# Will China Be Able to Achieve a V-shaped Recovery After the Coronavirus? —"The 90% Economy" Has Become the New Normal—

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#### Summary

- 1. In China, measures to prevent the spread of the novel coronavirus (COVID-19) have made considerable progress so far since the number of regions with no new confirmed cases has been steadily increasing, and the number of new confirmed cases per capita is not necessarily large. China is taking an exit strategy of easing restrictions on movement and deterring a "second wave" at the same time through 1) an information management system that manages risks for individuals and regions on a network, 2) implementing "sealed control" that utilizes the mutual monitoring functions of residential community association, and 3) taking bold measures to prevent the spread of infection, including large-scale quarantines and lockdowns, even in locations where the number of new confirmed cases is small.
- 2. The recovery of capacity utilization to a pre-coronavirus level has sparked optimism in China, where there is an emerging view that growth could exceed the International Monetary Fund's (IMF) forecast. Looking at economic indicators on the supply-side, however, the pace of recovery in corporate earnings is slow, and it is unreasonable to expect growth to exceed the IMF's forecast.
- 3. Looking at indicators on the demand side, investment is recovering and is expected to support the recovery in the second half of the year. On the other hand, decreases in both personal consumption and exports are expected to hinder economic recovery. As shown by the fact that consumption expenditure has declined more than disposable income, households are becoming more and more savings-oriented due to the difficulty of foreseeing a favorable employment and income environment. Exports are also unlikely to recover due to the economic downturn in developed and emerging economies.
- 4. According to Baidu's migration index, people's movement and consumption are now at 90% of the level before the COVID-19 outbreak. In other words, "90% consumption" has become the new normal. Consumption does not naturally increase even when the spread of the infection reaches a plateau, but the recovery of consumption depends on the human psychology of how individuals assess the risk of infection.
- 5. According to Oxford University's severity index, China still has stricter regulations than those of Japan under its state of emergency declaration, and it is unlikely that households' preference for savings will decline. In China, expectations are rising for "retaliatory consumption" in which households spend more in response to controlling infection, but the effects are not as great as expected.
- 6. The central government granted local governments the "indulgence" of increased investment termed "New Infrastructure Construction" to promote the building of new infrastructure such as 5G base stations. However, local governments are expected to try to revive the economy by investing in traditional rather than new infrastructure. It is premature to assume that the absence of a major stimulus package by the National People's Congress (NPC) will not exacerbate problems such as overcapacity, reduced investment efficiency and high leverage.
- 7. China's investment efficiency could fall to the lowest level among Asian countries due to reckless investment expansion by local governments. The immediate question for the Chinese economy is not whether it will be able to achieve a V-shaped recovery in 2020, but whether it will be able to avoid an investment-led recovery that will further reduce investment efficiency.

#### Introduction

China suffered an unprecedented shock due to the spread of the novel coronavirus (COVID-19). Although COVID-19 has a low mortality rate, it is characterized by a very rapid spread of infection. In Hubei Province, where the first cases were confirmed, major cities were closed in late January, but the outbreak spread quickly across China, causing record economic losses.

In the January-March 2020 period, the real economic growth rate declined 6.8% from the same period last year, which was the lowest level since 1992 when quarterly data began to be released. In its economic forecast released in June 2020, the IMF estimated China's growth rate for 2020 at 1.0%. The impact of the COVID-19 pandemic is greater than both the outbreak of severe acute respiratory syndrome (SARS) in 2002-2003 and the Lehman Brothers collapse in 2008.

In March, the number of new confirmed cases in China declined rapidly. General Secretary Xi Jinping visited Wuhan, saying that "The people of Wuhan are heroes and will go down in history as having won the battle against the COVID-19 pandemic" While emphasizing progress in eradicating the virus, the Chinese government has developed "mask diplomacy," providing masks and test kits abroad in an effort to improve its international standing.

The Chinese government's words and actions are being scrutinized both at home and abroad as an attempt to disregard the delay in its initial response to COVID-19. However, it would be good news indeed for the world economy if China could quickly contain the spread of COVID-19 and recover its economy ahead of other countries. This paper examines the probability of such a scenario.

The situation regarding the spread and containment of COVID-19 in China is considerably different depending on the region. In the following section, we first examine the changes in the number of cases and the measures taken by the government by region, and also describe the extent to which measures to prevent the spread of CO-VID-19 are functioning (1.). Then, based on the growth rates of each region and economic indica-

tors on both the supply and demand side, the recovery path in the second half of the year will be projected (2.). Finally, we examine the possibility of China's growth beyond IMF expectations and associated risks (3.).

#### COVID-19 Outbreak and Measures Taken by the Government

This section reviews changes in the economic outlook for China and the world by international organizations such as the IMF in 2020. We then examine how the central and local governments responded to the COVID-19 outbreak and to what extent those measures to prevent its spread are functioning.

### (1) Growth Forecast for 2020 Has Declined from 5.6% to 1.0%

The economic outlook for China and the world in 2020 deteriorated rapidly over time, partly because it was difficult to predict how far COVID-19 would spread and when it would end.

At the meeting of finance ministers and central bank governors from the 20 countries and regions (G20) that opened in Riyadh, Saudi Arabia on February 22, 2020, the IMF cut China's growth rate forecast for 2020 by 0.4% points to 5.6% from its January projection of 6.0%, and lowered the global growth rate forecast by 0.1% points from 3.3% to 3.2% (Table 1)<sup>(2)</sup>.

However, April's forecast for the world economy showed a sharp drop in growth, with 1.2% for China and minus 3.0% for the world. In the updated world economic outlook announced in June, China's growth forecast was revised down by 0.2% points from April to 1.0%, while the growth forecast for the world was revised down further to minus 4.9%. One of the reasons why China's downward revision is smaller than that of the world is

Table 1 Growth Forecast for China and the World in 2020

(%, % points)

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Organization	Ch	ina	World			
(forecast timing)	Growth rate	Change	Growth rate	Change		
IMF (February)	5.6	▲0.4	3.2	▲0.1		
OECD (March)	4.9	▲0.8	2.4	▲0.5		
World Bank (March)	2.3	▲3.6	-	-		
ADB (April)	2.3	▲3.8	-	_		
IMF (April)	1.2	▲4.8	▲3.0	▲6.3		
OECD (June)	▲2.6	▲8.3	▲6.0	▲8.9		
World Bank (June)	1.0	<b>▲</b> 4.9	<b>▲</b> 5.2	▲7.7		
IMF (June)	1.0	<b>▲</b> 5.0	▲4.9	▲8.2		

Notes: Change figures for the IMF and World Bank are as of January 2020. Figures for the OECD are based on a comparison with the forecast as of November 2019. March figures for the World Bank are based on the economic forecast for Asia.

Source: Prepared by The Japan Research Institute, Limited based on materials from the IMF, World Bank, ADB and the OECD

that some of China's economic indicators have begun to rise and its measures to prevent infection spread have been successful.

The Organisation for Economic Co-operation and Development (OECD) and the World Bank cut their growth forecasts substantially, as did the IMF. The OECD had projected growth rates of 4.9% and 2.4% for China and the world, respectively, as of March, but dropped its projections in June to minus 2.6% and minus 6.0%, respectively. Moreover, the revised projections are based on a scenario in which containment of the COVID-19 outbreak occurs. Under a scenario in which the outbreak spreads again by the end of the year, China's growth rate is likely to be minus 3.7% and that of the world minus 7.6% (OECD [2020 b]).

At the same time, the World Bank slashed its growth forecast in June. But the World Bank was slightly more optimistic than the OECD, pegging China's growth forecast at 1.0%, the same as the IMF, and that of the world at minus 5.2%. However, these forecasts also assume that the spread of infection will cease in the second half of the year. If this assumption proves faulty and financial instability develops, the growth rates of developed countries, emerging and developing countries<sup>(3)</sup>, and the world will be minus 10%, minus 5%, and minus 8%, respectively (World Bank [2020 b]).

In China, the pace of the spread of COVID-19 slowed in mid-February, and Foxconn, the world's largest provider of electronics manufacturing services (EMS), said it would return to normal operations by the end of March<sup>(4)</sup>. In May, we started to see some positive signs as the number of new confirmed cases decreased, including the easing of restrictions on outings in the United States and European countries. However, even with the recovery of the Chinese economy, it is inevitable that global trade and direct investment will decline, given the negative growth rates anticipated for all major developed countries in 2020 and the spread of COVID-19 in emerging and developing countries in the southern hemisphere such as Brazil, which is perceived as another cause for concern.

The World Trade Organization (WTO) estimates that global trade in goods will decline by up to 30% in 2020 from the previous year, but it is certain to exceed the 2009 level, when trade volume fell by 13% due to the impact associated with the Lehman Brothers collapse<sup>(5)</sup>. Meanwhile, the United Nations Conference on Trade and Development (UNCTAD) predicts that global direct investment will decline by up to 40% in 2020<sup>(6)</sup>.

The outlook for 2021 varies greatly depending on the assumption that is made on whether or not the COVID-19 outbreak will be contained in the second half of the year. The IMF's basic scenario is that economic activity will resume in stages from the second half of 2020, with the economy bottoming out in the April-June period. Under this scenario, China's growth rate would rise to 8.2% in 2021, rebounding from a year earlier, and the world's growth rate would reach 5.4%.

Of course, there is no guarantee that the CO-VID-19 outbreak will be contained in accordance with this scenario. The IMF has also published projections based on several pessimistic scenarios that factor in uncertainties in the April outlook, including: 1) measures to limit the spread of COV-ID-19 will be protracted and sustained in the second half of 2020; 2) another outbreak will occur in 2021; and 3) the situations described in both 1) and 2) will occur.

According to the IMF, which does not show

growth rates by country, under the worst-case scenario described in 3), the GDP of emerging and developing countries would fall by 7.1% in 2021 and by 4.7% in 2024 from the base scenario, while that of developed countries would fall by 7.6% and 3.3%, respectively. As a result, the global economy as a whole would decline by 7.3% and 4.1%, respectively, plunging into a recession almost equivalent in scale to the Great Depression of the late 1920s (Fig. 1).

The U.K. government indicated that because of the time required to develop vaccines and drugs for treatment, restrictions on daily life, such as social distancing to maintain a safe distance from others and restrictions on going out, will be required at least by the end of the year<sup>(7)</sup>, while Harvard University remarked that social distancing will be necessary until 2022 (Kissler, Christine, Marc, and Yonatan [2020]). As the pessimistic scenario indicated in 1) is highly likely, it will not be easy to achieve growth rates of 1.0% and minus 4.9% for China and the world, respectively, under the basic scenario.

#### (2) Spread of the COVID-19 Outbreak by Province: China Also Faces a Long War Against Coronavirus

The cumulative number of confirmed COV-ID-19 cases in China started to level off in March, meaning that the country entered a phase of convergence in which new infections declined (Fig. 2). The number of new confirmed cases per day decreased steadily to 55 in March, 34 in April, and 5 in May. However, in June, Beijing was hit by a massive outbreak originating at the wholesale food market, and the number of new confirmed cases increased to 21 per day. Although China has been successful in preventing the spread of infection on a national level, it remains in a precarious situation due to sporadic infection clusters.

The number of new confirmed cases reported by China does not include the number of asymptomatic cases with positive PCR results but without clear symptoms such as cough or fever. Asymptomatic cases could cause a "second wave" because it is difficult to identify them due to the lack of symptoms<sup>(8)</sup>, and it is not known how contagious they are. Jiaxian in Pingdingshan, Henan

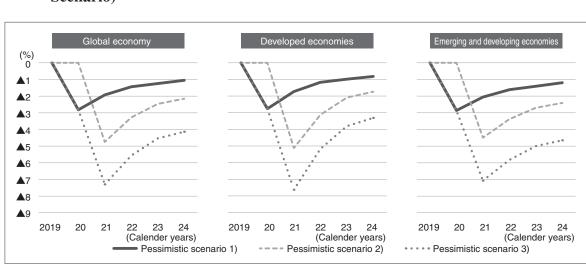
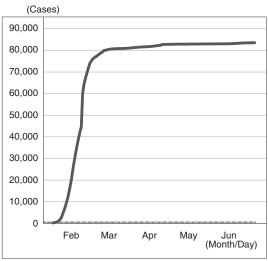


Fig. 1 Decline in GDP Under the Pessimistic Scenario (Deviation from the Basic Scenario)

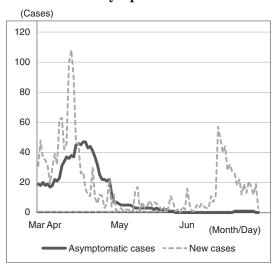
Source: Prepared by The Japan Research Institute, Limited based on the IMF [2020]

Fig. 2 Changes in the Cumulative Number of Confirmed Cases



Source: Prepared by The Japan Research Institute, Limited based on CEIC

Fig. 3 Changes in the Number of New Confirmed Cases and Asymptomatic Cases



Source: Prepared by The Japan Research Institute, Limited based on CEIC

Province lifted its lockdown in late February because the number of new confirmed cases had remained at zero. Jiaxian, however, was locked down again on April 1 after asymptomatic cases were confirmed<sup>(9)</sup>.

But since May, the number of asymptomatic cases decreased (Fig. 3) and interest in the issue also declined. This is because measures similar to those taken for ordinary symptomatic COVID-19 patients were taken, such as quarantining asymptomatic patients for 14 days while at the same time identifying close contacts, and requiring 14 days of follow-up observation for such contacts<sup>(10)</sup>. In addition, since asymptomatic individuals are only weakly infectious (approximately 1/3 that of ordinary symptomatic COVID-19 patients) it was considered that there is no need to be excessively fearful<sup>(11)</sup>.

Looking at the cumulative number of confirmed cases by province as of the end of June, the cumulative number of confirmed cases in Hubei Province, which was the source of infection, stands out starkly at 68,135. This is followed by coastal provinces such as Guangdong Province and Zhejiang Province, which accept migrant workers from rural areas, or "peasant workers," and the prov-

inces next to Hubei Province including Hunan Province, Henan Province, Anhui Province, and Jiangxi Province (Fig. 4). It can be seen that the cumulative number of confirmed cases largely depends on the number of people moving across the provinces or in geographical proximity to Hubei Province.

