

Impact of Global Epidemic Spread on China's Economy

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ABSTRACT. The Chinese government and all its medical staff have spared no effort in fighting against the COVID-19 epidemic, and on this basis, curbed the epidemic in China. However, the epidemic situation in overseas regions has become more and more severe since the middle of March 2020. Up to April 18, 2020, cumulative number of confirmed cases in overseas regions had climbed to over 2.16 million. Such severe epidemic has not only affected the public health, but also hit the economy of all countries in the world. In this context, this paper analyzes the factors that affect China's economic development after the outbreak of the epidemic and puts forward corresponding countermeasures.

KEYWORDS: Epidemic spread, Global, China's economy

1. Introduction

1.1 The Process and Status of Epidemic Development in China

In China, the first confirmed case of COVID-19 appeared in Wuhan on December 8, 2019. The epidemic spread slowly in China at the beginning. Up to January 22, 2020, which was the day before Wuhan "Lockdown", a total of 571 confirmed cases of COVID-19 had been reported in China cumulatively, including 95 severe cases and 17 deaths. However, due to the influence of multiple factors like the significant population moving in Spring Festival period, the unique geographical location of the "thoroughfare to nine provinces" of Wuhan and the upgrading of virus detection technology, the daily increment of confirmed cases in China still went up gradually even after the lockdown of Wuhan City. The highest number of confirmed cases in a single day reached over 14000. In such context, the Chinese government worked closely together with the medical staff day and night to reduce stocks and control increment. Finally, since late February, both the uncured cases and newly confirmed cases in China began to show a significant sign of decline. Up to April 18, 2020, China has reported a total of 84,182 cumulatively confirmed cases, 77,756 cases cured, 1,784 cases uncured, 1017 asymptomatic cases, and 4,642 deaths. From the overall situation, the epidemic status in China is relatively stable, and the patient stock and increase are maintained at a low level, but still need to keep high vigilance for overseas importers and asymptomatic infected persons.

1.2 Overview of Epidemic Development in Overseas Regions

The epidemic situation of overseas regions developed slowly at the beginning, but showed significant rising tendency since the middle of March 2020. The highest number of confirmed cases in a single day hit nearly 10,000. As of April 18, 2020, cumulative number of confirmed cases in overseas regions had reached 2.16 million, including 1.52 million uncured, 0.49 million cured and nearly 0.15 million died cases. Both the stock and increment of confirmed cases in overseas countries are maintained at a relatively high level nowadays and there is no sign of turning point. The cumulative number of confirmed cases in all continents except for Antarctica climbed to over 5,000. Among the top 20 countries with total import and export to China in 2018, the number of confirmed cases in major European and American economies such as the United States, Italy, France, Germany and so on has been higher than that in China and presented an obvious "three high" trend of high inventory, high increment and high diagnosis rate, which indicates that the epidemic situation is very serious.

2. Overview of Chinese Economy Before Epidemic Outbreak

2.1 Consumption in China

According to relevant data released by the State Council, the per capita consumption expenditure of residents in China was 21,559 yuan in 2019, indicating a nominal increase of 8.6% compared to the same data of previous year. After deducting the part caused by price factor, the actual increase was 5.5%.

Wherein, the national per capita expenditure on food, tobacco and liquor was 6084 yuan, which shows 8.0% increase and accounts for 28.2% in total per capita consumption expenditure; the per capita expenditure on clothing reached 1338 yuan, which shows an increase of 3.8% and accounts for 6.2% in total per capita consumption expenditure; per capita expenditure on housing was 5055 yuan, which indicates an increase of 8.8% and accounts for 23.4% in total per capita consumption expenditure; the data on daily necessities and services was 1281 yuan, showing an increase of 4.8% and accounting for 5.9% in total per capita consumption expenditure; the data on transport and telecommunication reached 2862 yuan, indicating an increase of 7.0% and accounting for 13.3% in total per capita consumption expenditure; the amount spent on education, culture and entertainment was 2513 yuan, showing an increase of 12.9% and accounting for 11.7% in total per capita consumption expenditure; the amount spent on medical care reached 1902 yuan, which is an increase of 12.9% and accounts for 8.8% in total per capita consumption expenditure; and the data on other supplies and services was 524 yuan, which is an increase of 9.7% and accounts for 2.4% in total per capita consumption expenditure.

