of production activities in China, which plummeted in the January to March quarter due to the coronavirus pandemic, and the push-up effect of the corona-related special demand.
- ◆ Demand related to the prevention of COVID-19, remote working, and stay-at-home lifestyle caused a sharp increase in imported items such as masks and laptop computers from China. These products are characterized by a low self-sufficiency rate and China’s large share in their respective total imports.
- ◆ While corona special demand fuels internal demand growth primarily in terms of personal consumption, its contribution to GDP growth has been limited with the GDP push-up effect offset by a hike in imports. Japan’s dependence on China supply chains is high, and we believe this situation will only be partially reexamined.

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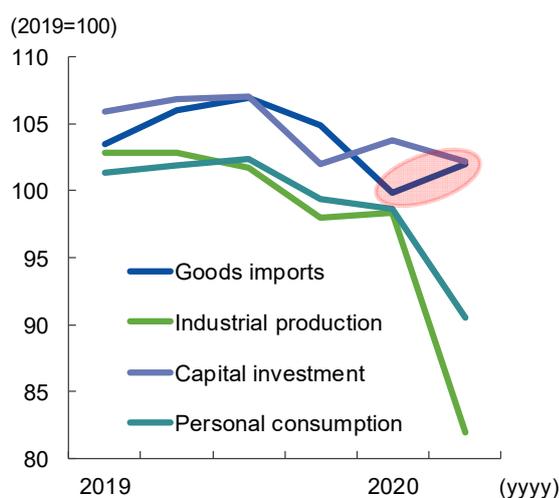
1. Introduction – Goods imports in the April to June quarter showed surprising resilience amid the corona crisis

The GDP growth rate in the April to June quarter of 2020 declined by -27.8% from the previous quarter on an annualized basis, marking the largest fall since the July to September quarter in 1956, which is the earliest quarter traceable in the current statistics. The decline was driven by external demand (net exports). The contribution of external demand in the April to June quarter was -3.0%pt, a substantial decrease exceeding the tumble recorded right after the collapse of Lehman Brothers (-2.6%pt in the October to December quarter of 2008).

The main reason for the decline was the contribution of the net export of goods, which showed a substantial fall of -2.9%pt from the +0.3%pt registered in the January to March quarter. As a result of strengthening the measures to prevent the spread of the coronavirus (lockdown) in the United States and European countries, exports plunged significantly by -19.2% from the preceding quarter centering on automobiles. On the other hand, goods imports rose by +2.1% from the previous quarter, the first growth seen over the past three quarters (**Chart 1**). We had anticipated that goods imports would continue to be sluggish after a sharp fall in the January to March quarter, because industrial production, personal consumption, and capital investment in the April to June quarter dropped significantly, affected by restrained domestic economic activities from April through May on the back of the rapid surge in coronavirus infections and the government's declaration of a state of emergency. But contrary to our expectation, goods imports showed surprising resilience.

In this report, we analyze the background behind the steady performance of goods imports amid the coronavirus pandemic and provide our views on the future outlook.

Chart 1: Goods imports and personal consumption, capital investment and production



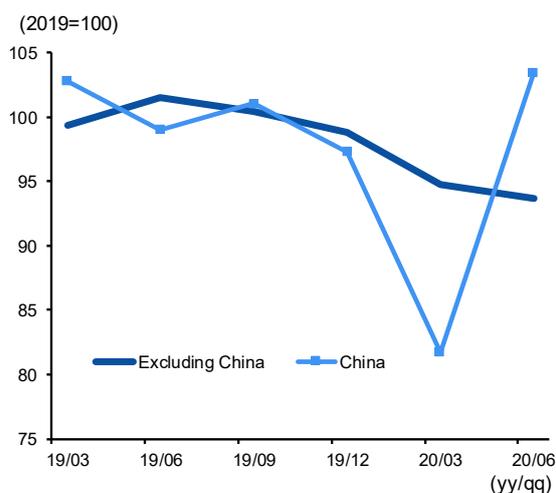
Source: Made by MHRI based upon the Cabinet Office, *Quarterly Estimates of GDP*, and the Ministry of Economy, Trade and Industry, *Indices of Industrial Production*.

2. Goods imports in the April to June quarter picked up beyond the recovery of production in China

Let us confirm the situation of goods imports in the April to June quarter using the import volume index.

