

## COVID-19 Pandemic on China's Economy: Impacts and Suggestions

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### Abstract

COVID-19 has caused an uproar in China and around the world since the end of 2019. It is coming violently, and it has serious impacts on the Chinese economy since the time of the Chinese New Year. With the passage of time, in the spring of 2020, the new virus ravaged the world's major economies; the world would fall into recession in 2020, and the financial markets had fluctuated sharply. "Taking back time and making up for the loss" is China's general tone for promoting economic and social development in the context of the current epidemic (Chen, Dou, & Long, 2020). How to get rid of the adverse effects of the epidemic on the society and to promote better social development are topics of practical significance. We study the background of the epidemic which impact on China's domestic and foreign economic, as well as the fluctuations in the world economy. We analyze various economic issues arising in the current context, investigate relevant data, apply the Mundell effective market classification principle for relevant analysis, and put forward reasonable suggestions accordingly.

**Keyword:** COVID-19 Pandemic, Internal and External Balance, Mundell Effective Market Classification

### 1. Foreword

In early 2020, a new type of coronary pneumonia first broke out in Wuhan, Hubei Province, China. The Central Committee of the Chinese Communist Party and the State Council examined the situation and sent experts to Wuhan in order to fight the epidemic while making scientific decisions and arrangements. Chinese president issued an urgent instruction, stating that "epidemic is command, prevention and control is responsibility". In order to minimize national losses and protect lives and safety of the Chinese people, the Party Central Committee made a scientific decision to "seal the Wuhan City". At the same time, medical personnel, and expert teams from all over China were gathered to rescue Wuhan with "full armed", and had fought bravely for Chinese people.

The sudden attack of the new crown epidemic has a certain impact on China's major industries, especially the service sector. It also influences the other industries. People are generally unemployed and the balance of the country and abroad is affected. However, the epidemic has been basically controlled in China, it is still ravaging the world. With the impact of the "pandemic", the world economy may fall into recession in 2020, the international financial markets would continue to fluctuate violently, while the exchange rates of all countries will be affected. In the short term, the global economic and financial trend will be dominated by the epidemic situation, and the global trade and investment patterns may also change.

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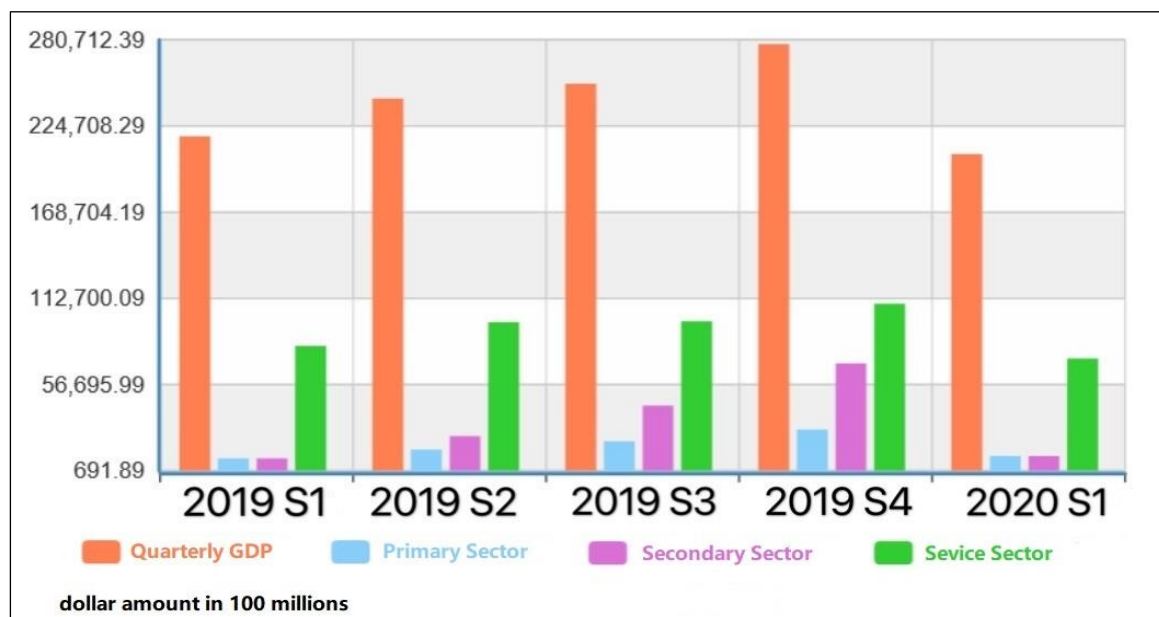
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## 2. Novel Coronavirus Pneumonia Causes “Economic Epidemic”