China as a whole saw a dramatic drop in the number of new confirmed cases, with 1,730 in March, down 97.5% from February's 68,033 cases. However, the pace of decline is not uniform by region. For example, Heilongjiang Province, which had only four new confirmed cases in March, added 460 new cases in April, and the number of new confirmed cases in Shaanxi Province increased from 10 to 51. Although the number of new confirmed cases since May has remained close to zero in both provinces, local spread of infection can occur anywhere.

The same is true in regions with many bases and factories operated by Japanese companies. In Beijing, the number of new cases per month was 13 in April, 0 in May and 329 in June, recording a sharp increase. Shanghai and Guangdong Province also saw an increase in the number of new cases in June, with Shanghai recording 136, 20

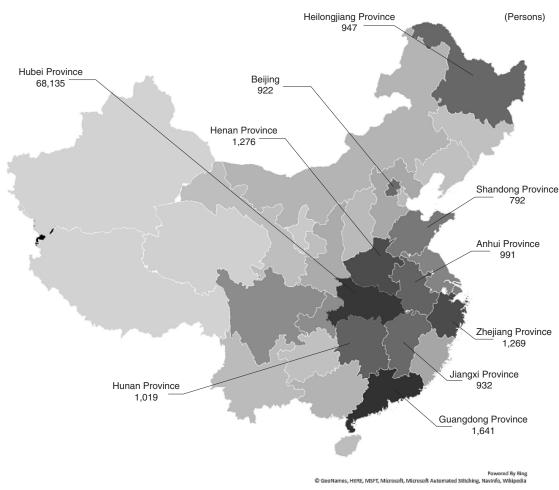


Fig. 4 Cumulative Number of Confirmed Cases by Province (As of June 30, 2020)

Source: Prepared by The Japan Research Institute, Limited based on CEIC

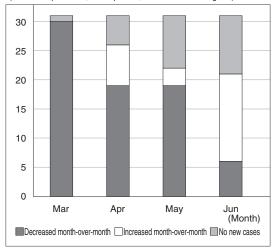
and 40 cases and Guangdong Province recording 87, 7 and 46 cases in April, May and June, respectively. Meanwhile, the number of new cases in Jiangsu Province remained close to zero, recording 7, 0 and 1 cases in April, May and June, respectively.

Although we cannot afford to be complacent against a "second wave" of COVID-19, the measures taken by the government to prevent the spread of the virus have made considerable progress so far, as the number of regions with no new cases is steadily increasing (Fig. 5), and the num-

ber of new cases as a percentage of the population has remained small given the large populations involved (21.54 million in Beijing, 24.28 million in Shanghai, 115.21 million in Guangdong Province, and 80.7 million in Jiangsu Province).

Fig. 5 Month-over-month Changes in the Number of New Confirmed Cases by Region

(Number of provinces, municipalities, and autonomous regions)



Source: Prepared by The Japan Research Institute, Limited based on CEIC

# (3) Response by the Government: From the Extension of the Spring Festival Holidays to Lockdowns

## 1) Designation as a "Specified Infectious Disease"

In China, the number of new COVID-19 cases in Hubei Province, which had been hovering around 40 per day, rapidly increased to nearly 300 in mid-January, while confirmed cases also emerged in Guangdong Province, Shanghai and Beijing, indicating the rapid spread of COVID-19. The first public announcement was published by the National Health Commission (NHC) on January 20 as the first policy announcement. The NHC, which is responsible for public health and medical care, designated COVID-19 as being subject to the Infectious Disease Prevention Law and the Border Health and Quarantine Law in its announcement. This meant that COVID-19 was designated as a so-called "specified infectious disease" in Japan.

According to the World Health Organization (WHO)<sup>(12)</sup>, the NHC reported a cluster of pneumonia cases of unknown etiology in Wuhan to

the WHO on December 31, 2019, and closed the seafood market in Wuhan, which was believed to be the infection source, on January 1. This was achieved quite quickly. The NHC identified the COVID-19 virus on the 7th and released its genetic sequence on the 12th, and also identified 763 close contacts, including medical workers, keeping them under observation<sup>(13)</sup>.

However, at this point, the NHC believed that the 41 confirmed cases were limited to the period between December 8, 2019 and January 2, 2020, that no new cases had been detected since January 3, and that there was no convincing evidence that human-to-human transmission of COVID-19 could easily occur. It is undeniable that this perception led to the subsequent pandemic. The initial response by the NHC was also viewed as being very slow and overlooking the outbreak, as a study based on genetic analysis had confirmed the spread of the virus to humans in the fall of 2019<sup>(14)</sup>.

The number of travelers who used railways, roads, waterways and airways during the six days from January 10 to 15, before the Chinese New Year, is said to have increased by 2.7% from the previous year to 440 million<sup>(15)</sup>. While the number of new cases reported in Hubei Province during that period did not increase beyond 41, it is clear that a significant number of infections went undetected. There is no doubt that their migration disseminated COVID-19 throughout China and the rest of the world.

In response to the first announcement, the Chinese government switched its policy to emergency mode and launched a series of measures. The following section focuses on measures that had a major impact on the economy, such as extension of the Spring Festival (Lunar New Year) holiday and lockdown, and summarizes how these measures were expanded.

#### 2) From the Extension of the Spring Festival Holiday to "Resumption of Work and Production"

One measure taken by the central government to stop the spread of COVID-19 was the extension of the Spring Festival (Lunar New Year) holiday. The Spring Festival holiday in 2020 was originally six days, from January 25 to 30, but the number of new confirmed cases per day jumped from 77 on the 20th, when the first announcement was made, to 688 on the 25th, five days later. The number of new cases also started to surge outside of Hubei Province. In response to this situation, the central government extended the Spring Festival holiday until February 2<sup>(16)</sup>. At the same time, local governments required those entering from Hubei Province to quarantine for two weeks, and those entering from other provinces to undergo a temperature check on arrival as well as a two-week observation period<sup>(17)</sup>.

While strengthening measures to prevent the spread of COVID-19, the central government urged local governments to set a date for "Resumption of Work and Production" in order to resume business activities according to circumstances. Regions except for inland areas with a small number of confirmed cases, such as the Tibetan Autonomous Region, Gansu Province, Xinjiang Uyghur Autonomous Region, and Qinghai Province, were scheduled to resume business activities on February 10, and Hubei Province on February 14<sup>(18)</sup>. In China, it is said that 300 million people started remote work after this time<sup>(19)</sup>.

However, the schedule for "Resumption of Work and Production" had to be readjusted in many regions thereafter. Guangdong Province realized its "Resumption of Work and Production" on February 10, but Shenzhen postponed its original schedule by one week to February 17<sup>(20)</sup>. By this time, the scheduling of "Resumption of Work and Production" was decided in smaller administrative units according to the local infection situation, with Jingdezhen in Jiangxi Province setting its date for "Resumption of Work and Production" on February 21<sup>(21)</sup>. In Hubei Province, March 10 was designated as the target date for all regions except Wuhan, and March 21 for Wuhan itself<sup>(22)</sup>.

As a result of the extension of the Spring Festival holiday and the adjustment of the "Resumption of Work and Production," companies were instructed to transfer a minimum of 6 and a maximum of 35 business days to holidays. During this period, there was widespread concern among em-

ployees about whether or not they would be paid. In response, the government clarified the following: those with valid labor contracts would be paid even if they were on stand-by at home; those whose labor contracts ended while they were on stand-by at home would be guaranteed around 70% of the minimum wage; wages would be guaranteed for persons who contracted COVID-19 and those subject to quarantine and no contracts would be terminated<sup>(23)</sup>.

#### 3) Expansion of Lockdown Measures and "Closed-off Management"

One measure that could have a significant economic impact, similar to extension of the Spring Festival holiday, is a "stay-at-home" order called a lockdown. Hubei Province, the epicenter of the COVID-19 outbreak, implemented lockdown measures by suspending public transportation operations in major cities, including buses, subways and railways, on January 23. The lockdown measures continued for 61 days until March 24 in cities other than Wuhan in Hubei Province and for 75 days until April 7 in Wuhan<sup>(24)</sup>. Lockdowns are effective in preventing the spread of the outbreak, but have a serious impact on the economy. Hubei Province's growth during the January-March 2020 period was minus 39.2%<sup>(25)</sup>, recording a decline that significantly exceeded the minus 6.8% seen for the entire nation.

On the other hand, large cities like Beijing and Shanghai, as well as coastal areas like Guangdong Province, announced that they would not implement lockdown measures. The government adopted the basic policy of "Block One, Not Three," that is, cutting off the route of spread of the virus, but not cutting off road, emergency transportation, and production and daily commodity transportation networks (26); and strengthened the inspection system by thoroughly checking people's temperature at the borders with other provinces and key points within the provinces in regions other than Hubei Province<sup>(27)</sup>. On the other hand, the government required people to wear face masks and check their temperature in specific autonomous residential associations called "Residential Communities," while strengthening so-called "Closedoff Management" by restricting the inflow of people from the outside (28).

"Closed-off Management" imposes far stricter curfews than those that were imposed in Japan under its state of emergency declaration. In Zhumadian in Henan Province, outings were restricted to only one person per household every five days<sup>(29)</sup>, and in Shenzhen, outings were restricted by issuing a travel permit<sup>(30)</sup>. Beijing banned couriers from entering apartments. "Closed-off Management" has contributed to prevention of the spread of COVID-19 by providing traditional self-governing associations called residential communities with a mutual monitoring function, similar to "neighborhood associations" in Japan that operated during the war. While "Closed-off management" is not considered to be a lockdown in China, Reuters reported that 48 cities in four provinces were effectively under lockdown as of February 14, with 500 million people restricted from free movement<sup>(31)</sup>.

The biggest challenge for the "Resumption of Work and Production" was how to redeploy workers who had returned to their hometowns during the Spring Festival holiday. According to the National Bureau of Statistics, the number of "peasant workers" who retain rural family registers and work in cities totaled 290 million as of 2019<sup>(32)</sup>. These workers make up 34.9% of the urban population and play a crucial role in manufacturing industries in coastal areas. Initially, receiving areas took measures such as requiring people coming in from the outside to quarantine for two weeks<sup>(33)</sup>, but both areas sending and receiving such workers ended up supporting their smooth return through mutual cooperation by issuing health certificates and arranging special trains<sup>(34)</sup>.

In March, while the number of new COVID-19 cases decreased in China, the spread of the outbreak overseas emerged as a challenge, and the government began to focus on how to prevent "backflow." On March 3, the Beijing government announced that anyone entering the country from South Korea, Italy, Iran, Japan, the United States, and any other countries with a significant number of COVID-19 cases, regardless of nationality, would be quarantined<sup>(35)</sup>. Similar measures were

adopted by many local governments, including Shanghai and Guangdong Province, which restricted the activities of companies that require foreign human resources, such those installing semiconductor manufacturing equipment.

## 4) Exit Strategy: Cross-referencing Regional Risks and Personal Information

In April, the Chinese government started to ease measures to prevent the spread of COVID-19 and came up with policies with an exit strategy in mind. First, the government took measures to ease quarantine requirements in accordance with regional risks. On April 18, the Beijing government announced that travelers from neighboring Tianjin and Hebei Province would not require quarantine measures provided they had not moved out of low-risk areas for the past two weeks<sup>(36)</sup>. People entering Beijing from other locations would not be quarantined if they tested negative in a PCR test performed within one week.

Risk assessment for each region is conducted at an administrative level that is equivalent to the county-level (level 3), following the provincial level (level 1) and prefectural level (level 2)<sup>(37)</sup>, and is divided into three categories based on the number of new cases confirmed over the past 14 days and the cumulative number of confirmed cases. Specifically, 1) low-risk areas are those where the cumulative number of confirmed cases remains at zero, or where no new cases have been confirmed in the past 14 days; 2) intermediate-risk areas are those where the cumulative number of confirmed cases is no more than 50 even though new cases have been confirmed in the past 14 days, or those where the cumulative number of confirmed cases exceeds 50 but no new cases have been confirmed in the past 14 days; and 3) high-risk areas are those where the cumulative number of confirmed cases exceeds 50, with significant clusters confirmed in the past 14 days (38). Although a simple comparison is not possible due to differences in the purpose of the system design, the condition in China requiring two consecutive weeks of zero confirmed cases in order to be designated as a low-risk area can be said to be more severe than in Japan, where the number of new infections over the past week must be around 0.5 per 100,000 people as one of the criteria for lifting its state of emergency declaration. In addition, since this information is linked to location information obtained from a smartphone, it can be confirmed at any time as needed, and is therefore effective in preventing people from approaching high-risk ar-

However, this is still not enough to completely contain the pandemic. The government has made clear its policy to contain the outbreak by not hesitating to quarantine a large number of close contacts or implement lockdowns. In Jiaxian in Pingdingshan, Henan Province, facilities other than hospitals and supermarkets were closed and public transportation services were suspended in response to the identification of two asymptomatic COVID-19 patients from a PCR test performed on medical workers at the end of March<sup>(39)</sup>. Such a move locking down an entire county with a population of 640,000<sup>(40)</sup> in response to only two confirmed asymptomatic cases can be said to be quite bold. On the other hand, Suifenhe in Heilongjiang Province<sup>(41)</sup>, and Jilin and Shulan in Jilin Province<sup>(42)</sup> saw a sharp increase in new cases acquired from returnees from Russia as the source of infection, leading to the reintroduction of "Closedoff Management." Quarantine measures have also been implemented widely. Shenyang, the capital of Liaoning Province, is said to have quarantined as many as 7,500 close contacts after three new cases were confirmed within the first five days of May<sup>(43)</sup>. Wuhan also responded to an increase in the number of asymptomatic cases by performing PCR testing on 9.98 million citizens by June 1<sup>(44)</sup>.

It appears that the Chinese government is taking an exit strategy to ease restrictions and deter a "second wave" at the same by: 1) creating an information management system that encourages individuals to act in a risk-averse manner by managing individual and regional risks on a network so they can refer to mutual risks at all times, while at the same time quickly determining the route of infection in the event of an outbreak; 2) utilizing the mutual monitoring function of residential communities to prevent the spread of the outbreak through "Closed-off Management;" and 3) introducing bold measures to prevent the spread of the outbreak, such as large-scale quarantines and lockdowns, even with a small number of new cases confirmed.