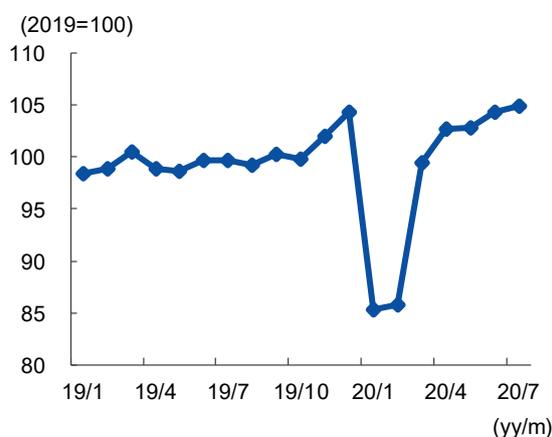
Looking at the import trend by region, imports from China fell largely in the January to March quarter of 2020, causing overall imports to decline¹ (**Chart 2**). After January, the coronavirus outbreak that started in Wuhan City, China, quickly spread to other regions, and the Chinese government placed Wuhan under lockdown and reinforced the COVID-19 prevention measures throughout the country. As a result, many local factories were compelled to stop or temporarily suspend their operations. China's industrial production in January and February demonstrated the steepest decline since statistics first became available, demonstrating how big the impact of the infection actually was (**Chart 3**). In response to this situation, Japan's industrial goods imports from China stagnated, and, naturally, imports from China in the January to March quarter fell sharply.

Chart 2: Import volume index by region



Notes: 1. Figures in the chart are seasonally adjusted by MHRI.
 2. "Others" represent regions other than China calculated using weight.
 Source: Made by MHRI based upon the Ministry of Finance, *Trade Statistics*.

Chart 3: Industrial production index in China



Source: Made by MHRI based upon the World Bank, *Global Economic Monitor*.

In February, many believed the suspension of local factories in China would continue through March and onward. But as the number of newly confirmed COVID-19 cases peaked out, manufacturing plants in China resumed operations in March, and production

¹ For areas other than China, imports from other areas (excluding US, Europe, China, NIES and ASEAN) are declining, primarily attributable to a decrease in mineral fuels imports from the Middle East.

recovered quickly centering on the IT and automobile sectors. It should be noted that industrial production in March recovered to a level slightly lower than December's figure, a period right before the outbreak of the pandemic, and in April it bounced back almost to the original level. The progress of China's production caused goods imports to rise in the April to June quarter.

The import volume from China in the April to June quarter, however, greatly surpassed the volume recorded in the October to December quarter before the spread of infection, marking a high level not seen since the April to June quarter in 2014. We believe this acute recovery may have also been fueled by factors other than the recovery seen in the January to March quarter.

3. Corona special demand has fueled strong growth for some imported products

Next, we confirm the trend of imports from China in the first half of 2020 using the import volume index by commodity.

As for the quarter-on-quarter growth rate, imports of all articles (excluding mineral fuels) declined in the January to March quarter,² and we can see that the decline in production at Chinese plants due to the spread of the coronavirus affected the overall import trend (**Chart 4**). In contrast, imports of goods other than mineral fuels showed positive growth in the April to June quarter, suggesting that import growth resumed following the normalization of production activities.

Chart 4: Import volume index from China by item

		Total	Foodstuff	Raw materials	Mineral fuels	Articles of apparel	Chemicals	Metals	Machinery and Equipment	Misc
Q-o-q % change	Jan-Mar 2020	-15.3	-7.9	-18.1	67.9	-14.9	-4.5	-16.4	-17.2	-18.0
	Apr-Jun 2020	26.8	2.7	12.9	-58.7	28.9	18.5	19.0	34.1	25.2
Level (Oct-Dec 2019=100)	Jan-Mar 2020	84.7	92.1	81.9	167.9	85.1	95.5	83.6	82.8	82.0
	Apr-Jun 2020	107.4	94.5	92.4	69.3	109.6	113.2	99.4	111.0	102.6

Note: Figures in the chart are seasonally adjusted by MHRI.
Source: Made by MHRI based upon the Ministry of Finance, *Trade Statistics*.

However, imports of some items rose sharply and surpassed the volume recorded in the October to December quarter, a period before the outbreak of the coronavirus. Specifically, the import volume of such items as articles of apparel, chemicals, and machinery and equipment increased by almost 10% from the pre-corona period. We believe these products grew reflecting not only normalized production activities in China but other factors as well.

² For mineral fuels, imports of kerosene grew in the January to March quarter.

We now examine what items actually grew in the categories of articles of apparel, chemicals, and machinery and equipment. We employed data at the HS 9-digit level to confirm which products contributed more to import growth, since these statistics are the most detailed information on import trend by item. It should be noted that our analysis described below uses year-on-year changes of the nominal import value and that the 9-digit figures in the parentheses represent the HS code.

The items that made the most positive contribution were textile fiber products including nonwoven masks (other than cotton and silk products)³ ('630790029') and laptop computers ('847130000') (**Chart 5**). These two items alone accounted for a major part of the positive contribution, and it is apparent that import growth was driven by the corona special demand.

