

# The Long-term Impact of China's Macro-economy under the Background of COVID-19 and the Countermeasures

Shiqi Teng

School of Management, Sichuan University of Science & Engineering, Zigong, Sichuan, 643000, China

## Abstract

**The outbreak of COVID-19 is a public health emergency that has a major impact on China's economy and society. The COVID-19 epidemic situation in China and the world is analyzed according to the analysis of the latest development and change of the situation. The COVID-19 situation will have a significant impact on the Long-term economy in China. The Long-term development of China's economy will be affected by the epidemic situation in the world, and finally the epidemic situation will be put forward. In this context, we should take measures to revitalize China's Macro-economy.**

## Keywords

**COVID-19; Macro-economy; Long Term Impact; Economic Development.**

## 1. Introduction

Corona Virus Disease 2019 outbreak (the COVID-19) has increased the risk of further slowing down China's economic growth since the founding of the people's Republic of China.

In recent years, the impact of major public health emergencies on Macro-economy and the choice of coping policies have gradually attracted the attention of scholars. In the measurement of macroeconomic impact, most foreign studies are based on the framework of general equilibrium model. By identifying and introducing the main impact channels of events, we can get the general conclusion of macroeconomic impact. Among them, some studies focus on the introduction of event shock from the demand channel, and this kind of literature is basically about the SARS incident. Lee and McKibbin (2004) investigated the impact of SARS on the global economy by introducing the risk premium of national investment, the decrease of residents' consumption in sensitive service industries such as accommodation and catering, and the increase of protection cost in sensitive service industries into the u-cube model. Evans and others mainly studied the Ebola event. Based on the fact that the high mortality rate and high infection rate of Ebola virus caused people panic and activity interruption, the World Bank (2014) proposed that the decrease of labor participation rate, the decrease of capital utilization rate and the increase of transaction cost in West African countries are the main channels to affect the Macro-economy.

However, the domestic literature on the economic impact of major public health emergencies using the general equilibrium model framework is still very limited. Judging from the past events, most of the researches tend to analyze from the local and micro perspectives. Yang Cuihong and Chen Xikang lack the overall understanding of the Macro-economy through the empirical analysis of the impact of specific data on certain subjects and industries. From the perspective of this epidemic situation, there are many research reports, but the analysis focuses on the impact mechanism. Zhang Xiaojing and Liu Lei, by referring to the impact of SARS, compared the economic cycle, industrial structure, regional pattern and other aspects to predict the macro impact of the epidemic. More domestic literatures focus on the macroeconomic effects and transmission mechanism of fiscal and monetary policies under the

current economic conditions, but there are still differences on the macroeconomic effects of policies. This important literature is basically based on the framework of general equilibrium model. In terms of the impact on the "troika", Hu Yonggang and Guo Xinqiang proposed that whether the increase of government expenditure is crowding in or squeezing out residents' consumption depends on the proportion of government productive expenditure and the level of tax burden. Ma Wentao's research shows that the performance of price monetary instruments is better than that of quantity monetary instruments. Therefore, the central bank should actively use interest rate instruments to control inflation and real output fluctuations more effectively.

Although some literatures have studied how major public health emergencies affect the Macroeconomy, there is still a lack of direct analysis of the macro-economic development situation.

## 2. The Development, Change and Current Situation of COVID-19

### 2.1. Development, Change and Current Situation of COVID-19 in China

As of 24:00 on November 17, 2020, the total number of newly diagnosed cases in China is 86369, the total number of cured cases is 81411, the total number of dead cases is 4634, the total number of confirmed cases is 324, the number of severe cases is 3, and the total number of imported cases is 3723. At present, the provinces, cities and autonomous regions (excluding Hong Kong, Macao Special Administrative Region and Taiwan Province) with the highest number of confirmed cases are Shanghai 98, Xinjiang 62, Sichuan 42, Shaanxi 40 and Fujian 37 respectively.