On the other hand, virus brought in from abroad is dealt with according to the infection situation of each country. The Heilongjiang provincial government, which shares the border with Russia, has tightened controls on the entry of returnees from Russia, which is a cause of the spread of COVID-19 in the north-east region, by thoroughly implementing inspection and quarantine measures at the time of entry, and by encouraging the reporting of illegal arrivals who circumvent the inspection with rewards as an incentive (45). On the other hand, with regard to South Korea, where the spread of COVID-19 was curtailed, the Chinese government eased restrictions on the entry of South Koreans on the condition that PCR tests are conducted in both China and South Korea so as to not hinder the resumption of business activities and capital investment. The Chinese government also made a similar proposal to Japan<sup>(46)</sup>.

#### Impact of the COVID-19 Pan-2. demic with Significant Variance

Due to the spread of the COVID-19 pandemic, China recorded negative growth of minus 6.8% in the January-March 2020 period (47). However, the range of fluctuations in economic indicators varies considerably based on region, time, and sector. Let's review the movements of each indicator up to May and view the outlook for the Chinese economy in the second half of the year.

#### **Growth Rate in the January-March Period Was Affected by Different Industrial Structures**

There is no precedent for China's negative quar-

terly growth even when we look back at the time of the Lehman Brothers collapse in 2008 or the Asian Financial Crisis in 1997 (Fig. 6). By supply category, primary industry saw a 3.2% decline, secondary industry saw a 9.6% decline, and tertiary industry saw a 5.2% decline. The spread of the COVID-19 pandemic affected not only secondary and tertiary industries but also primary industry. On the back of higher food prices, March's consumer price index (CPI) rose 4.3% year-on-year.

By sector, the manufacturing industry (down 10.2% year-on-year), construction industry (down 17.5% year-on-year), wholesale and retail industry (down 17.8% year-on-year), transportation and warehousing and postal industry (down 14.0% year-on-year), and accommodation and food services industry (down 35.3% year-on-year) all experienced significant declines. On the other hand, telecommunication, software and information technology services (up 13.2% year-on-year), which saw an increase in demand due to factors such as a rise in remote working, as well as financial services (up 6.0% year-on-year) remained robust.

As of March 11, Alibaba covered 120 million students with its distance learning application, called "Ding Talk" (48). Although the decline in

growth rate in regions with these emerging industries was restrained to a certain extent, regions that depend on such industries, such as the automobile industry, that had experienced a drop in demand due to the spread of COVID-19 and that had also faced supply concerns caused by disruption of the supply chain, were seriously affected.

As noted earlier, Hubei Province saw negative growth of minus 39.2% on a year-over-year basis in the January-March 2020 period. The cumulative number of COVID-19 cases in Hubei Province accounted for 80% of China's total, and lockdowns were implemented in major cities, which meant that the economy virtually ground to a standstill. By supply category, primary industry saw a 25.3% decrease, secondary industry a 48.2% decrease and tertiary industry a 33.3% decrease<sup>(49)</sup>, with secondary industry suffering the most serious impact.

Outside of Hubei Province, growth was down just 1-9%. Not all provinces publish their growth rates, but there is no clear correlation between the cumulative number of COVID-19 cases and a decline in growth rate (Fig. 7). For example, although Tianjin's growth rate was down 9.5% from a year ago, the cumulative number of COVID-19 cases as of the end of March stood at 174, a rela-

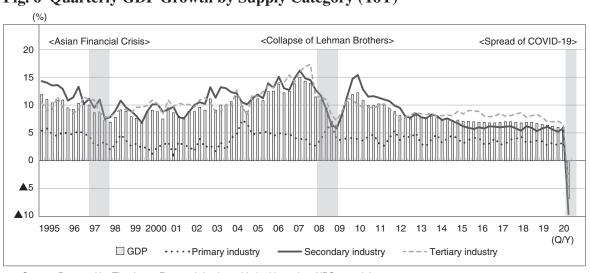
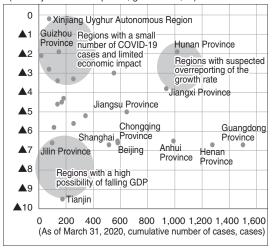


Fig. 6 Quarterly GDP Growth by Supply Category (YoY)

Source: Prepared by The Japan Research Institute, Limited based on NBS materials

Fig. 7 Correlation Between
Cumulative Number of
COVID-19 Cases and Growth
Rate

(January-March 2020 period, growth rate, %)



Notes: Hubei Province and some provinces that do not release growth rates have been excluded. Source: Prepared by The Japan Research Institute, Limited based on CEIC

tively small figure. This is because Tianjin is highly dependent on the petrochemical and automotive industries<sup>(50)</sup>.

Although the performance of enterprises in the industrial production sector deteriorated markedly in all industries, profits in the oil, coal, and other fuel processing industries and the automobile manufacturing industry in the January-March quarter fell by 187.6% year-on-year and 80.2% year-on-year, respectively, a decline that greatly exceeded the 36.7% decline seen in the entire industrial production sector<sup>(51)</sup>. The same can be said of Jilin Province, which saw its economic growth fall sharply despite a low number of confirmed cases. Like Tianjin, Jilin Province is highly dependent on petrochemicals and the automobile industry.

On the other hand, in some regions, the rate of decline in economic growth was limited despite a high cumulative number of COVID-19 cases. Because of its proximity to Hubei Province, Hunan Province is the fourth most infected province, but the rate of decline in economic growth is small, at

minus 1.9% year-over-year. By supply category, primary industry saw a 3.3% decrease, secondary industry a 3.0% decrease and tertiary industry a 1.0% decrease, recording a slight decline in each category.

Hunan Province did not provide reasons for this, but according to media reports, medical mask production rose 16.4 times from the same period last year, indicating growth in the manufacture of medical equipment, sanitary materials and pharmaceuticals<sup>(52)</sup>. In fact, Valin Steel Co., Limited, a state-owned steel company, shipped a large amount of medical supplies, including face masks and protective clothing, not only within China, but also exporting them to South Korea, India, Australia, and Spain<sup>(53)</sup>.

However, this alone cannot explain the small rate of growth decline. China's gross domestic product (GDP) announced by local governments, when added up, exceeds the national growth rate announced by the central government, so overreporting has become a habit (Miura [2013]). Hunan Province, for example, is highly suspect, and the same could be said of Jiangxi Province, which has the fifth largest cumulative number of COVID-19 cases.

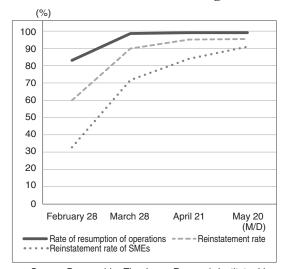
Regions can be divided into the following groups based on their characteristics: 1) regions such as Tianjin and Jilin Province, which are highly dependent on the automobile industry and whose growth rate has tended to decline; 2) regions with suspect statistical credibility, such as Hunan Province; and 3) regions such as the Xinjiang Uighur Autonomous Region, where the number of confirmed cases has been small, along with its growth rate decline. Excluding these regions, the growth rate of many regions in the January-March period was around minus 5% on a year-on-year basis, regardless of the cumulative number of COVID-19 cases.

This is because the growth rate is affected not by the number of confirmed cases, but by the decline in operating rates due to the extension of the Spring Festival holiday and suspension of operations until the "Resumption of Work and Production." As a result, little difference in the rate of growth decline can be identified due to factors other than differences in industry structure, represented by the automobile industry and the IT industry. If this is the case, the most important task facing the Chinese government will be to increase enterprise operating rates.

The Ministry of Industry and Information Technology (MIIT) surveyed the movement of enterprises in the industrial production sector toward resumption of their business activities. As of March 28, the rate of resumption of operations by enterprises above a certain size rose by 15.5% points from February 23 to 98.6% for the national average, and the reinstatement rate rose by 38% points from February 23 to 89.9% (54). As of May 20, the resumption rate rose further to 99.1% and 95.4%, respectively (55), approaching the level seen before the COVID-19 outbreak (Fig. 8).

In line with this, some economic indicators for the supply side in April and May, which will be discussed later, have returned to levels similar to those in the same months of the previous year. This has led to the emergence of optimism regarding the future outlook in China. While the growth rate of major developed countries in the April-

Fig. 8 Movement Toward Resumption of Operations by Enterprises in the Industrial Production Sector (National Average)



Source: Prepared by The Japan Research Institute, Limited based on local media reports

June period is expected to drop further compared to the January-March period, only China's growth rate is expected to turn positive in the April-June period. Moreover, China's growth rate is predicted to grow faster than the IMF forecast for the whole year.

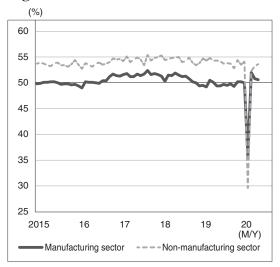
#### (2) Supply Side: Corporate Performance Recovers Slowly

The bullish outlook is based on the expectation that economic indicators, which fell sharply in February but recovered in March, will remain at virtually the same levels as the previous year even after April. This expectation became more realistic when the Purchasing Manager's Index (PMI) of companies showed a clear V-shaped recovery path.

The PMI, which is used to gauge business confidence based on corporate buyer surveys, fell to 35.7% in the manufacturing sector and 29.6% in the non-manufacturing sector in February, recording their steepest drops since 2005 when statistics were first recorded. The PMI for both sectors, however, returned to a level exceeding the 50-mark, which separates growth from contraction, as early as in March (Fig. 9). It should be noted, however, that the PMI tends to show an upward trend compared to other economic indicators since it asks how new orders, production, and employment have changed compared to the previous month<sup>(56)</sup>.

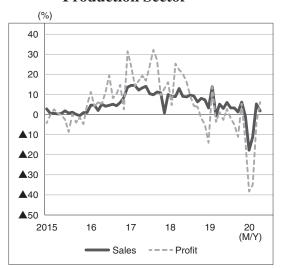
Compared with the PMI, the pace of recovery in corporate earnings in the industrial production sector has been slower. Revenue and profit for the January-February period fell 17.7% and 38.3%, respectively, on a year-on-year basis. Revenue and profit also fell 11.0% and 34.9%, respectively, in March from a year earlier, indicating slower recovery compared to that of the PMI (Fig. 10). While many of China's economic indicators show year-on-year growth rates based on cumulative figures from the beginning of the year, it is difficult to determine single-month growth. This paper calculates the year-on-year growth rate for each

Fig. 9 China's PMI



Source: Prepared by The Japan Research Institute, Limited based on NBS

Fig. 10 Earnings of Enterprises Above a Certain Size in the Industrial Production Sector



Notes: Sales are calculated based on revenues from principal operations until 2018 and operating revenues from 2019 onward. The data for the January-February period is based on a comparison with the same period of the previous year, and that for March and subsequent months is based on a comparison with the same month of the previous year.

Source: Prepared by The Japan Research Institute, Limited based on NBS materials

month by subtracting the cumulative value until the previous month from the cumulative value for that month.

Enterprises in the industrial production sector saw their rate of resumption of operations reach 98.6% at the end of March, so business activities were expected to return to the same level as the previous year after April, but the pace of recovery remained slow. In April, while revenue was up 5.3% year-over-year, profits were down 4.3% year-over-year, continuing on a declining trend. In May, profits were up 6.0% year-over-year but revenue was up a mere 1.8%, a sharp drop from the previous month. This indicates that corporate earnings remain unstable and that the outlook is not bright.

In China, since the latter half of 2018, the rate of profit growth has been lower than the rate of sales growth, with a rate of profit growth in 2019 that was minus 3.3% compared to the previous year. Therefore, even if the rate of profit growth returns to that before the COVID-19 pandemic, corporate performance will remain sluggish. Given the slow recovery in corporate earnings, it is unreasonable to expect that China will be able to achieve economic growth exceeding the IMF forecast for the full year.

Automobile sales were down 79% year-on-year in February and down 43.3% year-on-year in March, but were up 4.4% year-on-year in April<sup>(57)</sup>. In May, automobile sales were up 11.0%, thus achieving a V-shaped recovery<sup>(58)</sup>. However, this was largely due to the government's implementation of measures to stimulate demand. Through implementing a vigorous policy to stimulate consumption and investment, the government is able to boost the performance of some companies temporarily, but expanding the effect to entire industries and making it sustainable is very difficult.

#### (3) Demand Side: Recovery of Personal Consumption Will Take Time

## 1) Investment Has Been Driven by State-owned Enterprises

Investment is the second most visible indicator of a V-shaped recovery following PMI. Growth in

fixed asset investment declined 24.5% year-onyear in the January-February 2020 period. At the time of the Lehman Brothers collapse, investment increased rather than decreased, in order to boost economic recovery. Even if we go back to 1998, there had been no examples in which investment growth rate recorded a double-digit decline, indicating that China had never experienced such a situation. Fixed asset investment, however, fell 9.4% in March, rose 0.7% in April, and maintained positive growth of 3.9% in May<sup>(59)</sup>.

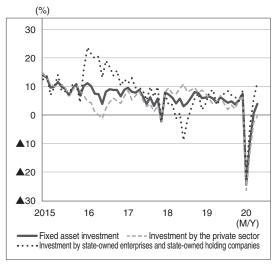
This was driven by investment by state-owned enterprises and state-owned holding companies, which accounted for 40% of the total. Private investment, which accounted for 60% of total investment, continued to decrease by 0.5% compared to the same month last year. On the contrary, investment by state-owned enterprises and state-owned holding companies in April increased by 5.8%, returning to the level seen before the COVID-19 outbreak, and increased by 11.3% in May, marking its highest growth in three years (Fig. 11).

Looking at the growth rate for fixed asset in-

vestment by region in the January-April 2020 period, the pace of recovery was faster than for other economic indicators. For example, investment in seven provinces, municipalities, and autonomous regions has already turned positive. Specifically, investment in the Tibetan Autonomous Region increased by 11.3% year-on-year, while investment in the Xinjiang Uygur Autonomous Region increased by 19.1% year-on-year, with both regions recording double-digit growth. While 26 provinces, municipalities, and autonomous regions recorded a year-on-year decline in growth exceeding minus 10% in the January-February period, the number of such provinces, municipalities, and autonomous regions decreased to seven in the January-April period (Fig. 12). This indicates that March or April's year-on-year growth rate turned positive in many regions.