With regards to masks, imports of cotton gauze masks ('630790010') also increased, making a positive contribution from the January to March quarter. We imagine that Japan rushed to procure imported masks while the infection was still spreading in China.⁴

On the other hand, laptop computers made a negative contribution to imports during the January to March quarter, suggesting that the lower operation rate of Chinese production sites due to the pandemic led to a decline in imports. But thanks to the normalization of local factory operations in China during the April to June quarter and the emergence of special demand for PCs in Japan driven by the spread of remote working, imports eventually started to grow.⁵

The next item to positively contribute to import growth was antiseptics ('380894000'). It seems that alcohol disinfectants and the like necessary to prevent the spread of infection fueled import growth. Routing devices⁶ ('851762010') were most likely buoyed by an increase in communication demand driven by remote working and e-commerce, and color televisions ('852872010') and video game consoles ('950450000') were moved by stay-at-home-related consumption.⁷

³ They include not only masks but also suit covers, baskets made of paper yarn woven fabric, sleeved coverlets made of blanket, etc. Refer to Ayumu Tanaka (2020), "International Trade and Trade Policy Research Memo, the 30th, [Import and export of nonwoven masks: How to respond to the mask shortage during the pandemic]."

⁴ The growth rates of prices and volumes in the April to June quarter of 2020 are +320% year-on-year and +178%, respectively.

⁵ According to the METI POS retail sales index compiled by the Ministry of Economy, Trade and Industry, laptop computer sales growth from the same week in the previous year at electric appliance stores has risen significantly in 2020 (October to December quarter (average): +5.2% => January to March quarter (average): +27.5% => April to June quarter (average): +20.6%).

⁶ The actual name in the HS code is "switching and routing apparatus," and they include switches, routers, Wi-Fi routers, and so forth.

⁷ According to the METI POS retail sales index compiled by the Ministry of Economy, Trade and Industry, color TV sales growth from the same week in the previous year at electric appliance store rose toward the April to June quarter of 2020 (October to December quarter (average): -5.3% => January to March quarter (average): +8.6% => April to June quarter (average): +20.6%). For video game consoles, if we look at the year-on-year change in expenditures of households with more than two members in the "Family Income and Expenditure Survey" by the Ministry of Internal Affairs and Communications, spending surged in the January to March quarter and maintained a positive growth trend in the April to June quarter (October to December quarter: -22.8% => January to March quarter: +103.1% => April to June quarter: +28.6%).

Chart 5: Contribution breakdown of the year-on-year change of nominal import value from China by item (top items making a positive contribution)

Item name	HS code	Jan-Mar 2020 y-o-y contribution, %pt	Apr-Jun 2020 y-o-y contribution, %pt	Classification in the import volume index
Grand total	TOTAL	-16.7	3.6	Total
Textile fiber products e.g. mask (other than cotton/silk products)	'630790029'	0.1	5.6	Articles of apparel
Laptop computer	'847130000'	-0.6	2.6	Machinery & equipment
Antiseptic	'380894000'	0.0	0.5	Chemicals
Routing device	'851762010'	-0.2	0.3	Machinery & equipment
Color television	'852872010'	-0.1	0.3	Machinery & equipment
Textile fiber products e.g. mask (cotton products)	'630790010'	0.0	0.3	Articles of apparel
Video game console	'950450000'	-0.1	0.3	Machinery & equipment
Communication base station	'851761000'	0.2	0.2	Machinery & equipment

Note: Names of items are different from the official HS classification names.
Source: Made by MHRI based upon the Ministry of Finance, *Trade Statistics*.

The demand for durable goods such as laptop computers, color TVs, and video game consoles has tended to increase, thanks not only to remote working and stay-at-home lifestyle, but also as compensation for the decline in service expenditures due to shortened operation hours in the service sector and restraints on human mobility during the “with corona” period. In fact, service expenditures in the April to June quarter fell largely while the decline in durable and non-durable goods remained modest (**Chart 6**). Also, the special cash payment of 100,000 yen per person supported the demand for durable goods.⁸

It should be noted that imports of communication base stations were boosted by progress made in 5G development based on plans formulated before the coronavirus outbreak. Imports of communication base stations also grew because the corona crisis made us recognize the necessity of 5G amid the spreading view that communication demand will increase in the middle to long term, reflecting the advance of remote working and online systematization.