Table 1 2019 Residents' Consumption in China

Index	Amount (CNY)	Ratio in Total Expenditure	Total (CNY)
Food, tobacco & liquor	6084	28.2%	
Housing	5055	23.4%	
Transport & communication	2862	13.3%	
Education, culture and entertainment	2513	11.7%	
Medical care	1902	8.8%	
Clothing	1338	6.2%	
Daily necessities and services	1281	5.9%	
Other supplies and services	524	2.4%	
			21559

2.1.1 Commodity Imp.&Exp. between China and Its Major Trading Countries (Regions)

Table 2 2019 Commodity Imp.&Exp. between China and Its Major Trading Countries (Regions)

Imp.&Exp. Country (Region)	Total Imports (100 million CNY)	Cumulative Year-on-year (±%)	Total Exports (100 million CNY)	Cumulative Year-on-year (±%)
Wherein: EU	19,062.6	5.5	29,550.6	9.6
Wherein: Germany	7,242.0	3.2	5,497.7	7.5
Netherlands	772.8	-5.1	5,102.9	6.1
United Kingdom	1,647.9	4.4	4,304.0	15.2
France	2,247.3	5.2	2,272.4	12.3
Italy	1,475.7	6.2	2,308.0	5.5
United States	8,453.8	-17.1	28,853.0	-8.7
ASEAN	19,455.6	9.8	24,796.2	17.8
Wherein: Vietnam	4,433.1	4.8	6,749.8	21.8
Malaysia	4,954.7	18.8	3,595.8	20.1
Thailand	3,180.9	8.1	3,145.5	11.3
Singapore	2,426.3	9.2	3,778.2	17.0
Indonesia	2,348.5	4.5	3,150.1	10.4
Philippines	1,392.5	2.4	2,810.9	21.7
Japan	11,837.2	-0.6	9,871.8	1.7
Hong Kong	626.0	10.9	19,242.4	-3.6
Korea	11,960.0	-11.4	7,645.7	6.6
Taiwan	11,933.9	1.9	3,798.6	18.3
Australia	8,361.7	20.0	3,326.2	6.4
India	1,239.0	-0.2	5,156.3	2.1
Russia	4,207.7	7.5	3,431.1	8.4
Canada	1,937.1	3.6	2,543.7	9.5

New Zealand	864.3	18.3	395.6	3.7
Latin America	11,401.9	9.0	10,479.6	6.9
Wherein: Brazil	5,501.0	7.4	2,452.1	10.8
Africa	6,573.0	0.4	7,805.7	12.8
Wherein: South Africa	1,784.2	-0.8	1,140.4	6.4
Total	143,148.0	1.6	172,298.0	5.0

It can be seen from the import and export status throughout the year of 2019 that, China's imports of commodities from Europe, Southeast Asia, and Oceania increased, while that imported from the United States and South Korea dropped significantly. Total commodity imports increased slightly. On the other hand, commodity exports of China developed positively in general. Except for part of the countries and regions, Chinese exports to major trading partners increased to certain extent, showing a comparatively stable growth rate in total national commodity exports.

3. Factors Affecting Chinese Economy after the Epidemic Outbreak

A large number of confirmed COVID-19 cases have been seen in all continents of the globe except Antarctica. And being restrained by a series of reasons, such as asymmetric information, nontransparent data release, and detection technology, the actual number of infections might be far higher than that announced. Such severe epidemic situation has not only impacted the public health, but also hit the economy of all countries in the world. As far China, the factors that are brought by the epidemic outbreak and can affect the Chinese economy mainly include:

3.1 Policy Control in China

The Chinese government took a series of powerful and necessary measures at the initial stage in order to prevent the epidemic spread. But like a coin has its two sides, a lot of business sectors closed door in the lockdown context, such as catering, accommodation, tourism, and entertainment businesses. And even the transportation and retail sale industries suffered therefrom greatly. Especially, due to the lockdown control, people's moving turned out to be a difficult thing, so that huge amount of labors were unable to return their posts on time. Even if they managed, lots of places required the labors to perform a 14-days self-isolation before going back to posts. Considering epidemic spread prevention, it is of course a necessary means to take. But objectively, it also brought with great inconvenience for the work resumption of enterprises.