In regions where investment in fixed assets is recovering rapidly, the ratio of investment in fixed assets by state-owned enterprises is high, indicating that the government is driving investment. Unlike private consumption, investment can be easily increased according to the government's wishes,

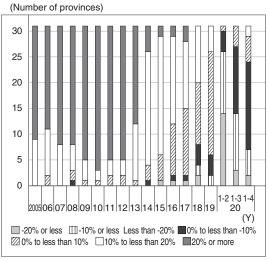
Fig. 11 Growth in Fixed Asset Investment



Notes: Investment by state-owned enterprises and stateowned holding companies is calculated by deducting investment by the private sector from total investment.

Source: Prepared by The Japan Research Institute, Limited based on NBS materials

Fig. 12 Classification of Regions Based on Year-on-Year Growth in Fixed Asset Investment



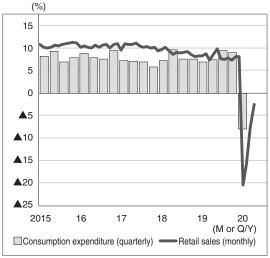
Source: The Japan Research Institute, Limited based on CEIC

and it also has the advantage that it is likely to have an effect on economic growth. In addition, local governments are striving to control the spread of infection and achieve a quick economic recovery, as the success of their measures determines their superiority or inferiority. Therefore, the scheme of economic recovery by increasing investment is expected to spread throughout China and become an engine supporting the Chinese economy in the second half of the year.

## 2) Private Consumption: The Shift from Spending to Saving

Although demand-side economic indicators are not as weak as supply-side indicators, the pace of recovery is slow. Household consumption in the January-March period declined 8.2% from the same period last year due to the imposition of curfews. As a result, retail sales reflecting personal consumption declined by 20.5% year-on-year in the January-February period and by 15.8% year-on-year in March. Retail sales have been weak since then, with April down 7.5% year-on-year and May down 2.8% year-on-year, taking time to return to the same levels as the same period of the previous year (Fig. 13). Even going back as far

Fig. 13 Growth in Consumption Expenditure and Retail Sales



Notes: Nominal basis

Source: Prepared by The Japan Research Institute, Limited based on NBS

back as 2000, there were no examples in which retail sales growth was negative for five consecutive months.

The economic contraction caused by COV-ID-19 differs from that of the Lehman Brothers collapse in that it involves a loss of domestic demand due to the imposition of curfews. Therefore, the growth rate in the second half of the year will largely depend on to what extent personal consumption recovers. China is highly dependent on investment, with personal consumption accounting for 38.8% of GDP in 2019, which is lower than fixed capital formation of 42.4%. If personal consumption becomes the driving force in the post-COVID-19 economy, China can enhance the sustainability of its economic growth while shifting from an investment-led economy to a consumption-led one. The shift to a consumptionled economy is one of the most desirable recovery patterns, as it is a policy issue that the Xi Jinping administration has considered essential to enhance the sustainability of economic growth.

In China, many regions issue gift certificates to boost personal consumption as a trigger for economic recovery. As of mid-May, gift certificates were issued in 170 cities in 25 provinces, municipalities, and autonomous regions, with the total amount issued believed to have reached 19 billion yuan. In some regions, it is said that the certificates stimulate consumption and industrial reconstruction<sup>(60)</sup>. Issuance amounts vary widely by city, with the largest of 2.3 billion yuan in Wuhan, followed by Wenzhou (1.8 billion yuan), Hangzhou (1.7 billion yuan) and Shenzhen (600 million yuan) (61). Because the gift certificates are funded by local governments, the amount issued is not very large, with even the largest amount issued by Wuhan, for example, representing only 2.3% of the city's retail sales in the January-March period.

Another reason for rising expectations for personal consumption is that Chinese consumers feel positively about consumption despite the spread of COVID-19. The Consumer Confidence Index, a measure of the confidence of consumers concerning economic conditions, declined by 5.6% year-on-year in February, by 1.5% year-on-year in March, and by 7.1% year-on-year in April. How-

ever, the decline was by a smaller margin than seen in 2016, when excessive capacity and debt reduction were urgently needed (Fig. 14).

A Consumer Confidence Index over the 100-mark indicates that consumers are optimistic about the future. In China, the ratio has remained at a high level of over 120 since the latter half of 2017. According to organizations such as Ipsos, which study the consumer confidence indices of major countries, including China, although China's index fell as a result of the COVID-19 outbreak, Chinese consumers still remain the most active in the world given the fact that the original level of the index was so high<sup>(62)</sup>.

Even in China, many people believe that personal consumption is the key to Chinese economic recovery<sup>(63)</sup>. In fact, the number of searches for travel during the long weekend in early May in China is said to have increased by 70% compared to the same period last year<sup>(64)</sup>, indicating the expectation of an early recovery in personal consumption. On the other hand, the number of tourists who actually traveled during the long weekend was only 47% of the previous year's figure, while per-capita spending was only 69%. Some

Fig. 14 China's Consumer Confidence Index and Growth



Source: Prepared by The Japan Research Institute, Limited based on CFIC

believe that many people will refrain from traveling until the "National Day" holiday in October (McKinsey [2020a]). There are differing views on the outlook regarding personal consumption.

Personal consumption depends on to what extent the employment and income environment improves. In the January-March period, the number of new jobs in urban areas was just 2.29 million, down 950,000 from the same period last year<sup>(65)</sup>, resulting in a rise in the March unemployment rate by 0.9% points year-on-year to 5.9%. The fact that consumption expenditure in the January-March period fell by 12.5% from the same period of the previous year, significantly exceeding the 3.9% decrease in disposable income (on a real basis, respectively)<sup>(66)</sup> suggests that there is great uncertainty among households about future employment and income. At the National People's Congress (NPC) held in May, targets were set to create 9 million new jobs in urban areas and lower the urban surveyed unemployment rate to around 6% in 2020. The urban surveyed unemployment rate was 6.0% in April and 5.9% in May, which were close to the target rate, but there is no sign that it will return to the lower 5% level that was seen before the COVID-19 outbreak. The unemployment rate estimated by private companies is much higher than the government's official figure, which suggests that households are experiencing an unprecedented level of uneasiness.

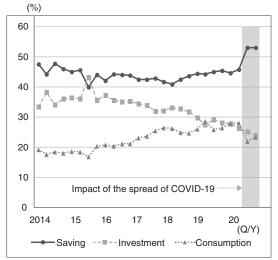
The Bank of Australia and New Zealand (ANZ) estimates unemployment at around 16% if those who reluctantly work part-time are included<sup>(67)</sup>, while Zhongtai Securities estimates that the number of unemployed persons exceeds 70 million, with an unemployment rate of 20.5%, due to the sluggish service sector and drop in exports<sup>(68)</sup>. It is reasonable to assume that households are curbing consumption because the employment and income situation has deteriorated more than what is indicated by the government's official unemployment rate.

The reason why the Consumer Confidence Index in China remains at a higher level than in other countries despite the COVID-19 pandemic is due to the unique Chinese practice of information control<sup>(69)</sup>. Therefore, it is not possible to

replace the index with the actual consumer confidence value. Premier Li Keqiang said in the NPC that "The Chinese have never been discouraged by hardships, and today, Chinese people have resilience and the ability to overcome any challenge." (70). Although such propaganda serves to boost the Consumer Confidence Index, it cannot actually increase consumer confidence in a real sense.

According to a survey by the People's Bank of China, the preference of city depositors for savings increased rapidly during the January-March 2020 period (Fig. 15). Even if measures to prevent the spread of COVID-19 work at the national level, households still face the risk of large-scale quarantines and lockdowns at the regional level, making it difficult for households to retain a positive outlook on employment and income. Even though this situation is expected to continue, the idea that individual consumption will support the economy in the second half of the year can be considered to be overly complacent given the situation that consumers face. Rather, it is necessary to be wary of the possibility that slow recovery

Fig. 15 Usage of Money in the Future (Report Based on the Questionnaire for City Depositors by the People's Bank of China)



Source: Prepared by The Japan Research Institute, Limited based on CEIC

of personal consumption could lead to a vicious circle in which job insecurity becomes prolonged and consumers become more savings-oriented.

In order to make personal consumption a driving force for the Chinese economy, temporary measures to stimulate consumption, such as the distribution of digital gift certificates, are not sufficient, and fundamental measures to dispel anxiety about the future through expansion of the social security system and lowering the preference for savings are necessary (Miura [2010]). Although China has approached "universal insurance" through the expansion of its social insurance system, it is still considered "low security," with the exception of public servants and those employed by state-owned enterprises, and is vulnerable to the risks of unemployment, illness and aging. The government should reduce the preference for savings by solving this problem, but instead, it has come up with a policy that heightens anxiety about the future, such as deteriorating the balance of funds that support the social security system by reducing social insurance premiums<sup>(71)</sup>.

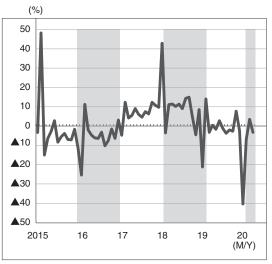
## 3) Exports: Shipments to the United States and Europe Have Slumped Again

Exports, like investment, is an economic indicator that tends to show rapid recovery. Manufacturing industries around the world, including those in Japan, such as automobiles and personal computers, realized anew the extent of China's presence in the supply chain, as evidenced by the shortage of parts that arose due to the shutdown of Chinese factories. However, the decline in Chinese exports was limited.

While exports decreased by 40.4% year-on-year in February 2020, they turned positive and increased by 3.5% year-on-year in April after recording a decline of 6.8% year-on-year in March (Fig. 16).

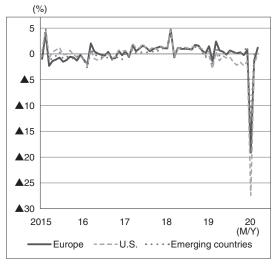
This was due to the fact that exports, which had been delayed, began moving again as a result of the resumption of plant operations, as seen in the sharp recovery of the new export orders index for March's manufacturing PMI from 28.7% in February to 46.4%. It was also fortunate that export capacity did not decline due to the absence of

Fig. 16 Growth in Exports



Source: Prepared by The Japan Research Institute, Limited based on NBS materials

Fig. 17 Growth in Exports by Country and Region



Source: The Japan Research Institute, Limited based on CEIC

large-scale COVID-19 outbreaks in the coastal regions such as Guangdong Province, Jiangsu Province, and Zhejiang Province. The three provinces account for 28.8%, 16.1%, and 13.6% of total exports, respectively. Meanwhile, the total number of new confirmed cases in the three provinces stood at 1,864 in February, 219 in March, 105 in April, 7 in May and 48 in June, which contributed to steady progress in "Resumption of Work and Production."

By item, exports of mainstay products have been recovering rapidly since the beginning of April. Exports of yarn, fabric and textile products (SITC 65) grew by only 0.8% year-on-year in the January-April period, but by 50.5% year-on-year in April alone. Similarly, exports of office equipment and automated data processing equipment (SITC 75) saw a 5.4% decline year-on-year in the January-April period, but grew 26.3% year-on-year in April alone.

By country and region, exports in the January-February period to the EU were down 29.9% year-on-year, those to the United States were down 27.4% year-on-year, and those to emerging countries were down 13.2% year-on-year, indicating sluggish exports to all destinations. However, this was largely due to factors pertaining to China,

as the number of working days decreased following the extension of the Spring Festival holiday. In fact, the "Resumption of Work and Production" brought March exports back to the same level as the previous year, while April saw a slight increase in exports, with a 1.2% year-over-year increase in exports to Europe, and a 0.1% year-over-year increase in exports to the United States (Fig. 17).

Whether exports will continue on a steady recovery track depends on the extent to which the economies of the recipient countries and regions recover. According to the IMF's forecast in June, the growth rate of emerging and developing countries in 2020 will be minus 3.0%, that of the United States will be minus 8.0%, and that of the EU will be minus 10.2%. It is highly likely that exports, which appear to have recovered, will turn downward again in the future.

In fact, May's exports fell 3.0% from a year earlier. The new export orders index of China's manufacturing PMI, which recovered to 46.5% in March, fell again to 33.5% in April, and sank well below the 50-mark to 35.3% in May. As the United States prioritized economic resumption, the number of new COVID-19 cases, which had been on a declining trend, began to increase in mid-

June. The same could happen in European countries. It is unrealistic to think that exports would grow so fast that they would be able to support economic recovery in the second half of the year.

## 3. Is a V-shaped Recovery within 2020 Achievable?

China believes that it can achieve high economic growth as a result of its remarkable success in preventing the spread of COVID-19. After introducing some of these viewpoints, the feasibility of such an idea will be examined from the viewpoints of personal consumption and investment. The risk of sticking to a V-shaped recovery is also reviewed.

# (1) Recovery Faster than the IMF Forecast: Emphasis on "Institutional Advantage"

Under the basic scenario by the IMF, the growth rate of the world economy, as well as that of China, would decline significantly in 2020, but in 2021, the growth rate would inevitably rise in reaction to this decline and a V-shaped recovery would be achieved. This scenario, of course, depends on the effectiveness of measures taken by each country to prevent the spread of COVID-19 and the success of the development of drugs and vaccines. Looking at the annual results, many countries are expected to follow a recovery path somewhere between a V and L shape, if not the classic V-shaped recovery (refer to Fig. 1 above).

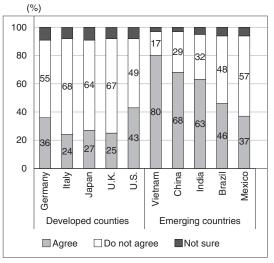
The IMF's economic forecast that China alone would achieve positive growth in 2020, while other major countries would fall into negative growth, has been widely introduced in China, and is positioned as one of the grounds for the "institutional advantage" in which the leadership of the Communist Party and the superiority of the socialist system played an important role<sup>(72)</sup>. This system

includes not only measures to prevent the spread of the virus, but also the rule of the Communist Party, which is described as "national capitalism."

The publicity effect of the "institutional advantage" is great, and expectations for early recovery of the economy are remarkably high in China compared to other countries with few confirmed cases. According to an opinion poll conducted by Ipsos in early April, 70% of people in China think that the economy will recover rapidly after the easing of lockdown measures (Fig. 18). This is the second highest expectation rate following Vietnam, which has virtually contained the spread of COVID-19 completely, with the cumulative number of cases at 355 and zero deaths during the period between January 23, when the first case was identified, and end-June. This expectation rate substantially exceeds that of Japan at 30%.