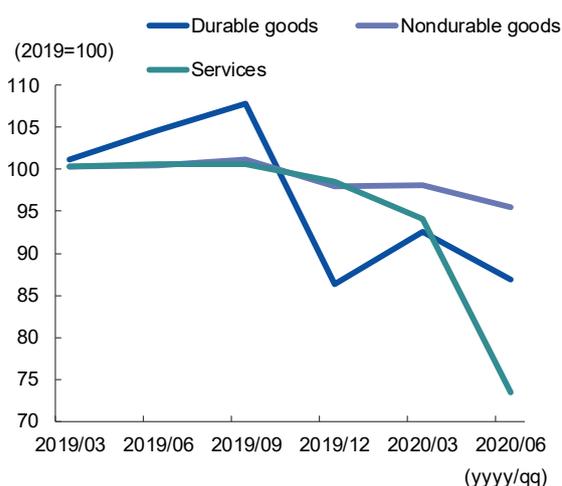
If we sum up the above results, it is clear that special demand fueling import growth in the April to June quarter was caused by (1) prevention of infection, (2) remote working, and (3) consumption related to the stay-at-home lifestyle. The contribution ratio of the

⁸ According to the Cabinet Office’s “Economy Watchers Survey,” in the comments on the current assessment as of June 2020, there were 67 comments referring to the special cash payments, of which 37 comments (55%) assessed that the economy is “improving.”

year-on-year change in the April to June quarter (+3.6%) for each item is as follows: (1) +176%, (2) +82%, and (3) +17%. We can see that (1) and (2) account for a majority of the push-up, revealing the importance of special demand driven by infection prevention and remote working (**Chart 7**).

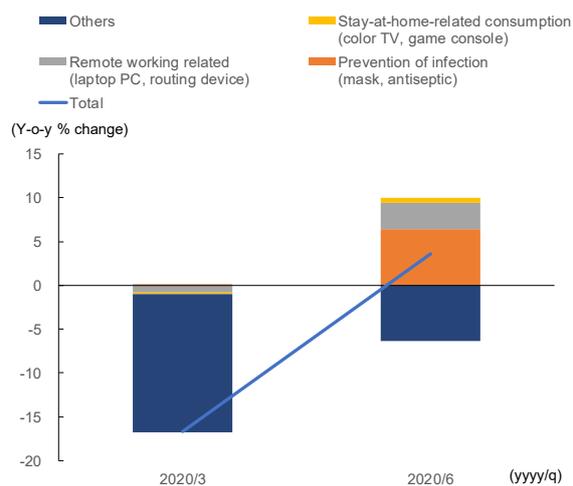
It should be noted that if we examine imports from regions other than China during the April to June quarter, there are no items fueling import growth to a greater extent than the items imported from China, as mentioned earlier. The items that made a relatively large contribution to import growth are all related to pharmaceutical products ('300215000' immunological products, '300490029' other medicaments), implying a rise in demand related to infection prevention.

Chart 6: Real consumption activity index by category



Source: Made by MHRI based upon the Bank of Japan, *Consumption Activity Index*.

Chart 7: Contribution breakdown of nominal import value from China by demand factor



Note: Names of items are different from the official HS classification names.

Source: Made by MHRI based upon the Ministry of Finance, *Trade Statistics*.

4. Given the low self-sufficiency ratio of products related to corona special demand, Japan has to rely on Chinese imports

As clarified in the previous section, goods imports in the April to June quarter in 2020 were supported not only by a recovery in production activity in China but also by special demand related to COVID-19, such as infection prevention, remote working, and stay-at-home lifestyle.

The items related to corona special demand have a low self-sufficiency ratio, and their imports are highly dependent on China (**Chart 8**). For this reason, the emergence of special demand spurred import growth from China.

According to statistics compiled by the Japan Hygiene Products Industry Association, the domestic production rate of face masks in 2019 was only about 23%, suggesting a high import dependence, and of total mask imports, more than 70% came from China.

The domestic production rate of laptop computers calculated from the “Current Survey of Production” released by the Ministry of Economy, Trade and Industry and “Trade Statistics” by the Ministry of Finance was also low at around 24%. The dependence on import from China reached 99%, meaning that almost all laptop computers were sourced from China.

We also estimated the domestic production rate and the dependency on China for other items whose imports grew driven by special demand, using available data and information materials. It became apparent that color televisions also had a low domestic production rate with a high dependence on Chinese imports, meaning that an increase in demand may easily lead to an increase in imports. Video game consoles as well were mostly imported from China, and since their domestic production rate is apparently low,⁹ an increase of demand in Japan would directly lead to expanded imports from China.

Although antiseptics are said to be mostly produced domestically,¹⁰ imports have been rising sharply from China and other regions since the January to March quarter, suggesting that the sudden increase in demand could not be covered by domestic production (**Chart 9**).

In the case of routing devices, as production in China stagnated in the January to March quarter due to the spread of infection, imports from China declined and the fall seems to have been compensated by an increase in imports from other regions. This situation has changed lately, and after imports from China increased in the April to June quarter, imports from other regions have decreased (**Chart 9**). While the import trend in the first half of 2020 suggests that routing devices are not excessively dependent on China, the self-sufficiency ratio seems low.¹¹

In sum, many items whose demand surged on the back of the corona special demand are characterized by a low self-sufficiency ratio and high dependence on China, and structurally they tend to encourage import growth from China.