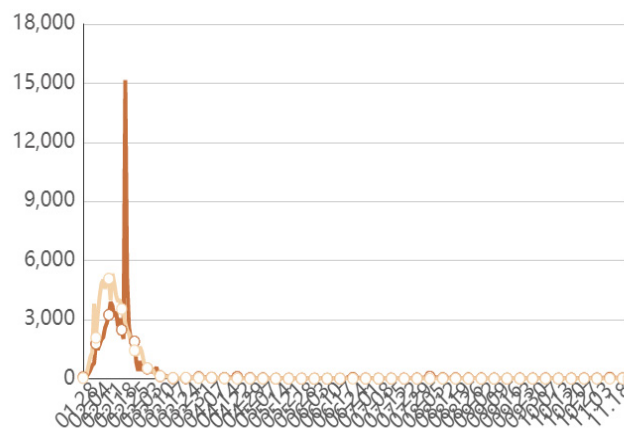


Figure 1. new confirmed / suspected trends

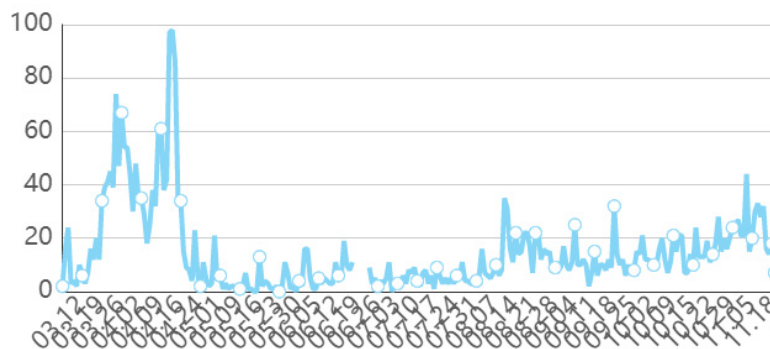
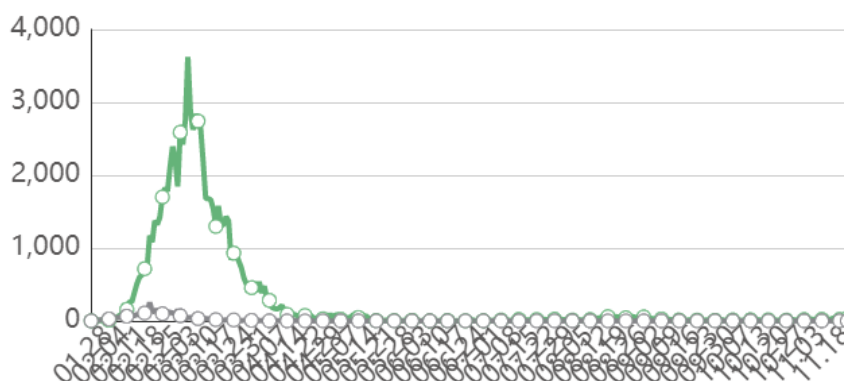
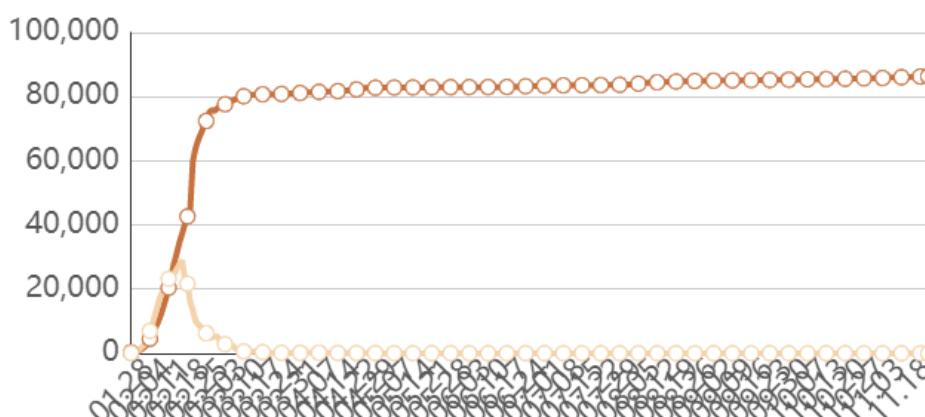


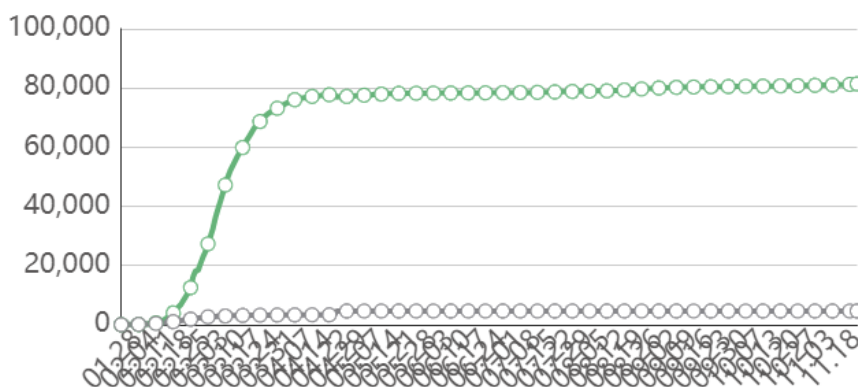
Figure 2. number of new overseas confirmed cases



**Figure 3.** new cure / death trends



**Figure 4.** cumulative confirmed / suspected trend



**Figure 5.** cumulative cure / death trend

At present, the important factor that puzzles our country is the imported cases. In the first half of December, the increase of imported cases has caused a certain burden to our country, and the clustering infectious events caused by foreign imported cases have been formed in some areas, which puts forward higher requirements for the management of local epidemic prevention and relevant departments Class, epidemic prevention work still can not be relaxed. At present, China has formed a series of effective management measures to deal with the epidemic situation. Taking advantage of China's system and combining with emerging information technology such as mobile Internet, a set of scientific response mechanism has been created, which provides valuable experience for the world. In addition, COVID-19 has been clinically proven and a group of new crown pneumonia potential drugs have been screened out.