One of the most striking features of the economic recovery in China is that the country is expected to achieve a V-shaped recovery in 2020, not 2021. Professor Cao Heping of Peking University predicts that the Chinese economy will re-

Fig. 18 The Economy Will Recover Rapidly After the Easing of Lockdown Measures (Opinion Poll)



Notes: The poll was conducted between April 9 and 12 in 15 countries, targeting 29,000 people in total. Source: Prepared by The Japan Research Institute, Limited based on Ipsos materials cover in the second half of the year, with a growth rate of 3% in 2020, which is higher than the IMF's forecast<sup>(73)</sup>. At the same time, Liu Shangxi, President of the Chinese Academy of Fiscal Science, a think tank under the Ministry of Finance, said that China can grow by 2-3%<sup>(74)</sup>. Furthermore, Justin Lin Yifu, former chief economist at the World Bank, added that the growth rate would turn positive for the April-June period, and eventually grow by 3-4%<sup>(75)</sup>.

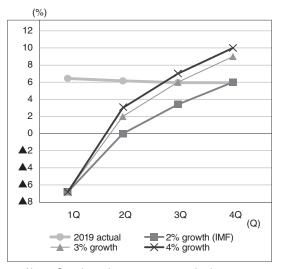
Similar views have been expressed outside of China. Deloitte projected full-year growth of 3.0-3.5% at the end of April<sup>(76)</sup>. This was quickly introduced in China as well, and served to show that the "institutional advantage" advocated by the Xi Jinping administration was not self-praise at all. In China, it is often reported that advanced countries, including Japan, will fall into negative growth, but pessimistic views about China are rarely introduced. For this reason, the notion of "institutional advantage" has been adopted naturally among the people.

However, it is not easy to achieve growth that exceeds the IMF's expectations. I estimated how much growth would be required after the April-June period in order to achieve the IMF's forecast of 1.0% and the Chinese forecast of 3% and 4% based on the assumption that the growth rate would continue to increase every quarter. In order to achieve 3% growth, it is necessary to return to positive growth of 2% for the April-June period and subsequently achieve growth of 6% and 9% for the July-September period and October-December period, respectively.

Growth of 4% will raise the bar even further, requiring 3%, 7% and 10% growth for the respective periods (Fig. 19).

This is not a feasible level given that outbreaks are still occurring (albeit sporadically), that social distancing is still necessary to prevent the spread of the virus, and that economic activities similar to those before the COVID-19 outbreak are difficult at the individual and corporate level.

Fig. 19 Quarterly Economic Growth for 2020



Notes: Growth rate is on a year-on-year basis. Source: Prepared by The Japan Research Institute, Limited based on NBS materials

#### (2) Personal Consumption Based on Data: "The 90% Consumption" Has **Become the New Normal**

In 2020, all developed countries are anticipated to record negative growth, and in emerging and developing countries such as South America and Africa, infection is also likely to spread. Given this situation, only personal consumption and investment can be expected to drive the economy in the second half of the year. But the stimulus package presented by the NPC was not strong enough to support a V-shaped recovery.

Among the policies announced by Prime Minister Li Keqiang at the NPC, those with specific budgetary measures and numerical targets are as follows: 1) burdens will be reduced by 500 billion yuan through new tax cuts and a reduction in social security fees, and by 2.5 trillion yuan via the delay of income tax payments by small and medium-sized enterprises and self-employed persons; 2) issuance of special local bonds will be increased by 1.6 trillion yuan to 3.75 trillion yuan in order to make investments within the central budget of 600 billion yuan; and 3) major banks will be directed to increase their lending to small and medium-sized enterprises by 40%. In addition, the budget deficit will be increased by 1 trillion yuan from the previous year, and special government bonds to combat infectious diseases totaling 1 trillion yuan will be issued.

Although a comparison with the previous year is not straightforward, the economic stimulus package for 2020 will total 7.2 trillion yuan, including a grace for tax payments. Although this figure is higher than the 4 trillion yuan at the time of the Lehman Brothers collapse, it is only 7.2% of GDP and about half of the 12.5% indicated at that time. Premier Li Keqiang sees the package as an attempt to ease the decline in household income<sup>(77)</sup>, but it is unclear to what extent it will stimulate consumption by households, which are reducing their spending by more than the decline in income.

It is difficult to predict the future of personal consumption if we rely solely on government statistics. Various studies have been conducted by private companies and universities on how the spread of the COVID-19 infection will change consumer behavior. I would like to predict the future based on these studies.

The first is the Migration Index ("迁徙规模指数" in Chinese) by Baidu, China's largest search engine<sup>(78)</sup>. The index is based on personal location data obtained from smartphones, and shows the extent to which personal mobility is limited compared to the previous year on a daily basis. The index was originally developed to reveal population movements during the Spring Festival holiday, but was used in 2020 to confirm the routes by which the virus spread as well as the effectiveness of curfew measures.

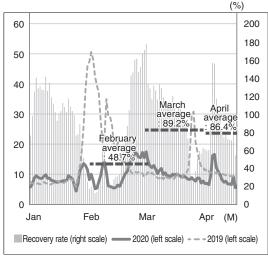
The index is also closely related to personal consumption. Although curfews increase the weight of online consumption, mobility and consumption are closely linked. According to Baidu's "China Urban Vitality Research Report," the scale of people's movements in China as a whole declined sharply after the NHC's first announcement on January 20, followed by a gradual recovery, but the January-March period saw a 58% decrease from the same period last year. This is in line with the consumption dynamics that Baidu is research-

ing with China UnionPay (Baidu [2020]), and there appears to be a positive correlation between the two.

Baidu stopped releasing the Migration Index in early May as the economy began to normalize. In reality, however, there is no sign of a return to the level in April of last year. Regarding Guangdong Province, where the largest number of migrant workers come and go, the recovery rate was calculated by dividing the index in 2020 by the value in 2019. Based on this calculation, the recovery rate in March was 89.2% on average, up sharply from 48.7% in the previous month; however, the recovery rate in April was 86.4%, with a slight decline month-over-month (Fig. 20). Since the number of new COVID-19 cases in Guangdong Province stood at 829 in February, 152 in March and 87 in April, the movement of people is not necessarily correlated with the number of new confirmed cases. In Guangdong Province, the 90% level of personal consumption compared with the level prior to the COVID-19 outbreak, or in other words, the "90% consumption," is becoming the new normal.

The reason why the movement of people does

Fig. 20 Migration Index for Guangdong Province (Comparison Between 2019 and 2020)



Notes: Data for April is until the 18th. Source: Prepared by The Japan Research Institute, Limited based on Baidu materials not correspond with the number of new COV-ID-19 cases is that the measures for preventing the spread of the virus will remain in place for a while even after the number of new cases has decreased, and that people remain strongly vigilant against the spread of the virus, as seen in the large-scale outbreak in Beijing in June where there were no new infections. People's movement and consequent consumption should not naturally increase even when entering a phase where the outbreak is contained, but instead should be considered to depend on people's mental state, which affects how they assess the risk of infection.

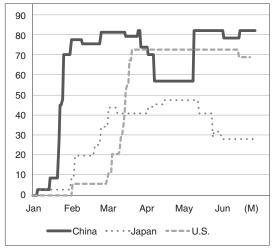
As a second data point, I would like to note the Stringency Index by Oxford University. This index is an arithmetic mean based on the degree of restriction on individuals, schools, and companies, with a higher value indicative of more stringent restrictions (Hale, Angrist, Kira, Petherick and Phillips [2020]). In China, the index remains high despite a decline in new infections, with little changes since March (Fig. 21). In late June, the index stood at 82, higher than the 28 seen in Japan and 69 in the United States. Although China was among the first countries to move toward nor-

malization in response to a decline in the number of new confirmed cases, it has maintained tighter restrictions than Japan following its state of emergency declaration.

How will households behave in this environment? Finally, I would like to share the results of questionnaire surveys conducted by several universities. The Southwest University of Finance and Economics, which has a good reputation for surveying household financial assets, and the Ant Financier Group, an affiliate of Alibaba, conducted an online survey of about 30,000 people from late February to early March, when the number of COVID-19 cases was starting to settle down, and clarified the impact of the spread of COVID-19 on household income, expenditure and assets (Survey and Research Center for China Household Finance at the Southwest University of Finance and Economics and Ant Financial Group Research Institute [2020]).

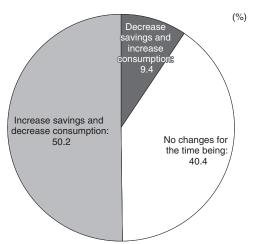
According to the survey, while 58.8% of respondents believed that the Chinese economy would start to recover within six months, 50.2% placed priority on saving rather than consumption (Fig. 22). Households are optimistic about the na-

Fig. 21 Stringency Index by Oxford University (Comparison of Japan, U.S. and China)



Source: Prepared by The Japan Research Institute, Limited based on the Oxford COVID-19 Government Response Tracker

Fig. 22 Household Propensity to Consume/Save After COVID-19 is Contained



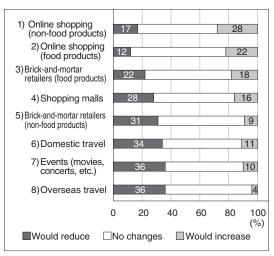
Source: The Japan Research Institute, Limited based on the Survey and Research Center for China Household Finance at the Southwest University of Finance and Economics, and Ant Financial Group Research Institute [2020] tional economy, but that does not mean they will increase consumption. This result is consistent with the survey of city depositors conducted by the People's Bank of China, which was mentioned earlier in this report, and proves that households' appetite for consumption has declined due to the COVID-19 pandemic.

A similar survey conducted by Shanghai University of Finance and Economics between the end of March and the beginning of April found that 61.9% of respondents had shifted their focus to saving due to the spread of COVID-19 (Lee [2020]). The study found that 54.7% of people would bring consumption back to the previous level "after the outbreak is contained," but no one knows when the "outbreak will end" as a result of the development of vaccines and drugs. Even if the situation where there are no new infections continues in China, there is always a risk that the virus will be brought in from abroad.

According to a survey of Chinese consumers conducted by McKinsey in May, when asked whether they would increase consumption in 1) online shopping (non-food products), 2) online shopping (food products), 3) brick-and-mortar retailers (food products), 4) shopping malls, 5) brick-and-mortar retailers (non-food products), 6) domestic travel, 7) events (movies, concerts, etc.), and 8) overseas travel, the number of answers with "Would increase" exceeded the answers with "Would reduce" only in 1) online shopping (non-food products) and 2) online shopping (food products), and the number of answers with "Would reduce" exceeded the number of answers with "Would increase" in other items (Fig. 23).

The survey was conducted at a time when the number of new COVID-19 cases per day had fallen to five. Nonetheless, given the fact that consumers remained cautious about spending, people remain strongly guarded with respect to COV-ID-19, and this attitude will not easily change going forward. The major outbreaks in Beijing and the spike in the number of new cases in June surely had a negative impact on consumer sentiment, which had been improving up until then.

Fig. 23 Consumer Sentiment Survey in China



Source: Prepared by The Japan Research Institute, Limited based on McKinsey [2020b]

#### (3) Return to an Investment-led Economy: Risks of "Old Wine in a New Bottle"

If the government attempts to raise the economic growth rate for 2020 to a level higher than the IMF's forecast amid a situation where private consumption has not returned to the level "prior to the COVID-19 outbreak" and external demand cannot be expected, it will eventually have to rely on investment. Will China return to an investment-led economy as a result of the COVID-19 outbreak? The key is how much growth the government expects and how much investment it will carry out to achieve it.

In May, the NPC did not set a growth target for 2020. As General Secretary Xi Jinping showed during a meeting with the NPC delegation from Inner Mongolia, the government had been planning on a target of around 6% year-on-year growth if COVID-19 had not been a factor (79). This is supported by growth targets set by local governments. Most provinces had already finished their people's congress before the NHC's first announcement, but they had set a target of around minus 0.5% points year-on-year (Table 2).

Table 2 GDP Targets and Actual Results by Region

	ces, municipalities, itonomous regions	2020 target	Date of people's congress	2019 target	2019 actual	Achievement rate (±0.5%p)
1	Guangdong	Around 6%	January 15	6.0-6.5%	6.2%	0
2	Jiangsu	Around 6%	January 22	6.5% or higher	6.1%	0
3	Shandong	6%	January 18	6.5%	5.5%	×
4	Zhejiang	6.0-6.5%	January 12	Around 6.5%	6.8%	0
5	Henan	7%	January 10	7.0-7.5%	7.0%	0
6	Sichuan	National average + around 2%	May 9	Around 7.5%	7.5%	0
7	Hubei	Around 7.5%	January 13	7.5-8.0%	7.5%	0
8	Fujian	7.0-7.5%	January 12	8.0-8.5%	7.6%	0
9	Hunan	Around 7.5%	January 13	7.5-8.0%	7.6%	0
10	Shanghai	Around 6%	January 16	6.0-6.5%	6.0%	0
11	Anhui	Around 7.5%	January 12	Around 6.5%	7.5%	0
12	Beijing	Around 6%	January 12	6.0-6.5%	6.1%	0
13	Hebei	Around 6.5%	January 7	Around 6.5%	6.8%	0
14	Shaanxi	Around 6%	January 17	7.5-8.0%	6.0%	×
15	Liaoning	Around 6.5%	January 13	National average	5.5%	×
16	Jiangxi	Around 8%	January 15	8.0-8.5%	8.0%	0
17	Chongqing	6%	January 11	6%	6.3%	0
18	Yunnan	National average	May 10	Around 8.5%	8.1%	0
19	Guangxi	6.0-6.5%	January 12	Around 7%	6.0%	×
20	Inner Mongolia	Around 6%	January 26	Around 6%	5.2%	×
21	Shanxi	Around 6.1%	January 13	Around 6.3%	6.2%	0
22	Guizhou	Around 8%	January 15	Around 9%	8.3%	×
23	Tianjin	Around 5%	January 16	Around 4.5%	4.8%	0
24	Heilongjiang	Around 5%	January 12	5% or higher	4.2%	×
25	Xinjiang Uyghur	Around 5.5%	January 7	Around 5.5%	6.2%	0
26	Jilin	5-6%	January 13	5-6%	3.0%	×
27	Gansu	6%	January 11	Around 6%	6.2%	0
28	Hainan	6.5%	January 15	7.0-7.5%	5.8%	×
29	Ningxia Hui	Around 6.5%	January 11	6.5-7.0%	6.5%	0
30	Qinghai	6.0-6.5%	January 15	6.5-7.0%	6.3%	0
31	Tibet	Around 9%	January 7	Around 10%	8.1%	×

Notes: The data is in descending order of economic scale, and the evaluation of achievement is indicated by "O" in cases where the actual results are within ±0.5% points of the target, "©"in cases where the actual results exceed the target by +0.5% points, and "x" in cases where the actual results are below the target by -0.5% points.