⁹ For example, Nintendo produces almost all of its mainstay video game console, Nintendo Switch, in China. Facing the possibility that US-China friction will worsen, Nintendo was proceeding with the transfer of part of its manufacturing facility to Vietnam (refer to Nikkei newspaper, “Nintendo to transfer part of its “Switch” production to Vietnam from China,” July 9, 2019). And as a result of hearings, we learned that many prominent video game consoles produced by other firms are also mostly imported from China.

¹⁰ Refer to Sankei newspaper, “Highly dependent on China, masks and pharmaceutical products,” May 17, 2020.

¹¹ According to interviews, there are many cases of products being assembled in Taiwan and China and then imported.

Chart 8: Self-sufficiency ratio of corona special demand related items and their dependence on Chinese imports (2019)

	Self-sufficiency ratio (%)	Dependence on China imports (%)
Mask	23.0	76.7
Laptop computer	24.2	99.0
Antiseptic	NA	36.2
Routing device	Low (interview based)	61.3
Color television	4.0	68.5
Video game console	Low (media coverage/interview based)	98.9

Note: It was difficult to calculate the self-sufficiency ratio of routing devices and videogame consoles, therefore our estimate is based on media coverage and hearings.

Source: Made by MHRI based upon the Ministry of Finance, *Trade Statistics*, the Ministry of Economy, Trade and Industry, *Current Survey of Production*, and the Japan Hygiene Products Industry Association.

Chart 9: Import of antiseptics and routing devices

		Jan-Mar 2020 y-o-y % change	Apr-Jun 2020 y-o-y % change
Antiseptic	China	53.4	4025.4
	Excluding China	88.1	825.3
Routing device	China	-15.9	31.6
	Excluding China	14.4	-20.2

Source: Made by MHRI based upon the Ministry of Finance, *Trade Statistics*.

5. Growth in personal consumption fueled by the corona special demand is offset by an increase in imports, limiting the GDP push-up effect

Will the increase in goods imports driven by the corona special demand continue even after the July to September quarter?

We see during this “with corona” period no change in the mechanism in which demand tends to increase in the areas related to infection prevention, remote working, and stay-at-home lifestyle, as mentioned earlier. Hence it is difficult to imagine that the demand for items described in the earlier section will suddenly fall. However, looking at the current situation, there are signs of a slowdown for some items that showed sharp import growth. In this section, we will confirm the import growth rate for the respective items (**Chart 10**).

First, if we observe the monthly data on face masks imported from China, the import growth rate began slowing down in June, after Japanese makers increased the mask production volume three-fold compared with normal times and continued production activities on a 24-hour basis with the support of the Japanese government. According to the Ministry of Economy, Trade and Industry,¹² thanks to the new subsidy system for companies introducing mask production equipment, mask production facilities have been expanding since March, and the production capacity was enhanced to about 81 million units by March 2020 and again to 239 million units by the April to June quarter. This

¹² Refer to the Ministry of Economy, Trade and Industry website, “Current Status of Production and Supply of Face Masks, Antiseptics and Toilet Paper – Public-private collaborative efforts advancing to overcome shortage – Ministry of Health, Labour and Welfare/Ministry of Economy, Trade and Industry” (<https://www.meti.go.jp/covid-19/mask.html>).

expansion is estimated to account for around 22% of total domestic mask production in Japan (about 1,483 million units) for 2019.

In the area of antiseptics, the Ministry of Economy, Trade and Industry¹³ announced that 17 operators were selected as eligible to receive a subsidy under the new subsidy system for companies introducing alcohol antiseptic production equipment by the end of May.¹⁴ Thanks to initiatives taken by major domestic manufacturers to expand production, they were able to increase antiseptic production 6.5 times higher than the previous year (as of July) (production volume in July: about 6.3 million liters). Even so, antiseptic imports continued to show rapid year-on-year growth up until May, and demand was rising even faster than production growth, but the growth rate has been slowing since June. With the reinforcement of domestic production, imports of alcohol antiseptic are also expected to decelerate just like face masks.

In addition, the push-up effect fueled by special cash payments will most likely dissipate by the fall.¹⁵ While the demand for some video game consoles is expected to remain strong due to shortage of certain popular models, in general, import growth in color televisions and video game consoles is projected to slow down gradually in the future.

Summarizing the above observations, overall goods imports in the July to September quarter are expected to decline, reflecting the reinforced domestic production of face masks and antiseptics, and the dissipation of the push-up effect of special cash payments. As growth in nonwoven masks had a particularly large impact on pushing up imports, the shift to domestic mask production seems to be exerting strong downward pressure on the import value.

However, imports of laptop computers and routing devices, that also contributed to import growth in the same manner as masks did, continue to perform steadily and indicate that demand related to remote working is strong even now. In fact, according to a survey of large companies conducted by the Development Bank of Japan in June 2020, 50% of the respondents answered that the “lack of information equipment and communication infrastructure” is an obstacle to introducing and promoting flexible working styles such as remote working. The demand for information and communication equipment seems to be expanding strongly among both households and companies.¹⁶

¹³ Refer to footnote 12.