Since the outbreak, the novel coronavirus pneumonia (COVID-19) has continued for several months and is still spreading all over the world. The World Health Organization announced on January 31, 2020 that the outbreak constituted a public health emergency of international concern. The epidemic severely impacted China’s economic operations (Zhao, 2020).

### 2.1 China’s Current GDP and Industrial Output

Since the outbreak, the epidemic has caused turbulence on China’s economy and domestic financial markets. At present, the prevention and control of epidemic situation in China has been achieved somewhat, and the Chinese economic and social orders have been restored. However, the rapid spread of epidemic situation at overseas is forming a second-wave shock on China.



Source: Chinese National Bureau of Statistics

Figure 1. China’s GDP statistics and industrial distribution from 2019 to 2020

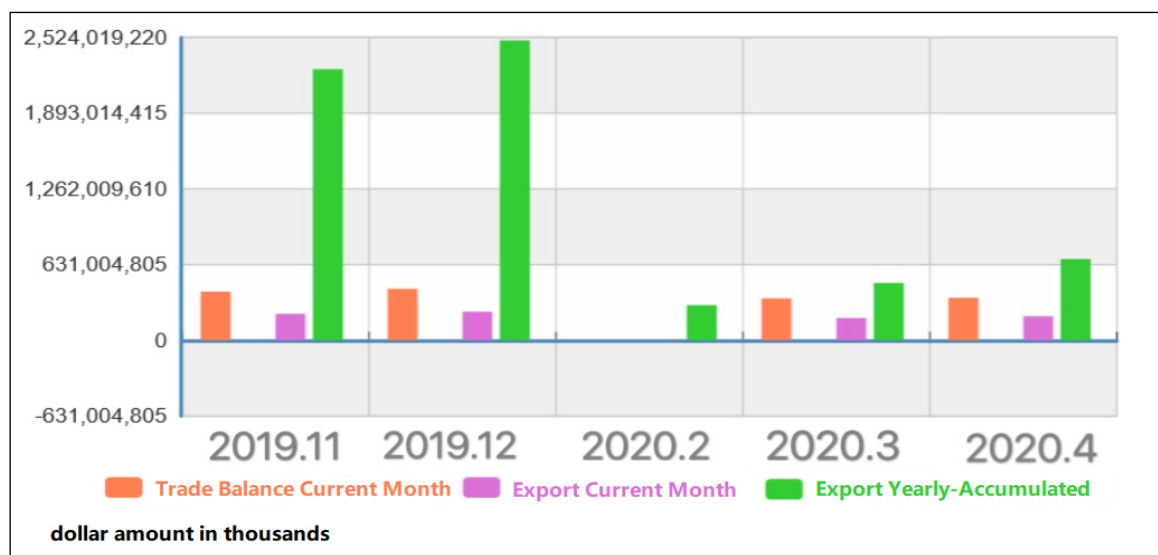
The Chinese GDP of all industries decreased by 6.0% in the first quarter of 2020 (Xu, 2020). As the epidemic spread to the world, the economic and trade relations between China and major foreign countries have been seriously impacted. The import and export of the primary sector both declined, and domestic consumption was dominated by household consumption, and the stability of the global agricultural product supply chain was greatly impacted. The uncertainty of international agricultural supply and demand increased, while the import cost increased, thus reduced China’s import demand for foreign agricultural products. Although the government’s rescue policy had achieved remarkable results, domestic agricultural supply chain has been restored in time. Many foreign countries entered a state of emergency due to the spread of the epidemic and trade restrictions were imposed successively. Thus, the foreign demand for China’s agricultural products was greatly reduced. For the secondary sector, some countries and regions reduced or suspended imports of related commodities from China, which insulated the epidemic situation and negatively impacted China’s manufacturing export. For the service sector, transportation, catering and entertainment were the most affected industries. Restrictions on personnel

flows hindered international tourism, business trip and overseas studying.