Source: Prepared by The Japan Research Institute, Limited based on local media reports and NBS materials

The central government's decision not to set a growth target left local governments' January target in limbo. In the meeting mentioned above, General Secretary Xi Jinping stated that high targets require strong stimulus measures, making it even more difficult to achieve the economic and social goals that should be achieved. Therefore, local governments could no longer maintain their existing growth targets.

The growth rate that local governments should aim for can be seen in Sichuan Province and Yunnan Province, where the date of the people's congress was delayed until May due to the spread of COVID-19. The local governments of the two provinces set growth targets based on the "national average." They cannot actually be called targets since the "national average" cannot be identified until afterward, but they can be considered as safe targets that took into account the intentions of the Xi Jinping administration.

However, it is premature to conclude that local governments have abandoned their high growth targets. For example, at the people's congress held on May 26 after the NPC, Jiaozhou City in Qingd-

ao, Shandong Province<sup>(80)</sup> set an ambitious growth target of around 7% for 2020<sup>(81)</sup>. Jiaozhou City is by no means an exception. Jizhou, Hengshui City, Hebei Province, held a people's congress on May 29 and set a growth target of 7% for 2020, which was the same as the previous year's target<sup>(82)</sup>.

It appears that many local governments, especially those in the third level administrative division, have set higher growth targets. The real intentions of local government officials are to show that they are running an excellent economy by

achieving high growth despite the COVID-19 pandemic.

Local governments are eager to invest. The investment plan for the key projects of 22 provinces, municipalities, and autonomous regions in 2020, which can be compared with the previous year as of the beginning of June, totaled 8,127.5 billion yuan, up 12.1% year-on-year (shaded portions of Table 3). Most of the plans were announced in March, demonstrating the strong enthusiasm of local governments for economic recovery through

Table 3 Key Project Investment Plan for 2020 by Local Governments (As of June 5, 2020)

		2020 plan (100 million yuan)	Overall plan (100 million yuan)	Changes in the 2020 plan (%)	Fixed capital formation ratio (%)
1	Guangdong	7,000	59,000	7.7	18.2
2	Jiangsu	5,410	N.A.	1.5	14.9
3	Shandong	N.A.	N.A.	_	_
4	Zhejiang	4,150	30,489	6.4	19.0
5	Henan	8,372	33,000	5.5	27.5
6	Sichuan	6,000	44,000	5.3	33.9
7	Hubei	2,263	13,291	9.5	11.0
8	Fujian	5,005	38,400	9.4	28.4
9	Hunan	3,050	10,000	18.5	17.8
10	Shanghai	1,500	N.A.	10.1	13.0
11	Anhui	4,267	13,055	220.1	31.4
12	Beijing	2,523	N.A.	7.2	24.3
13	Hebei	2,402	18,833	13.9	12.6
14	Shaanxi	5,014	34,202	_	35.4
15	Liaoning	N.A.	N.A.	_	_
16	Jiangxi	2,390	11,194	16.5	24.5
17	Chongqing	3,476	26,000	0.5	35.1
18	Yunnan	4,400	50,000	▲14.2	29.7
19	Guangxi	1,675	19,620	▲30.8	18.5
20	Inner Mongolia	5,059	25,790	137.7	48.7
21	Shanxi	N.A.	N.A.	_	_
22	Guizhou	7,262	N.A.	0.8	79.9
23	Tianjin	2,105	10,125	34.7	20.8
24	Heilongjiang	2,000	8,856	_	20.7
25	Xinjiang Uyghur	2,216	7,924	_	20.7
26	Jilin	N.A.	N.A.	_	_
27	Gansu	1,779	9,958	32.8	50.0
28	Hainan	N.A.	N.A.	_	_
29	Ningxia Hui	510	2,269	▲0.4	13.3
30	Qinghai	677	3,772	▲26.8	17.3
31	Tibet	N.A.	N.A.	_	_
	Total	90,505	469,778	17.7	24.5

Notes: The data are in descending order of economic scale. Regions with N.A. provided only a list of projects and did not specify the amount of investment. The fixed capital formation ratio shows the value for 2017.

Source: The Japan Research Institute, Limited based on local media reports

leveraging investment.

Although ambitious investment plans appear to contradict Xi Jinping's wishes, the Communist Party of China (CPC) told at the Politburo Standing Committee in March that it would encourage a new type of infrastructure investment known as "New Infrastructure Construction," and provided local governments with an "indulgence" to expand investment. Local governments do not take responsibility for problems such as excessive debt and bad loans caused by reckless investment, and they hope that the higher government will eventually come to the rescue, making it difficult for them to resist the urge to invest.

New infrastructure refers to seven areas<sup>(84)</sup>: 1) 5G base stations, 2) ultra-high voltage transmission, 3) intercity High-Speed Rail (HSR) and rail transport, 4) new-energy vehicle charging networks, 5) data centers, 6) artificial intelligence (AI), and 7) IoT. The importance of the new infrastructure was indicated at the Central Economic Working Conference held at the end of 2018, but it was upgraded to a priority investment area for 2020 and beyond in order to enable early recovery from the COVID-19 pandemic while at the same time laying the foundation for China's medium- to long-term growth.

There will be no problem if local governments concentrate on investing in new infrastructure. However, investment in new infrastructure is less effective in boosting the economy and creating jobs compared to traditional infrastructure investments. Local governments have turned their attention to the quantity of investments, not quality. Traditional infrastructure investments have been a "magical weapon" that is easy for local governments to wield (85), and they are tempted to choose traditional infrastructure investments.

Another problem is that investment in new infrastructure does not benefit state-owned enterprises because its investment targets are different from those of traditional infrastructure investments. Investment targets in new infrastructure, especially the digital field, are private companies such as Baidu, Alibaba, Tencent, and Huawei, and the structure between orderer and beneficiary is different from the case of investing in traditional

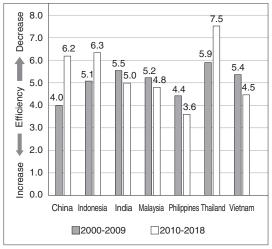
infrastructure such as roads. In fact, new infrastructure accounts for only 10-20% of infrastructure investment in 2020<sup>(86)</sup>.

The problem that "New Infrastructure Construction" can stimulate traditional investment and lead to overcapacity, reduced investment efficiency, and high leverage is also feared in China, and is described as "Old Wine in a New Bottle<sup>(87)</sup>. In order to determine the sustainability of China's economic recovery, it is essential to consider what areas local governments are investing in and whether this will lead to improved investment efficiency and productivity.

It is premature to assume that because largescale stimulus measures were not set out during the NPC, local governments would adopt sound economic policies, or that problems such as overcapacity, reduced investment efficiency and high leverage will not worsen in the future. China will likely be regarded as the country that achieved the fastest V-shaped recovery, just as it did after the collapse of Lehman Brothers. However, if we proceed with economic recovery described as "Old Wine in a New Bottle," it is highly likely that "Guo jin min tui' (the state enterprises advance, the private sectors retreat)" will accelerate and investment efficiency will decline, as it did at the time of the Lehman Brothers collapse (Miura [2020]). The decline in investment efficiency is the biggest weakness of "national capitalism," which tends to focus purely on strength, and could turn into a problem that overturns the "institutional advantage."

When the Incremental Capital Output Ratio (ICOR), an indicator of investment efficiency, is compared between the 2000-2009 and 2010-2018 periods, China fell from 4.0 to 6.2, which was worse (lower investment efficiency) than ASEAN countries except India and Thailand in terms of both increase in value and level (Fig. 24). "Old Wine in a New Bottle" could further reduce efficiency and make China a country with one of the lowest ICOR's in Asia. The immediate question for the Chinese economy is not whether it will be able to achieve a V-shaped recovery within 2020, but whether it will be able to avoid an investment-led recovery that will further reduce investment

Fig. 24 Comparison of Incremental Capital Output Ratio of Asian Countries



Notes: Incremental Capital Output Ratio = (Ratio of total capital formation to GDP during the period) / (Average real GDP growth rate during the period). The higher the coefficient, the more investment is required for 1% growth, which indicates less efficiency.

Source: Prepared by The Japan Research Institute, Limited based on materials by the World Bank

efficiency. The Xi Jinping administration is obsessed with emphasizing "institutional advantage" and is too insensitive to the risk of "Old Wine in a New Bottle."

## Conclusion: Encirclement of China is the Result of China's Own Actions

Triggered by the COVID-19 outbreak, the United States and European countries have become much more hostile toward China. Because European countries did not have any security concerns regarding China, public sentiment toward the country did not worsen as much as in the United States. Instead, they were eager to deepen economic relations with China and tended to take a hard look at the Trump administration, which advocates its "America First" policy (Miura [2018]).

However, the series of remarks and actions China made both at home and abroad regarding the spread of COVID-19 has amplified distrust not only in the United States but also in European countries. French President Jacques Macron warned in an interview with the Financial Times not to believe that China has been much better at handling the virus<sup>(88)</sup>. In England, scientists apparently reported to Prime Minister Johnson that the actual number of infections in China was 15 to 40 times higher<sup>(89)</sup> than that reported. Many questioned the official numbers published by China, with a research team from the School of Public Health of the University of Hong Kong reporting in April that 232,000 people had contracted COV-ID-19 in China, four times as many as the 55,000 cases reported on February 20<sup>(90)</sup>.

The growing distrust of China among developed countries is reflected in a Canadian poll conducted by Angus Reed, a local non-profit organization. In it, 85% of respondents said that China's response to COVID-19 "lacks integrity and transparency" (91). According to a Pew Research Center poll, 66% of Americans have "unfavorable" views of China, up from a record 60% in 2019 (92).

The environment surrounding China has never been more severe due to worsening sentiment toward the country. The United Kingdom, Canada and Germany have reversed course and are moving away from using Huawei devices in their 5G networks<sup>(93)</sup>. This series of actions was triggered by the U.S. government's tighter embargo on Huawei<sup>(94)</sup>, but it is noteworthy that the movement to review their "dependence on China" has been spreading at the citizen level. In the United States, 40% of people<sup>(95)</sup> said that they would not buy Chinese products, while in the United Kingdom, the figure reached 50%<sup>(96)</sup>.

In response to mounting criticism of China, the Xi Jinping administration released a white paper stating that China responded quickly to the CO-VID-19 outbreak and made a significant contribution to the control of the virus worldwide<sup>(97)</sup>. The white paper, however, did not dispel the concerns of the United States and European countries, but instead fanned the flames of governments struggling to cope with their response to COVID-19.

The Xi Jinping administration has refused to accept criticism from other countries, as it is extremely wary of damaging its prestige. In April, Blackbox Research and other companies in Singa-

pore conducted an opinion poll targeting 24 countries and regions and indexed people's evaluations of measures taken by their governments to prevent the spread of COVID-19. The evaluation index for China was 85, which was unusually high, exceeding the world average of 45 and Vietnam's 77<sup>(98)</sup>. The Xi Jinping administration cannot afford to listen to criticism from outside the country that contradicts public opinion, which has been guided by propaganda.

Another reason for China's hardline stance is that the supply chain, led by the country, is so strong that other countries cannot easily break free of their dependence on China; thus emboldening the country. With the American Chamber of Commerce warning that excessive movement toward a "Break from China" would seriously affect the U.S. economy even as American sentiment toward China worsens (99), it is possible to move some factories from China back home or to a third country; however, in practical terms, it is difficult to build a supply chain without China.

The Xi Jinping administration, wary of mounting criticism by the international community, has used high-handed diplomacy known as "Wolf Warrior Diplomacy" to pressure other countries to refrain from criticizing China (Kuwahara [2020]). The Chinese government has strongly opposed Australia's call for an international investigation into the cause of the spread of COVID-19, and has come up with measures to restrict imports by strengthening additional tariffs and quarantines. These pressures are relentless and ruthless even from the viewpoint of Japan, which had experienced anti-Japanese demonstrations in the past.

By making other countries their enemies, the Xi Jinping administration can strengthen its centripetal force. However, through high-handed diplomacy that does not allow for criticism, it appears that China has pushed countries that had previously kept a certain distance from the Trump administration with regard to their diplomacy toward China over to the side of the United States, resulting in the self-imposed encirclement of China. Josep Borrell Fontelles, High Representative of the European Union (EU) for Foreign Affairs and Security Policy, which is equivalent to the foreign

minister of the EU, reflected on the situation in May by saying that the EU had been too "naïve" toward China in the past, and on the premise that China's international order would not be compatible with the EU's multilateralism, vowed to change to more realistic diplomacy<sup>(100)</sup>.

The strengthening of the authority aid regime, which regards Xi Jinping as absolute, helped to maintain the country's political stability even amid the COVID-19 pandemic. However, in the international community, China's rigid political system has highlighted its heterogeneity and raised its risk of isolation. By carrying out diplomacy that forced gratitude from the countries concerned, China's dignity and generosity, which it had showcased as a world leader that could replace the United States and as a forerunner for developing countries, were severely damaged.

Although much remains to be seen regarding COVID-19, concern over a "second wave," of infections in which the number of cases will increase again from autumn to winter remains. If the "second wave" accelerates the investment-led economic recovery, the Chinese economy will further deteriorate. An additional danger is that China's foreign relations will deteriorate further due to its "Wolf Warrior Diplomacy," which is inextricably linked to the authority aid regime. On a global level, China is a country that has experienced fewer COVID-19 cases and fast economic recovery. On the contrary, the environment surrounding the Xi Jinping administration at home and abroad is likely to shift to its worst phase since inauguration of his administration.