3.2 Psychological Changes of Chinese Consumers

Since mid-March, policies in various provinces and cities have been loosened, allowing business opening of industries relating to catering, tourism, and accommodation. However, psychological changes brought by the epidemic to Chinese consumers still exist. As a matter of fact, Chinese consumers seem always conservative in consumption due to various factors, such as the preference for saving, big gap between the poor and the rich, and the very high house price. And now, plus the impact of the epidemic, situation becomes even worse than ever before. Even though the practical status has shifted from "no place to spend money" to "many places are now available to spend money", people now "dare not to spend money" from psychological perspective. Except for things necessary for survival, people, no matter what classes, ages, and genders they are, no longer go to the consuming places that they once visited frequently because of the fear to the epidemic. This is kind of a common phenomenon right now. And the wait-and-see attitude towards the economic situation has also worsened the "dare not" psychology, thereby further imposing negative impact on domestic demand market of China.

3.3 Demand Changes in Both Chinese and Overseas Markets

All products, either imported to China or produced by Chinese enterprises, will finally flow to two market: Chinese market or overseas market, that is, for purpose of exporting or satisfying domestic demands. China has always been a major exporter of commodities and possesses a relatively complete industrial chain. In 2019, the total commodity exports of China accounted for about 17.4% of its total GDP. Being affected by the epidemic, the situations in all other countries in the world are almost the same as that in China. The city "lockdown" policy implemented in foreign countries lead to business closing or semi-closing of catering, retail and other industries. And the epidemic spread and economic fluctuation also promote the psychological transmission of ordinary foreign consumers from positive to savings-focused attitude, which directly results in overall reduction of foreign commodity demands. With the epidemic development, such situation might get even worse, and affect the Chinese exports inevitably.

3.4 Impacts of Foreign Policies

The measures taken by foreign governments on transportation control make Chinese commodity export even harder. A number of countries, representing by the United States, even launched decrees prohibiting the import of certain commodities, which can undoubtedly reduce the exports of relative Chinese commodities. Besides, what needs to be on the alert is that the behaviors of foreign countries to print more banknotes and distribute to their people may possibly cause passive appreciation of Renminbi, or even shocks in global economy. If so, the total wealth of mankind would be reduced and the environment for commodity export of China would be further worsened.

4. Possible Impacts of Global Epidemic Spread on Chinese Economy

4.1 Drop of Per Capita Consumption Expenditure of Chinese Residents

Being affected by domestic control policy and residents' psychological changes on consumption, and under the context that the global epidemic situation is getting worse day by day, the per capita consumption expenditure of Chinese residents could possibly drop to a certain extent before getting the epidemic under control worldwide. Industries of catering, transportation, education, and entertainment, would be the first batch of sectors being affected. On the contrary, per capita consumption expenditure in medical care and online shopping might increase slightly, but not enough for saving the overall situation. Therefore, the per capita consumption expenditure would still show a declining trend.