Figure 1 shows that the proportion of China's secondary sector in the economy has greatly increased and was affected seriously. Also, in the real life, the third sector was the industry most affected by the epidemic, and the negative impact will be further amplified (Ma, 2020). From the perspective of demand structure, the main forces of China's economic growth in 2019 are fixed assets investment and net export.

## 2.2 Analysis of China's Current Gross Domestic Import and Export Value

It can be seen from Figure 2 that in 2019, China was still a veritable export country, with a total export value of more than 2.5 trillion yuan. At the end of December, at the time of Chinese New Year, a large number of industrial businesses completed year-end exports. In the fourth quarter of 2019, China's total import and export value increased by 11.08 trillion yuan, an increase of 2.47 trillion-yuan year-on-year; On the contrary, in the first quarter of 2020, the overall trend was downward. In February, the current total value of exports and the total import value decreased by 100% compared with the same period of the previous year. In order to prevent and control the epidemic situation, ensure China's national security, and prevent the virus spreading, the Chinese government chose to save the "human epidemic" instead of the "economic epidemic" (Zhang, 2020) during the New Year's period. The defenses against the epidemic had been effective. Since March, China's total import and export value has returned to normal. Although the total export value only accounted for about 10% in the past, at this time, the international epidemic broke out and the world economy was paralyzed. China exported a large number of medical and living goods to support the world in fighting the epidemic. Since March, the overall import and export value has improved and the domestic economy has gradually recovered.



Source: Chinese National Bureau of Statistics

Figure 2. Statistics of China's gross domestic imports and exports (2019 to 2020)

As can be concluded from Figure 2, there was a risk of continued decline in foreign demand, and the foreign trade situation was slightly grim. At present, China's import and export trade presented structural characteristics. First, among the major trading partners, the growth of developed economies was relatively weak, and China's exports to major trading partners such as the United States, the European Union and Japan have dropped sharply. ASEAN has become China's largest trading partner (Zhao, 2020), which was mainly

affected by factors such as avoiding the US tariffs and industrial chain transfer. Second, the general trade and the export of some high-tech products were relatively good. The processing trade with traditional advantages and the export of labor-intensive products have a large decline, and the textile and clothing, mechanical and electrical products and other industries were under great pressure. Third, there was a certain rigidity in the import of necessities, and the import of bulk commodities and meat were growing rapidly.

In the future, the growth of China's import and export trade may be further dampened. On one hand, the demand of regions with severe epidemic situation and countries that rely on crude oil and other commodities for export has dropped sharply (Zhang, 2020), and China's foreign trade orders are facing the risk of further decline. Although the demand for epidemic prevention related materials and equipment has increased sharply, the volume is limited. On the other hand, the aggravation of overseas epidemic situation and the upgrading of prevention and control measures have led to the stagnation of production of some foreign manufacturers and the obstruction of international logistics, which has affected China's intermediate goods import through the global industrial chain, thus forming an adverse impact on the relevant industrial production and finished product export. Although the decline of crude oil price is conducive to reducing China's import cost, and the decline of foreign trade may have little impact on the pressure of trade deficit and net export in GDP accounting, the decrease of import and export will directly affect industrial production and employment, especially processing trade and labor-intensive industries, and then affect domestic investment, consumption and foreign investment.