#### **End Notes**

- 「習近平:堅決打贏湖北保衛戦武漢保衛戦」March 11, 2020, XINHUANET (http://www.xinhuanet.com//mrdx/ 2020-03/11/c\_138864366.htm)
- "Global foreign direct investment projected to plunge 40% in 2020," 16 June 2020, UNC-TAD. (https://unctad.org/en/pages/newsdetails. aspx?OriginalVersionID=2396)

- "Remarks by IMF Managing Director Kristalina Geor-2. gieva to G20 on the Economic Impact of COVID-19" 22 February 2020, IMF (https://www.imf.org/en/News/ Articles/2020/02/22/pr2061-remarks-by-kristalinageorgieva-to-g20-on-economic-impact-of-covid-19)
- "UK will need social distancing until at least the end of the year, says Whitty," 22 April 2020, The Guardian. (https://www.theguardian.com/world/2020/apr/22/ukwill-need-social-distancing-until-at-least-end-of-yearsays-whitty)

- The IMF and the World Bank use "Advanced Economies" and "Emerging Market and Developing Economies" for the classification of regions. In this paper, the former refers to developed countries and the latter refers to emerging and developing countries.
- At the end of March when the government began announcing the number of asymptomatic cases, the proportion of asymptomatic cases of the total number of cases was at least 1.2% and at most 60%, depending on the expert. The length of the transmission period, severity of transmission and route of transmission were all unknown. For more information, see "China Announces First Number of Asymptomatic Cases, Which Will Become the Focus of COVID-19 Measures" April 7, 2020, AFP BB News (https://www.afpbb.com/ articles/-/3276805)
- 4. "iPhone Maker Expects China Plants to Return to Normal in the Coming Weeks," March 3, 2020, Bloomberg. (https://www.bloomberg.com/news/articles/2020-03-03/ iphone-maker-expects-china-plants-back-to-normal-incoming-weeks)
- 9. 「河南郏県:社区大門再次被封鎖,春寒,総抵不住百 花怒放的芬芳!」April 2, 2020, 新浪網 (https://k.sina. com.cn/article\_2490026067\_946ac85300100v148.html)
- "Remarks by DG Azevêdo", 8 April 2020, WTO. (https:// www.wto.org/english/news\_e/spra\_e/spra303\_e.htm)

- 10. "Why is China tightening controls on asymptomatic CO-VID-19 patients?" April 11, 2020, People's Daily (Japanese Edition). (http://j.people.com.cn/n3/2020/0411/ c95952-9678422.html)
- 15. 「2020年春節前後中国交通運輸行業現状:新型冠状病 毒感染肺炎与SARS事件对高速、鉄路、航空及港口的 影響対比[図]」February 13, 2020 中国産業信息 (http:// www.chyxx.com/industry/202002/833518.html)
- 11. 「"無症状感染者" 不可忽視, 也無需恐慌」April 22, 2020, 北京青年報 (http://epaper.ynet.com/html/2020-04/22/content\_352072.htm?div=-1)
- 16. 「国務院弁公庁関于延長2020年春節仮期的通知国 弁(発明電)[2020]1号」January 26, 2020, Chinese Government Website (http://www.gov.cn/zhengce/ content/2020-01/27/content\_5472352.htm)
- 12. "Pneumonia of unknown cause China", 5 January 2020, Disease Outbreak News, WHO. (https:// www.who.int/csr/don/05-january-2020-pneumonia-ofunkown-cause-china/en/)
- 17. For Beijing's response, see「北京People's Government 関于進一歩明確責任加強新型冠状病毒感染的肺炎預 防控制工作的通知」January 27, 2020, People's Government of Beijing (http://www.beijing.gov.cn/ywdt/yaowen/ t1614531.htm)
- 13. "Novel Coronavirus China", 12 January 2020, Disease Outbreak News, WHO. (https://www.who.int/csr/ don/12-january-2020-novel-coronavirus-china/en/)
- 18. 「春節仮期再次延長,各省刷新復工時間,還有2億人 在家開工!」February 7, 2020, 捜狐網 (https://www. sohu.com/a/371214250\_100253422)
- 14. "Pandemic Started Between October 6 And December 11 Last Year: Report", 7 May 2020, NDTV. (https:// www.ndtv.com/world-news/coronavirus-pandemicstarted-between-october-6-and-december-11-last-yearsays-report-2224751)
- 19. 「疫情之下"遠程弁公"火了, 2020年中国遠程弁公 発展空間及趨勢分析」March 18, 2020, 雪球 (https:// xueqiu.com/4375159485/144348379?page=2)

- 20. 「人大代表建議深圳再延長仮期, 2月17日復工」February 6, 2020, 藍粵網 (http://sc.yuetol.com/news/important/ 2020/17990.html)
- 25. 「湖北一季度gdp2020 今年湖北一季度gdp下降39.2」 April 23, 2020, 至誠財経. (http://www.zhicheng.com/ gncj/n/329756.html)
- 21. 「江西景徳鎮:各類企業復工時間不得早于2月20日24 時」February 7, 2020, 捜狐網 (https://www.sohu.com/ a/371291054\_99986045)
- 26. 「交通運輸部:交通運輸応按照"一断三不断"原則 落実好疫情防範工作」January 26, 2020, 国務院新聞 弁公室 (http://www.scio.gov.cn/xwfbh/xwbfbh/wqfbh/ 42311/42478/zy42482/Document/1672544/1672544. htm)
- 22. 「湖北省新型冠状病毒感染肺炎疫情防控指揮部通告」 March 11, 2020, Hubei Province Government (http:// www.hubei.gov.cn/zhuanti/2020/gzxxgzbd/zxtb/202003/ t20200311\_2178823.shtml)
- 27. For the case in Jiangsu Province, see「江蘇確保"一断 三不断"努力阻断病毒伝播渠道」February 2, 2020, XI-NHUANET (http://www.js.xinhuanet.com/2020-02/02/ c\_1125520857.htm)
- 23. 「人力资源社会保障部办公厅关于妥善处理新型冠 状病毒感染的肺炎疫情防控期间劳动关系问题的通 知人社厅明电 [2020] 5号 January 24, 2020, Chinese Government Website (http://www.gov.cn/zhengce/ zhengceku/2020-01/27/content\_5472508.htm)
- 28. For the case in Beijing, see「関于進一歩加強社区(村)疫 情防控工作的通告」February 10, 2020, Beijing Government (http://www.beijing.gov.cn/zhengce/zhengcefagui/ 202002/t20200210\_1627106.html)
- 24. 「受新型冠状病毒肺炎影響, 湖北13市"封城"」January 24, 2020 雪 玉 (https://xueqiu.com/5828850316/ 139974922)、「76天, 14天, 14天, 武漢解除"封城"的 関鍵数字」March 25, 2020, 鳳凰網 (http://news.ifeng. com/c/7v74TuYA2D4)
- 29. 「河南馬店両地発布"限行令:"每家每5天限1人外出」 February 5, 2020, 新浪財経 (http://finance.sina.com.cn/ china/gncj/2020-02-05/doc-iimxxste8979461.shtml)

- 30. 「要復工了!深圳Beijing突放"大招"!深圳所有小区 実施人員通行認証管理,全国多地已実施小区封閉管 理」February 12, 2020, 捜狐網 (http://finance.sina.com. cn/wm/2020-02-10/doc-iimxxstf0159601.shtml)
- 35. 「北京調整境外人員入境隔離政策」March 3, 2020, XI-NHUANET (http://www.xinhuanet.com/2020-03/03/ c 1125658512.htm)

- "Under China's coronavirus lockdown, millions have nowhere to go", 14 February 2020, Reuter. (https://www. reuters.com/article/us-china-health-scale/under-chinascoronavirus-lockdown-millions-have-nowhere-to-goidUSKBN2081DB)
- 36. 「"北京健康宝"服務京津冀往返及商務出行等功能発 布」April 18, 2020, Beijing Government Website (http:// www.beijing.gov.cn/ywdt/gzdt/t1626056.htm)
- 37. Refer to Miura [2014] for the administrative divisions of China.
- 「2019年農民工監測調査報告」April 30, 2020, National Bureau of Statistics (http://www.stats.gov.cn/tjsj/ zxfb/202004/t20200430\_1742724.html)
- 38. 「全国所有県域均調整為低風険意味着什麼?距離摘口 罩還有多遠?」May 7, 2020, 新浪網. (http://news.sina. com.cn/c/2020-05-07/doc-iircuyvi1870673.shtml)
- 33. For the case in Beijing, see「解読北京最新規定:返京 人員一律居家隔離14天!」February 17, 2020 捜狐網 (https://www.sohu.com/a/373660506\_100019986)
- 39. 「河南郏県全面封村封小区最新進展:無症状感染者公 開 河南郏県全面封村封小区到底発生了什麽?生了 什麽感染者公開 河南郏県全面封村封小区到底発生 了什麼?」April 4, 2020, 新浪網 (http://k.sina.com.cn/ article 2345597047 8bcef87702000utce.htm)
- 34. 「《四川省応対新型冠状病毒肺炎疫情応急指揮部関 于成立農民工外出務工服務工作専班的通知》解読」 February 18, 2020, Sichuan Government (http://www. sc.gov.cn/10462/10464/13298/13301/2020/2/18/74bd2fe 8f5c74ff6b6b74e74079e4116.shtml)
- 「郏県統計局関于2018年国民経済和社会発展的統計公 報」October 28, 2019, People's Government of Jiaxian (http://www.jiaxian.gov.cn/contents/13171/128001.html)

- 41. 「绥芬河緊急"求援":疫情風険驟然升級!」April 11, 2020, 雪玉 (https://xueqiu.com/5599676754/146599467? page=2)
- "China Seeks to Ease Border Restrictions and Consults with Japan on the Relaxation of Border Control on Condition of 'Negative' PCR Results" May 11, 2020, Nikkei Inc. (https://www.nikkei.com/ article/DGXMZO58936730R10C20A5EA1000/ ?n\_cid=DSREA001)
- 42. 「42人確診, 吉林市5個地区出現病例, 這条伝染鏈 再延長」May 19, 2020, 新浪網 (https://k.sina.com.cn/ article\_1686546714\_6486a91a020012s1e.html?cre= tianyi&mod=pcpager\_news&loc=1&r=9&rfunc= 11&tj=none&tr=9)
- 47. 「2020年一季度国内生産総值(GDP)初歩核算結果」 April 18, 2020, National Bureau of Statistics. (http:// www.stats.gov.cn/tjsj/zxfb/202004/t20200417\_1739602. html)
- 43. 「沈陽厳防新冠肺炎疫情拡散隔離7500多人」May 14, 2020, XINHUANET. (http://www.xinhuanet.com/ politics/2020-05/14/c\_1125986389.htm)
- 48. 「釘釘公布教育業務数拠,覆蓋30多箇省份1.2億 学生」March 11, 2020, 騰訊網 (https://new.qq.com/ omn/20200311/20200311A0HM8V00.html)
- 44. 「武漢発布989万人核酸検測結果」June 3, 2020, 環球時 報 (https://tech.huanqiu.com/article/3yUu4RPw45O)
- 49. Same as Note 19
- 45. "China Tightens Countermeasures Against COVID-19 at the Border Between China and Russia to Contain the Outbreak from Travelers" April 14, 2020, Newsweek. (https://www.newsweekjapan.jp/headlines/ world/2020/04/271765.php)
- 「天津:一季度GDP下降,新旧働能転換進行時」April 26, 2020, 天津市工業情報化局 (http://gyxxh.tj.gov.cn/ newzixun/72169.htm)

- 51. 「2020年1-3月份全国規模以上工業企業利潤下降 36.7%」April 27, 2020, National Bureau of Statistics. (http://www.stats.gov.cn/tjsj/zxfb/202004/t20200427\_1741735.html)
- 57. 「2020年4月汽車工業産銷綜述」May 11, 2020, China Association of Automobile Manufacturers (http://www.caam.org.cn/chn/4/cate\_31/con\_5230148.html)

- 52. 「湖南省GDP2020一季度分析:生産総量和増速是多少?」 April 21, 2020,南方財経網 (http://www.southmoney. com/caijing/caijingyaowen/202004/5538870.html)
- 58. "China's New Automobile Sales Increased 11% in May Thanks to Consumption Stimulus Measures: Industry Outlook" June 2, 2020, Nihon Keizai Shimbun (https://www.nikkei.com/article/DGXMZO59899350S0A 600C2EA1000/)
- 53. 「湖南医薬集団正積極籌集相関防疫物資」February 4, 2020, 湖南経済網(http://www.hnce.com.cn/sn/2020/0203/114884.html)
- 59. According to the National Bureau of Statistics, fixed asset investment grew 6.2% year-on-year in April and 5.9% year-on-year in May. In this paper, the author's estimates were used because it is difficult to maintain consistency with past data due to data constraints such as suspension of the release of investment figures by the Bureau from May 2018.
- 54. 「【資訊】工信部:規上企業開工率超98% 中小企業 復工率達76%」March 31, 2020, 雪球 (https://xueqiu. com/5542989900/145627314)
- 60. 「北大国発院研究報告:発消費券地区行業恢復比未 発券快」May 18, 2020, 中国経済網 (http://www.ce.cn/ xwzx/gnsz/gdxw/202005/18/t20200518\_34929236. shtml)
- 55. 「規模以上工業企業開工率基本恢復正常」May 20, 2020, 新 浪 網 (http://news.sina.com.cn/c/2020-05-20/doc-iircuyvi4141553.shtml)
- 61. 「全国170城髪発了190億消費券」May 24, 2020, 21 財 経 (https://m.21jingji.com/article/20200524/herald/db263cebc649d7eacd7191a9e459eab2.html)
- 56. "China's Manufacturing PMI Unexpectedly Exceeded the 50-mark in March: There Are Challenges Ahead" March 31, 2020, Bloomberg (https://www.bloomberg.co.jp/news/articles/2020-03-31/Q81A0XT1UM0X01)