¹⁴ Production volume in June: about 6.1 million liters. Our estimate based on this figure indicates that capacity has expanded by approximately 40% by the end of May.

¹⁵ According to the Cabinet Office’s “Economy Watchers Survey,” in the comments on the current assessment as of July 2020, there were 58 comments referring to the special cash payments, of which 24 comments (41%) assessed that the economy is “improving,” which is a slight deterioration from the preceding month (55%). Our detailed observation shows comments referring to the dissipation of the special cash payment effect here and there.

¹⁶ Demand for communication base stations is projected to maintain strong growth momentum for the time being, driven by an increase in communication demand during the “with corona” period. However, accelerated elimination of Huawei due to the intensifying US-China conflict may become a downward risk.

In addition, confirmed cases of the coronavirus continue to hover at a high level, so there is little possibility that demand related to prevention of infection, remote working, and stay-at-home lifestyle will completely disappear. Furthermore, we hold that the ongoing prudent attitude of consumers toward eating out and traveling will promote a shift in expenditures from service consumption to goods purchases.

In the light of this observation, corona special demand encompassing prevention of infection, remote working, and stay-at-home lifestyle will be maintained until the threat of the coronavirus is eliminated, giving a boost to personal consumption and capital investment to a certain extent.

Nonetheless, it is highly probable that the GDP push-up effect driven by the corona special demand will remain limited.

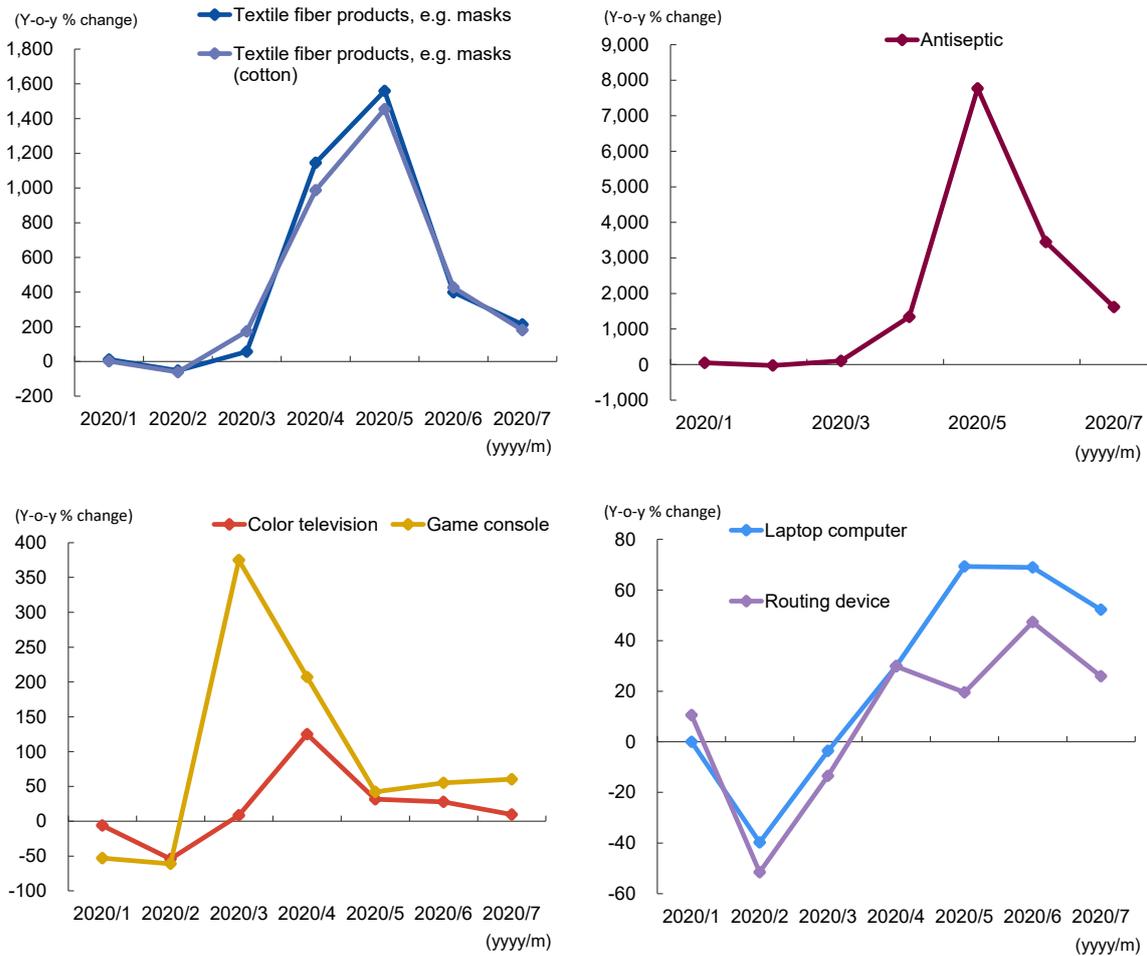
In the GDP statistics, face masks¹⁷ and laptop computers purchased by households are classified as household consumption. As mentioned earlier, one reason why the decrease in the consumption of durable and nondurable goods has been limited compared to service consumption was the push-up effect of the corona special demand. Also, in the case of laptop computers purchased by companies, this type of spending is classified as private non-resident investment. Hence, corona special demand can contribute to increasing final domestic demand through private consumption and capital investment to a certain degree.