Looking forward, the impact of the epidemic on China's economy may be deeper and longer than expected. In the second quarter, the economy may be significantly warmer than that in the first quarter, but the strength is limited. Among the "troika" driving the economy, the overall growth of investment is relatively optimistic, but the recovery of consumption and import and export trade is difficult. In terms of consumption, the rise of unemployment rate and the slowdown of residents' income growth will limit the rebound of consumption. It will take time for service consumption with strong aggregation characteristics such as accommodation, catering, tourism, offline sports, entertainment and education to fully recover before the epidemic (Tian, Song & Miao, 2020). In terms of import and export trade, the spread of overseas epidemic situation will cause interruption of overseas supply chain and short-term shock of the world economy, which will make China's export situation more severe. The reduction of export orders after the resumption of work will restrict the short-term economic recovery. The prerequisite for the economy to return to normal in the second half of the year is that the global epidemic situation is well controlled, but it is still very unlikely.

### **3. Equilibrium Analysis of China**

#### **3.1 Mundell's Effective Market Classification Principle**

In the 1960s, Robert Mundell proposed a new idea: dividing the expenditure increase and decrease policy into two independent tools, fiscal policy and monetary policy, to achieve two goals of internal and external equilibrium. Mundell further pointed out that although the two policies have an impact on the internal and external equilibrium, their relative effects are different. Each policy tool should be assigned to its most effective policy goal. The Mundell's Assignment Rule does the following: assign fiscal policy to internal equilibrium goals; use the expansionary fiscal policy to solve internal unemployment, and tightening fiscal policy to solve internal inflation. Assign monetary policy to external equilibrium goals, use easing monetary policy to correct the surplus in external payments, and tightening monetary policy to correct the deficit in external payments.

In response to the impact of overseas epidemic, China still has more policy space. Since the outbreak of the epidemic, China has introduced a series of fiscal, monetary and financial policy response measures. Unlike the US and other western countries, where monetary policy tools are almost exhausted, China has plenty of macro policy space. In terms of fiscal policy, China's government debt burden is relatively low. At the end of 2019, the government debt to debt ratio was 38.6%, lower than the level of major developed countries and emerging market countries. In addition to supporting epidemic prevention and control, fiscal policy can help enterprises and residents' tide over the difficulties through targeted relief, tax reduction and subsidies, and provide necessary guarantee for financial services to the real economy through policy finance and loan guarantee funds. In terms of monetary policy, the central bank still has a certain downside space for LPR and deposit reserve ratio, which can reduce the financing cost of enterprises by reducing the comprehensive capital cost of financial institutions in special period.

### 3.2 Combination of Model Application and Real Data

As the two most important macro-control policies, fiscal policy and monetary policy are powerful weapons for the implementation of demand management and economic regulation. The close relationship between the two stems from the consistency of the ultimate goal of service. The four ultimate goals of government macro-control are: economic growth, price stability, full employment and balance of payments. The essence of these four objectives is to maintain macroeconomic stability (Zhang, 2015).

Under the impact of the epidemic situation, the central banks of seven countries have made interest rate cuts in response to the epidemic, and both China's gross national product and import and export value are affected. At this time, in order to face the current situation, realize internal and external balance, and adjust the adverse effects caused by the epidemic, we select the Mundell effective market classification principle model to conduct relevant analysis and adjustment (Figure 3).