3 vaccines have been approved for clinical trials. Among them, the Chen Wei team developed the new crown vaccine, which has been in the stage of mass production at home and abroad, and the epidemic situation in China has also been obviously controlled.

## 2.2. Development, Change and Current Situation of COVID-19 in Foreign Countries

At present, the COVID-19 in foreign countries has formed a trend of pandemic. As of 24:00 on December 13, 2020, nearly 70.23 million people have been diagnosed and nearly 1.6 million people have died. The epidemic prevention form is still severe. Some of the situations are shown in the table below.

**Table 1.** Statistics of COVID-19 in foreign countries

Country	Cumulative diagnosis	Cumulative death
U.S.A	7583748	212229
India	7053806	108334
Brazil	5055888	149639
Russia	1298718	22597
Columbia	894300	27495
Argentina	871468	23225

At present, the global epidemic situation is still in a state of spreading, and the number of newly diagnosed cases per day in some key countries is still at a high level, which is bound to have a Long-term impact on China's foreign trade economy, increase the risk of imported cases in China, and bring uncertainty to the world economy by using the epidemic situation to make hostile remarks against China.

## 3. Long Term Impact of the New Epidemic on China's Macro Economy

The Long-term impact of the COVID-19 on China's Macro-economy depends on the epidemic scope and time in the world. Combined with the constantly revised forecasts of the development of the COVID-19 by various international organizations and the prevention and control of the disease in countries around the world, the changes in the world economy can be divided into three situations: (1) the COVID-19 was brought under control in the second quarter, and the growth of the world economy in 2020 will be 1 %-(2) the global economic growth will be below 1% in 2020, even zero or negative growth; (3) the spread of the new epidemic will cross the year or even longer, and the economic recession will be inevitable. In view of the current epidemic situation in some countries, the impact on China's economy can not be underestimated.

Overall, the impact of the new epidemic on China's economy will be Long-term and profound. COVID-19 is a major challenge to the current economy, because China's economy is facing structural changes and economic challenges. China needs to introduce relevant policies to boost investment and consumption confidence, especially to reduce the pressure on small and medium-sized enterprises. At present, to solve the supply bottleneck of core components and open up new markets is the key to the rapid development of China's manufacturing industry and the realization of the leap of value chain. Therefore, we should support the development of High-tech enterprises, otherwise the reduction of production will lead to the interruption of global supply chain, the contraction and transfer of global value chain.

In addition to the direct impact on China's economy, in the context of Sino US economic and trade conflicts and US sanctions against Chinese High-tech enterprises, the epidemic situation

and related reactions of other countries will have a Long-term impact on China's future economic development. First of all, the pandemic of foreign epidemic is likely to lead to the decline of the consumption ability of Chinese products and services, resulting in the reduction of China's export and affecting China's foreign trade enterprises; at the same time, some foreign supply chain products may be affected by the epidemic, threatening the supply chain security of some Chinese enterprises. Secondly, in the face of the risk of damage caused by the epidemic, the company will tend to shorten the supply chain, and production will become more regional, which will promote the development of trade barriers to a more centralized direction, and ultimately threaten the future of globalization. Finally, under the epidemic situation, the trend of economic globalization and the international political game between countries appear to be increasingly conflicting. The fragility of international cooperation mechanism between countries is highlighted. The epidemic situation intensifies the strategic competition among big countries, and becomes the target of domestic election, party competition and political legitimacy struggle of a certain country. The epidemic situation is highly ideological, leading to the national governance mode and the whole The competition of global governance mode. The United States and other western countries are worried that China is highly dependent on its economy, its system and its global status will be replaced by China. Therefore, there is a high probability that the new epidemic will lead to global economic recession, the space for macroeconomic adjustment will be greatly reduced, and the room and means for adjustment will be extremely limited. The lack of international cooperation and leadership will lead to the spread of the epidemic and the adjustment of global supply chain. However, at present, China's manufactured products account for 65% or more of the global production, so China will be the most affected. China needs to actively formulate relevant policies to cope with the Long-term impact of the new epidemic.