4.2 Reduction of Total Commodity Exports

Due to the reasons of demands reduction in overseas market and control policies implemented by foreign governments, the total commodity exports of China would significantly drop in short term. According to data of the General Administration of Customs, P.R.China, in the first quarter of 2020, China's total commodity exports were 3.33 trillion yuan, indicating 11.4% year-on-year decrease; total imports were 3.24 trillion yuan, showing 0.7% year-on-year decrease; and the trade surplus was 98.33 billion yuan, which is actually a decrease of 80.6%. However, the author believes that this isn't bottomed out, and further decline in Chinese commodity exports may occur. One of the reasons is that, developed countries of Europe and America have commonly adopted the approach of printing more banknotes and distributing to the people. This could promote the passive appreciation of Renminbi and further worsen the export environment of China. But what's worse is that, developed countries of Europe and America have been implementing the quantitative easing policy for over a decade since 2008 in order to get rid of the economic crisis impacts. But facts have proved that such measure fails in solving the problem radically. The economy in European and American countries seems like a big bubble. And the act of printing more banknotes and distributing to the people, which is taken by various countries during the epidemic period undoubtedly further enlarges this bubble. Once the bubble bursts, the next round of economic crisis would come soon. The four times of "circuit breaker" in American Stock Market not only showed us the market attitude, but also warned us. And according to the updated predication of IMF on world's economic trend, even if the crisis won't happen, most countries that are affected by the epidemic, except for a small number of countries like China, would have negative GDP growth. The GDP of the United States and the euro zone countries will generally decline by over 5%. This means that the total wealth of human society will be greatly reduced. In the context of global economic integration, this will seriously affect the total exports and overall economic situation of China.

4.3 Increased Stress of Enterprises

The epidemic that was happened abruptly in Spring Festival travel period, resulted in rapid spread and left no preparing time for most enterprises. In terms of human resources, China extended the Spring Festival holidays due to the epidemic outbreak. The "lockdown" measures weren't canceled after the end of the Spring Festival holidays. And a 14-day self-isolation mandatory requirement was implemented for personnel returning back to work. In this case, enterprises had no personnel available to resume work for nearly a month. As for capital, it is a simple truth that there is no output without input, and no return without output. No matter for what kind of industry, it is impossible to achieve input without available personnel. Therefore, the fund inflow also seems unrealistic. Though having no income at all, various expenditures continue. Lots of fixed expenditures, such as depreciation of fixed assets, house rents, employee salaries, and financing costs, have all become the tough tests of corporate cash flow. Although the state provides preferential loans to enterprises during the epidemic period, the majority of Chinese enterprises represented by the manufacturing industry still face a severe survival test due to factors like the demands reduction of both domestic and foreign markets, and the global economic downturn etc.

4.4 Personal Wealth Drop of General Public

For general public, the ways to increase personal wealth are no more than broadening sources of income and reducing expenditure. Regarding the wealth stock, the personal wealth of general public in China mainly concentrate in bank deposits, low-risk funds and wealth management products (WMP). At present, the benchmark one-year deposit rate in major banks of China is around 2%. And the return rates of low-risk WMPs offered by various investment institutions are usually below 4%. According to relevant data released by the Central Bank of China, the inflation rate of China remained above 7% in 2015-2017. That is to say, a great part of the general public wealth in China are dropping gradually. About the wealth increment and income resource broadening, a variety of enterprises suffered epidemic impact and adopted approaches of pay cuts and delay to reduce losses before resuming work. However, even if the working is resumed, due to the demands reduction of both domestic and overseas markets, and the uncertainty of the overall economic situation, the prospect of the enterprises seems not that clear. Therefore, enterprises may possibly adopt radical measures like pay cuts or job cuts positively or passively in order to maintain corporate operation or shift losses. But all these measures can lead to income decline of the general public. Then in terms of expenditure reducing, though the per capita consumption expenditures of Chinese residents may drop under the impact of the epidemic, expenses of housing loans and car loans are still unavoidable recurring payments. What's worse, prices of daily necessities like vegetables, grains, oils, and meat rise in many places recently, which undoubtedly pulls up the Engel's Coefficient of common Chinese households and enlarges the living costs of ordinary people. To sum up, the personal wealth stock of general public in China is gradually reducing. And the impacts of factors like income reduction and living cost rising on the wealth increment during the epidemic period are also not optimistic. The personal wealth of general public in China will be further reduced.