- 62. "Consumer Sentiment Is Declining in China But It Has Been Sustained in Other Major Countries" February 16, 2020, Ipsos (https://www.ipsos.com/ja-jp/consumersentiment-drops-china-not-other-major-economies)
- 67. "China's Economy is Worse Than It Looks" June 2, 2020, The Wall Street Journal (https://jp.wsj.com/ articles/SB110308189479194544872045864212207449 11918)
- 63. 「消費券如何撬働宏観経済大勢?後疫情時期的消費刺 激、経済增長与公共政策設計 | 企鵝経済学」May 18, 2020, 騰訊研究院 (https://www.tisi.org/14469)
- 「中泰証券《中国失業率有多高?》竟然能放出来 了?」April 28, 2020, 騰 訊 新 聞 (https://xw.qq.com/ cmsid/20200428A0BE5X00)
- 64. 「"五一" 旅遊產品搜索量環比增長超70% 国内遊逐漸 歩入復蘇通道 | March 24, 2020, 北京商報網 (http:// www.bbtnews.com.cn/2020/0324/346076.shtml)
- 69. "Despite the virus, China's consumer confidence remains robust; Japan faces biggest hit", 10 May 2020, Japan Times. (https://www.japantimes.co.jp/news/2020/03/10/ business/economy-business/coronavirus-china-consumerconfidence/#.Xs3WZ7NS8wl)
- 65. 「《求是》発表寧吉喆署名文章:如何全面弁証看待 一季度経済形勢」May 1, 2020, National Bureau of Statistics (http://www.stats.gov.cn/tjsj/zxfb/202005/ t20200501\_1742905.html)
- 70. 「政府工作報告 (文字実録)」May 22, 2020, Chinese Government Website. (http://www.gov.cn/premier/ 2020-05/22/content\_5513757.htm)
- 66. 「2020年一季度居民收入和消费支出情况」April 17, 2020, National Bureau of Statistics. (http://www.stats. gov.cn/tjsj/zxfb/202004/t20200417\_1739334.html)
- 71. "China's Social Security Balance Will Be in the Red for 2020 Due to the Impact of a Reduction in Corporate Burden" June 12, 2020, Nihon Keizai Shimbun (https://www.nikkei.com/article/DGXMZO 60328240S0A610C2FF8000/)

- 72. 「人民日報人民要論:中国制度的優越性」March 4, 2019, People's Daily Online (http://opinion.people.com. cn/n1/2019/0304/c1003-30954848.html),「人民日報整 版観察:解碼我国国家制度的顕著優勢」January 31, 2020, People's Daily Online (http://opinion.people.com. cn/n1/2020/0131/c1003-31565447.html),「習近平在浙 江考察時強調:統籌推進疫情防控和経済社会発展 工作 奮力実現今年経済社会発展目標任務」April 2, 2020, People's Daily Online (http://cpc.people.com.cn/ n1/2020/0402/c64094-31658252.html)
- 77. 「李克強出席記者会開回答中外記者提問」May 23, 2020, XINHUANET. (http://www.xinhuanet.com/ politics/2020lh/zb/zljzh/)
- 78. "迁徙规模指数" can be described as "遷徙規模指数" in Kanji, but its meaning is difficult to understand. Since it is translated as "Migration Index" in English, I described it as "移動規模指数" in this paper.
- 73. 「趕超欧盟27国! 2020年中国経済增速或為3%, GDP 預計約15万億美元」May 13, 2020, 新浪網 (https:// cj.sina.com.cn/articles/view/6862376589/199078e8d00 1017uws)
- 79. 「"着眼点着力点不能放在GDP増速上" (微鏡頭・習近 平総書記両会 "下団組")」 May 23, 2020. People's Daily (http://paper.people.com.cn/rmrbhwb/html/2020-05/23/ content\_1988444.htm)
- 74. 「劉尚希:預計2020年中国経済可実現2%到3%增 長」May 8, 2020, 鳳凰網 (http://finance.ifeng.com/ c/7wIjhNg2Aeu)
- 80. The word "市 (city)" is used twice here, as the word is used both in the level 2 administrative district (subprovincial-level city) and level 3 administrative district (county-level city).
- 75. 「2020年中国経済増長預測」April 5, 2020, 中国経済形 成報告網 (http://www.china-cer.com.cn/hongguanjingji/ 202004053457.html)
- 81. 「政府工作報告—2020年5月26日在膠州市第 十七届人民代表大会第四次会議上」May 28, 2020, People's Government of Jiaozhou (http:// www.jiaozhou.gov.cn/n31281551/n31281561/ n31281629/200528093111081355.html)
- 76. "The Deloitte Research Monthly Outlook and Perspectives", 24 April 2020, Deloitte. (https://www2.deloitte. com/cn/en/pages/about-deloitte/articles/deloitteresearch-issue-56.html)

- 82. 「衡水市冀州区第一届人民代表大会第四次会議開幕」 May 29, 2020, People's Government of Jizhou (http:// jzq.hengshui.gov.cn/art/2020/5/29/art\_225\_236085. html),「2019年冀州区一届人大三次会議《政府工作 報告》解読」People's Government of Hebei Province (http://www.hbrd.gov.cn/system/2019/02/11/019440575. shtml)
- 87. 「"新基建" 冷思考: 33万億投資蓄勢待発, 如何防止 "新瓶装旧酒"?」March 25, 2020, 新浪網 (https://www.sohu.com/a/382952831\_351509)

- 83. 「34万億投資駆働新基建発展 藍思科技迎来穏健発展 "長周期"」March 10, 2020, 雪玉網 (https://xueqiu.com/ 2238656195/143469030?page=2)
- 88. "FT Interview: Emmanuel Macron says it is time to think the unthinkable", 17 April 2020, Financial Times. (https://www.ft.com/content/3ea8d790-7fd1-11ea-8fdb-7ec06edeef84)

- 84. 「搶抓 "新基建" 新機遇 2020年新基建七大領域投資機 会分析」June 6, 2020, 中商情報網 (http://t.10jqka.com. cn/pid\_129317722.shtml)
- 89. "Johnson government furious at China over COVID-19 cover-up", 30 March 2020, Neweurope. (https://www.neweurope.eu/article/johnson-government-furious-at-china-over-covid-19-cover-up/)

- 85. 「李長安:加快新基建,不忘"老基建"」May 28, 2020 環 球 網 (https://opinion.huanqiu.com/article/ 9CaKrnKraGF)
- 90. "China coronavirus cases may have been four times official figure, says study", 23 April 2020, The Guardian. (https://www.theguardian.com/world/2020/apr/23/chinacoronavirus-cases-might-have-been-four-times-officialfigure-says-study)
- 86. 「2020年基建投資規模可達20万億 其中新基建占10-20%」June 4, 2020, 慧 正 資 訊 (https://www.hzeyun.com/detail/2502874)
- 91. "Canadian opinions of China reach new low", 13 May 2020, Angus Reid Institute. (http://angusreid.org/covid19-china/)

- "U.S. Views of China Increasingly Negative Amid Coronavirus Outbreak" 21 April 2020, Pew Research Center. (u-s-views-of-china-increasingly-negative-amidcoronavirus-outbreak)
- 97. 「抗擊新冠肺炎疫情的中国行働」June 7, 2020, Chinese Government Website. (http://www.gov.cn/ zhengce/2020-06/07/content\_5517737.htm)

- "U.K. and Canada Shifting Away from Huawei, Changing Their Approach of Acceptance. Good Opportunity for NEC and Others" June 10, 2020, Nikkei XTECH (https://xtech.nikkei.com/atcl/nxt/column/ 18/01308/00006/)
- 98. "The World in Crisis. A Global Public Opinion Survey Across 23 Counties (Summary Report)", 6 May 2020, Blackbox. (https://blackbox.com.sg/everyone/ 2020/05/06/most-countries-covid-19-responses-ratedpoorly-by-own-citizens-in-first-of-its-kind-globalsurvey)
- "Commerce Addresses Huawei's Efforts to Undermine Entity List, Restricts Products Designed and Produced with U.S. Technologies", 15 May 2020, U.S. Department of Commerce. (https://www.commerce.gov/news/ press-releases/2020/05/commerce-addresses-huaweisefforts-undermine-entity-list-restricts)
- "Business group cautions U.S. on 'reshoring' too much China supply", 20 May 2020, Reuters. (https://www. reuters.com/article/us-health-coronavirus-supplychains/us-chamber-ceo-warns-against-overdoing-itwith-production-reshoring-effort-idUSKBN22V2VO)

- 95. "Americans Are Giving Made-in-China the Cold Shoulder", 17 May 2020, Bloomberg. (https://www.bloomberg. com/news/articles/2020-05-17/what-do-americansthink-of-made-in-china-polling-latest)
- 100. "Europe has been 'naive' about China, EU official says", 3 May 2020, Politico. (https://www.politico.com/ news/2020/05/03/europe-has-been-naive-about-chinaeu-official-says-230593)

"Half of Britons boycotting Chinese goods as anger over coronavirus mounts", 6 June 2020, Daily Express. (https://www.express.co.uk/news/uk/1292096/UKcoronavirus-news-China-Chinese-boycott-Covid-19-pandemic)

#### 6. [2013]. "Credibility of China's Regional GDP References Statistics", Japan Research Institute, Pacific Business (Japanese) and Industries RIM Vol.13 No.48. (https://www.jri.co.jp/ Kuwahara, K. [2020]. "China's Wolf Warrior Diplo-MediaLibrary/file/report/rim/pdf/6584.pdf) macy: Limits and Challenges Exposed as a Result of the COVID-19 Crisis", The Japan Institute of International Affairs. (https://www.jiia.or.jp/strategic\_comment/ 2020-11.html) 7. - [2014]. "Verification of Feasibility of China's Urbanization", Japan Research Institute, Pacific Business and Industries RIM, Vol.3, No.13. (https://www.jri.co.jp/ MediaLibrary/file/report/jrireview/pdf/7280.pdf) 2. Tsuyuguchi, Y. [2020]. "Will China Achieve a V-shaped Recovery from the COVID-19 Shock?", WEDGE RE-PORT. (https://wedge.ismedia.jp/articles/-/19393) - [2018]. "How to Look at the Influence of the Xi Jinping Administration That Aims for a 'Powerful Nation' - Limits of the 'Chinese Model' as Seen from Marukawa, T. [2020a]. "Novel Pneumonia: Analysis of Damthe World's Image of China", Japan Research Institute, age to the Chinese Economy Based on Big Data", News-Pacific Business and Industries RIM, Vol.18, No.69. week Japanese Edition. (https://www.newsweekjapan.jp/ (https://www.jri.co.jp/MediaLibrary/file/report/rim/ marukawa/2020/02/post-59\_4.php) pdf/10460.pdf) 4. - [2020b]. "China's Economic Situation: V-9. - [2020]. "Slowdown of the Chinese Economy and shaped Recovery of the Chinese Economy Has Already Private Enterprises: Continuation of 'Guo jin min tui' (the Started", Newsweek Japanese Edition. (https://www. state enterprises advance, the private sectors retreat)", newsweekjapan.jp/marukawa/2020/04/v.php) Japan Research Institute, Pacific Business and Industries RIM, Vol.20, No.77. (https://www.jri.co.jp/MediaLibrary/ file/report/rim/pdf/11754.pdf)

Miura, Y. [2010]. "Destabilization in China: The Structure of Inequality Undermines the Sustainability of

Growth", Toyo Keizai, Inc.

(English)

- Asian Development Bank (ADB) [2019]. "GROWTH SLOWS FURTHER IN DEVELOPING ASIA'S GI-ANTS, Asia Development Outlook Supplement", December 2019. (https://www.adb.org/sites/default/files/ publication/543066/ado-supplement-december-2019. pdf)
- [2020b]. "World Economic Outlook Update, June 2020". (https://www.imf.org/en/Publications/WEO/Issues/ 2020/06/24/WEOUpdateJune2020?cid=em-COM-123-41754)

- 11. ADB[2020a]. "The Economic Impact of the CODIV-19 Outbreak on Developing Asia", ADB Briefs, No128, 6 March 2020. (https://www.adb.org/publications/economicimpact-covid19-developing-asia)
- 16. Kissler, S., Christine, T., Marc, L., and Yonatan, G. [2020]. "Social distancing strategies for curbing the CO-VID-19 epidemic", Harvard University. (https://dash. harvard.edu/handle/1/42638988)

- [2020b]. "Asian Development Outlook 2020: 12. Growth Outlook" April 2020. (https://www.adb. org/news/infographics/asian-development-outlook-2020-growth-outlook)
- 17. McKinsey[2020a]. "The way back: What the world can learn from China's travel restart after COVID-19". (https://www.mckinsey.com/industries/travel-transportand-logistics/our-insights/the-way-back-what-the-worldcan-learn-from-chinas-travel-restart-after-covid-19)

Phillips. [2020]. Variation in government responses to COVID-19, BSG-WP-2020/032, Version 6.0, Blavatnik School of Government and University of Oxford. (https://www. bsg.ox.ac.uk/research/research-projects/coronavirusgovernment-response-tracker)

13. Hale, T., N. Angrist., B, Kira, A, Petherick, and T,

— [2020b]. "Survey: Chinese consumer sentiment during the coronavirus crisis". (https://www.mckinsey. com/business-functions/marketing-and-sales/ourinsights/survey-chinese-consumer-sentiment-during-thecoronavirus-crisis)

- IMF[2020a]. "World Economic Outlook Chapter 1: The Great Slowdown". (https://www.imf.org/en/Publications/ WEO/Issues/2020/04/14/weo-april-2020)
- OECD[2020a]. "OECD Interim Economic Assessment. Coronavirus: The world economy at risk". (https://www. oecd-ilibrary.org/docserver/7969896b-en.pdf)

- 20. [2020b]. OECD Economic Outlook, June 2020, The world economy on a tightrope". (http://www.oecd.org/economic-outlook/june-2020/)
- 25. Survey and Research Center for China Household Finance at the Southwest University of Finance and Economics and Ant Financial Group Research Institute [2020]. 「疫情下中国家庭的財富変動趨勢 中国家庭財富指数調研報告 (20201Q)」(https://chfs.swufe.edu.cn/uploads/20200423/53dccb967a3a723b60d62e2363f6e af6.pdf)
- 21. World Bank[2020a]. "East Asia and the Pacific in The Time of COVID-19", World Bank East Asia and Pacific Economic Update, April 2020. (https://www.worldbank.org/en/region/eap/publication/east-asia-pacific-economic -update)
- [2020b]. "Global Economic Prospects Pandemic, Recession. The Global Economy in Crisis" June 2020. (https://www.worldbank.org/en/publication/global-economic-prospects)

#### (Chinese)

- 23. Baidu [2020].「2020年第一季度中国城市活力研究報告」 (https://huiyan.baidu.com/cms/report/2020Q1chengshi/)
- 24. 李倩 [2020].「澎湃新聞 | 上海民消費意願:年軽人、 低収入者、個体戸受疫情影響最大」上海財経大学高 等学院 (http://iar.sufe.edu.cn/08/1e/c6456a133150/page. htm)

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