#### **4. Countermeasures for Revitalizing China's Macro Economy under the Background of COVID-19**

##### **4.1. Active Fiscal and Financial Policies**

In the case of the COVID-19, fiscal policy has naturally become the "main attacker" to hedge the impact of the epidemic on the economy. We can put forward corresponding hedging strategies from the aspects of preventing and controlling the epidemic itself, stabilizing the macroeconomic prosperity index, stabilizing the supply side and expanding the total demand. Firstly, we should formulate fiscal policies to reduce the impact of the epidemic on the economy and strengthen the ability of epidemic prevention and control; secondly, we should increase the support for small, medium and micro enterprises, stabilize and gradually promote the supply side reform; thirdly, we should formulate stimulus policies to promote the "troika" of investment, consumption and export, play its role of four or two allocation, and expand the total demand; in addition, it is necessary to take measures We should use unconventional policies to stabilize the economy, and adhere to the idea of stabilizing leverage to maintain Long-term economic stability. At the same time, we should make plans to deal with foreign loose stimulus policies.

##### **4.2. Increase Support for Small, Medium and Micro Enterprises**

Small and medium-sized enterprises play an important role in China's economy. Compared with large enterprises, small and medium-sized enterprises are in a weak position in terms of capital strength and order negotiation ability, which is also the weak link in the whole industry supply chain. For the small, medium and micro enterprises in the upstream of the industrial chain, the epidemic will lead to the rising cost of raw materials import and the shortage of components, which makes the production difficult to sustain; As a result, small and medium-

sized enterprises have to face a series of problems, such as the lack of financing ability of small and medium-sized enterprises and micro enterprises So as to improve economy and ensure employment.

### **4.3. Accelerate the Development of Global Supply Chain**

The impact of COVID-19 is a pressure test on the global manufacturing supply chain. Under the epidemic situation, China's manufacturing supply chain is faced with the impact from supply shock, demand shock and impact from different regions, industries and scales. China should optimize the spatial layout of manufacturing industry, enhance the integration ability of supply chain, and promote the digital transformation of manufacturing industry. China's China one belt, one road China strategy and the "China made 2025" strategy should be combined to speed up the direct investment of Chinese manufacturing enterprises, to achieve deeper integration of China's manufacturing industry and the world manufacturing industry chain, and to increase the pace of "going out" of Chinese manufacturing enterprises, further comply with the demands of localization of global supply chains, and ensure that China's manufacturing industry is in the global supply chain. In the process of adjustment, the loss is the smallest and the benefit is the largest, so as to prevent the "de Sincization" impact of accelerating the global industrial chain due to the outbreak of the epidemic.

### **4.4. Increase Investment in Basic R & D to Boost the Development of High-tech Industry**

The trade war, science and technology war between China and the United States, the increasing technological repression of the United States and the difficulties in the development of China's High-tech enterprises directly reflect that there are serious deficiencies in the investment in basic R & D and congenital defects in the development of High-tech industries. Under the premise of controlling the epidemic situation in China, we should fully assess the impact of the epidemic situation on the weak links of international industrial chain, supply chain and value chain, and improve China's technological innovation system, give priority to the development of High-tech industries, focus on the construction of industrial chain around High-tech industries, and enhance participation in the development of High-tech industries Global value chain and the ability to upgrade along the value chain. By increasing investment in basic research, accelerating the identification and introduction of high-end talents at home and abroad, introducing more flexible and attractive local policies to introduce overseas high-end manufacturing industry and talents, and gradually improving the construction of high-end manufacturing talent team in China.

## **5. Conclusion**

From the development of the epidemic situation at home and abroad, with the effective control of the COVID-19 in China, the short-term impact of the epidemic on the Macro-economy will be gradually controlled, and the Long-term impact will be far-reaching, so it should be prevented as soon as possible. This paper analyzes the Long-term influence factors of China's Macro-economy from different aspects, and puts forward countermeasures from the aspects of Finance and finance, small and medium-sized enterprises, supply chain and High-tech industry investment, so as to provide reference for macroeconomic research under the background of epidemic situation.

## **References**

- [1] He Jun. from efficiency to safety: global supply chain adjustment and response under the impact of epidemic situation [J]. Learning and exploration, 2020, No.298 (05): 85-95 + 198.

- [2] Hong Wei. Analysis of the impact of epidemic impact on manufacturing supply chain and policy orientation in "post epidemic era" [J]. Southwest finance, 2020, 000 (006): 3-12.
- [3] Liu Zhibiao, Chen Liu. Impact of epidemic on global industrial chain, restructuring and China's coping strategies [J]. Nanjing Social Sciences, 2020, No. 391 (05): 21-27.
- [4] Liu Yuanchun. Impact of epidemic situation and economic countermeasures -- Comments on China's first quarter economic data [J]. Financial market research, 2020, No.96 (05): 5-11.
- [5] Tong Jiadong, Sheng bin, Jiang Dianchun, et al. Global economy under the impact of new crown pneumonia and challenges to China [J]. International economic review, 2020 (3): 9-28.