5. Countermeasures to Cope with Current Economic Situation

5.1 Adjust the Focus of Prevention and Control According to Epidemic Development.

First of all, we shall keep a close watch on the epidemic development in both China and overseas countries, and try to reduce stock and contain increment. As for China, we shall focus on asymptomatic patients and prevent super-spreader. At the same time, we shall speed up our pace in vaccines R&D and production, thus to achieve people's resistance to the virus as soon as possible. Then for external aspect, we shall keep implementing the comprehensive medical isolation policy for entry personnel, to whom, multiple times of virus tests shall be carried out to minimize the imported cases. Meanwhile, we shall keep observing the epidemic situation in key regions, especially the countries and regions having problems of asymmetrical information and lack of detection technology, which can result in big gap between actually infected cases and announced cases. Only by doing so can we act with a well-defined objective in mind when considering to allow entry of personnel coming from certain part of countries, and reduce risk of imported cases.

5.2 Offer Necessary Support to Enterprises

For enterprises that have resumed production and work, we shall guarantee their priority when supplying anti-epidemic materials, thus to satisfy their demands according to their actual need and help relieve worries of their employees. In terms of funds, we can take a series of assistance to help enterprises overcome difficulties and prevent massive enterprise failures caused by capital chain rupture, including policy subsidies, tax exemption, lowering of bank loan interest rates, and offering of grace period for bank loan repayment, etc. Meanwhile, certain favorable policies could be provided to enterprises in sectors with positive prospects, such as online shopping, medical care, and online education, thus to enable them to drive the development of surround industries while maintaining their own development steadily, and ease the downturn stress of other industries caused by the epidemic impact.

5.3 Guarantee Social Stability and Stimulate Domestic Consumption

During the epidemic period, we should guarantee the supply of necessary resources for daily use, such as water, electric power, and gas; and stabilize prices of daily necessities like grain and oil, vegetables, and meat; especially, we shall keep adhering to the principle of real estate industry proposed by CPC Central Committee, that is, "housing is for living, not for speculation", thus to contain bubbles of real estate sector. Besides, we should crack down on price hikes and rumors spread during the epidemic period, and guarantee social harmony and stability. Moreover, we shall guide the people to learn about the epidemic with a rational and objective attitude, thus to help form their consumption confidence. And in low-risk areas, we can gradually loosen the control measures to offer consumption environment to the people, and properly encourage and stipulate residents' consumption by means of distributing coupons or lowering the deposit

rates. In terms of non-contact consumption fields like online shopping and takeaway, we could encourage relative enterprises to engage in low-price promotion activities like “Singles’ Day (11.11)” activity.

5.4 Alleviate Export Downturns

Though China now has contained the epidemic, the global situation is still not optimistic. In this context, China can offer necessary assistance to its important export trading partners, thus to help them get relieved from the epidemic impact and resume market demand as soon as possible. And on the other hand, China could take good use of and expand the achievements obtained through the “Belt and Road” initiative to further expand the markets of countries and regions that are not affected by the epidemic so much. Meanwhile, the state could assist enterprises that have positive export prospects to expand the production capacity and improve the product quality, thus to further enhance their competitiveness and capability in dealing with sharp rise of orders during the epidemic period. Moreover, great efforts should also be made to maintain a relatively stable exchange between Renminbi and the world’s major currencies, thus to prevent passive appreciation of Renminbi caused by foreign currency depreciation, thereby further preventing negative impact on China’s export situation.

6. Conclusions

The epidemic spread in the globe can be deemed as a critical test to China’s economy. It indeed brought a series of challenges to China, such as demands reduction in both domestic and overseas markets, increase of operating stress in Chinese enterprises, and personal wealth drop of general public in China. But on the contrary, just as Nietzsche said: “What does not kill you makes you stronger”, China possesses relatively complete industrial chain and political system superiority, which helped to control epidemic spread in China shortly and make China one of the few countries expected by IMF to have positive GDP growth in 2020. How to further exert these advantages, accelerate industrial transformation and upgrading, arrest what seems to be the beginning of an unwholesome trend, and turn crisis into opportunity, will be the key points of economic work in China next.

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