The self-sufficiency ratio for items related to corona special demand is low, however, and as these products have to be procured from overseas, including China, this spending would also be classified as an increase in imports in the GDP statistics. As imports are a deduction item from GDP, their increase makes a negative contribution to the GDP growth rate.

In sum, while increases in personal consumption and capital investment contribute positively, a concurrent increase in imports slashes GDP, and as a result, the net positive contribution to GDP growth becomes limited. For example, even though a +100% increase in laptop computer demand by households and firms fuels growth in personal consumption and capital investment, if we assume the self-sufficiency ratio is unchanged, 75% of this demand would be covered by imports (mostly from China), making the net positive contribution to GDP only +25%.

¹⁷ Masks purchased by companies (including medical institutions) are classified as intermediate consumption and do not appear in GDP. According to the statistics compiled by the Japan Hygiene Products Industry Association, the share of masks for households accounts for about 78%.

Chart 10: Nominal imports of corona special demand related items from China



Source: Made by MHRI based upon the Ministry of Finance, *Trade Statistics*.

So, to what extent has corona special demand supported the GDP growth rate achieved in the April to June quarter of 2020? Using the example of laptop computers once again, total supply that consists of domestic production and import values increased considerably by +35.1% from the previous year. This was registered as private consumption and capital investment, and is estimated to have pushed up the nominal GDP growth rate (-8.5%) by +0.1%pt. As part of the total supply, however, imports account for 99.3%, and with the domestic demand increase being mostly offset by an increase in imports, the resultant GDP push-up effect of laptop computers is estimated to be almost nil.

On the other hand, while we cannot conduct a detailed analysis on masks due to statistical data restraints, the domestic production capacity of masks was enhanced by 22% year-on-year in the first half of the year, as mentioned earlier. Meanwhile, imports of textile fiber products including nonwoven masks (other than cotton and silk products) ('630790029') doubled the import value achieved last year in just half a year. This implies that just like for laptop computers, the increase in personal consumption stemming from

mask purchases by households has most likely been offset by import growth.

Of course, sales growth of laptop computers and masks can improve the earnings of electric appliance stores and pharmacies, which may make a certain indirect contribution to the GDP growth rate. But in the end, the effect of the sharp increase in corona special demand is thought to be limited in boosting GDP directly.

6. Conclusion – Corona special demand has made us aware of our dependence on China supply chains once again

From the trend in the first half of 2020, we can see that a majority of the corona special demand was covered by Chinese imports, and that corona special demand contributed to the GDP growth rate only in a limited way. It also made us realize again how heavily Japan is dependent on Chinese supply chains. Since the 2000s, Japan's high reliance on Chinese supply chains has been the subject of reexamination given the hike in personal costs in China. In fact, triggered by the 2011 Great East Japan Earthquake and the deteriorating Japan-China relationship due to the situation of the Senkaku Islands, Japanese companies have started reviewing their supply chains under the slogan "China Plus One." The corona crisis has heightened interest in the discussion on supply chain restructuring, and the "De-China" movement, the trend to relocate manufacturing plants outside China, is attracting more attention.

The next question is, will Japanese companies accelerate their moves to restructure the China-centered supply chains after the corona shock, and will these actions lower Japan's dependence on China in the near future?

In the "with corona" period, there is always the risk of a lockdown being imposed in some cities within the supply chains. It is highly possible that Japanese firms will aim to avoid concentrating their manufacturing plants in China and will accelerate their efforts to relocate their plants back home in Japan or in other regions such as ASEAN.

However, it is too early to judge whether production sites in China will diminish substantially and be quickly substituted by other regions. We should take it calmly that the mid-term importance of China in Japanese firms' supply chains has not faded even though the movement to diversify production sites had already existed before the outbreak of the corona crisis. In fact, for Japan, China is the largest import partner country with a 24% share in total imports (2019). Looking at the top import items accounting for 30% of total imports from China (**Chart 11**), Japan relies on China for a variety of products beside those related to corona special demand as described in earlier section, such as smartphones, photocells, toys, computer parts, and air conditioners. Although labor costs are rising in China, it seems difficult for Japanese firms to find a substitute for China as the core supply chain site, given the availability of a labor force equipped with certain skillsets and the

potential of internal demand growth. China’s comparative superiority will not collapse so easily even with the corona shock.

Chart 11: Dependency of the top items on China in terms of nominal import value (2019)

HS	Name of commodity	Share of China in total imports (%)	Cumulative share of imports from China (%)
'851712000'	Mobile phone	85.8	7.8
'847130000'	Laptop computer	99.0	12.6
'847150000'	Electronic computer body (excluding personal computer)	62.2	14.3
'851762010'	Routing device	61.3	15.6
'854140020'	Photovoltaic cell (whether or not assembled in modules or made into panels)	70.6	16.7
'950300000'	Toys (tricycles, dolls, puzzles, others)	79.2	17.8
'000000099'	Reimported items	14.4	18.8
'847330019'	Other computer parts and accessories	76.4	19.8
'420292000'	Items normally carried in a pocket or handbag	62.1	20.7
'851762090'	Other apparatus for transmission or reception of voice, images and other data	51.5	21.6
'950450000'	Video game console	98.9	22.4
'844399000'	Other printing machine parts and accessories	67.4	23.2
'730890010'	Other structures and structure parts	69.4	23.9
'392690029'	Other plastic items	51.7	24.7
'852872010'	Color television	68.5	25.4
'854370000'	Other electrical machines and apparatus	53.5	26.1
'852580000'	Digital camera	47.8	26.8
'841510010'	Air conditioning unit (with power consumption below 3 kilowatt)	90.4	27.5
'611030099'	Jersey, pullover, cardigan, waistcoat (of manmade fibers)	68.8	28.1
'851770000'	Telephone set	58.2	28.8
'630790029'	Textile fiber products e.g. mask (other than cotton/silk products)	77.0	29.3
'640419290'	Others among footwear	65.2	29.9

Note: Names of items are different from the official HS classification names. Shaded items are corona special demand related products described in this report.

Source: Made by MHRI based upon the Ministry of Finance, *Trade Statistics*.

In the light of these observations, it is realistic to think that the current core position of China in the supply chains will not change so easily, particularly when private companies have to make rational decisions on the location of production sites to make their production systems more efficient. There are also opinions that the intensification of US-China friction will prompt the restructuring of China supply chains. Certainly, for highly important sensitive products that may be diverted for military use, China-centered supply chains may be subject to reexamination.¹⁸ But for other less sensitive products, we do not believe the dependence on China will lower dramatically, since changing supply chains involving products of wide applications such as smartphones and laptop computers requires high initial costs.

With a view to lowering the risk of excessive reliance on China, the Japanese government has introduced a measure to diversify supply chains titled “Program for

¹⁸ In Taiwan, for example, as US-China tensions escalate, more customers are now asking that China be excluded from the manufacturing of information and communication equipment that may risk confidential information being leaked. Statistics show that domestic manufacturing of servers suddenly gained momentum in 2019.

Promoting Investment in Japan to Strengthen Supply Chains”¹⁹ as a subsidy program to assist Japanese firms in reinforcing their domestic production facilities. This kind of measure is considered necessary to enhance the self-sufficiency ratio, particularly for essential items such as medical goods. Nevertheless, given the high personnel costs in Japan, the size of the domestic market, and the risk of natural disasters, it is difficult to imagine that Japan’s reliance on China will change in a drastic way.²⁰

In the light of the above argument, we see little possibility of accelerated restructuring of China-centered supply chains triggered by the pandemic. For items other than sensitive products, we hold that firms will maintain their existing stance on reexamining the transfer of part of their production sites to other areas such as ASEAN, while keeping their Chinese production sites in the future.²¹

¹⁹ The budget for this subsidy is 220 billion yen. Direct investment by manufacturers in 2019 was around 15 trillion yen.

²⁰ The government’s program to support the diversification of overseas supply sources, aimed at strengthening the supply chains between Japan and ASEAN, may also lower Japan’s reliance on China. Its budget size (23.5 billion yen) is, however, smaller compared with the Program for Promoting Investment in Japan to Strengthen Supply Chains.

²¹ According to the “Survey on Planned Capital Spending for Fiscal Years 2019, 2020 and 2021” by the Development Bank of Japan, for the overseas capital investment plan for FY2020, investment bound for China is up by +10.9% from the previous year, and is higher than the growth rates of investment bound for other areas (North America: -5.6%, Europe: +6.3%, Asia excluding China: -8.7%, and Others: -11.1%). We can confirm that the investment appetite for China continues to be strong even under the corona crisis.

Reference

Refer to the original Japanese report by clicking the URL below for the reference material.

<https://www.mizuho-ri.co.jp/publication/research/pdf/insight/jp200903.pdf>