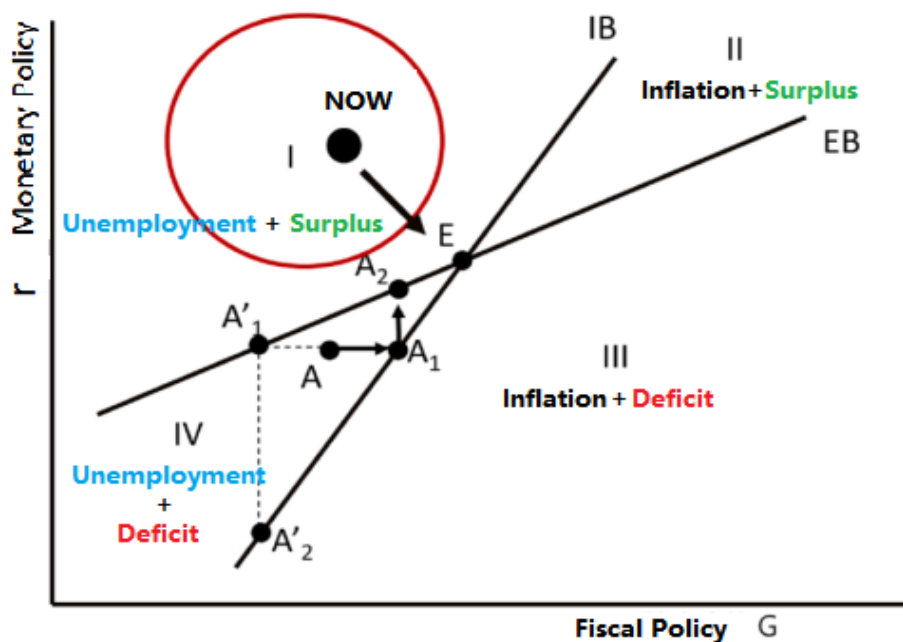


Figure 3. Mundell effective market classification

After practical analysis and data combination, China should be at the stage of unemployment + surplus, that is, the domestic people are in the stage of unemployment, while for foreign countries, China's balance of payments is in the surplus stage.

There are two reasons. First, the outbreak of the epidemic, which coincides with the traditional Chinese New Year's spring festival, is the period when catering industry, tourism industry and essentially all other kinds of service industries are operating at a high level. However, due to the epidemic situation, all the cities in all lines are closed, and the planes and trains and other transportation routes have stopped operating one after another (Budget Review Center of the Ministry of Finance, 2020). Regardless of the costs and losses of all kinds of houses and tools, people are working in a short period of time. During the blank period, after the epidemic situation improved, many small and medium-sized enterprises would choose to lay off staff because they could not afford the expenses. Therefore, unemployment appeared. Second, at the beginning of 2020, the epidemic situation in Wuhan and other regions of China was in a serious stage. However, after the government regulation and the great contribution of the medical department, China temporarily passed through the most difficult period. However, after the outbreak of the overseas epidemic, the interest rates of various countries were lowered, and the exchange rates of various countries fell. Currently, China's foreign exchange reserves were sufficient, and the funds were generous to help overseas China's foreign balance of payments surplus.

Since China is now in the unemployment + surplus region, it is necessary to implement expansionary fiscal policy and loose monetary policy to achieve internal and external balance and minimize the economic impact of the epidemic.

The use of expansionary fiscal policy can promote higher economic growth, and maintaining a certain economic growth rate is the fundamental way to solve people's livelihood employment. The growth target of GDP can be set at 3.2%, which can be used as a benchmark or an intentional target to analyze the prospects of economic growth. How to achieve 3.2%?

First, some pre-conditions, such as control of the epidemic, no recurrence, and no major imported epidemic, must be set. Secondly, it is necessary to make assumptions about the growth rate of endogenous variables that are difficult for the government to control. For example, it can be assumed that the growth rate of consumption demand is also 3.2%, and the growth rate of net export is kept negative by 34% (China's net export growth rate in 2019). After making these assumptions, it can be calculated that in order to achieve a GDP growth rate of 3.2%, the growth rate of capital formation must reach 5%. Among the various components of capital formation, what the government can directly control is the growth rate of infrastructure investment. Stimulating infrastructure investment is the key. If infrastructure investment can achieve a high enough growth rate (double-digit), China is likely to achieve a growth rate of 3.2% or even higher for the whole year.

With loose monetary policy, we can implement four measures. First, we should improve financial regulation and control, appropriately increase the supply of money and credit while maintaining price stability, maintain sufficient liquidity in the banking system, and ensure that the total amount of money and credit meets the needs of economic development; Second, we should optimize the credit structure, guide financial institutions to make full use of new credit funds, and increase credit investment in weak links and key areas such as "agriculture, rural areas, farmers", small and medium-sized enterprises, post disaster reconstruction, and livelihood projects. Major project construction, energy conservation and emission reduction, technological innovation, technological transformation and regional coordinated development; Third, further straighten out the transmission mechanism of monetary policy to ensure smooth flow of funds. We should

give full play to the advantages and characteristics of various financial institutions, innovate and improve financial services, meet the reasonable demand for funds, form financial synergy, and promote economic development; Fourth, to strengthen and improve financial supervision, all kinds of financial enterprises must strengthen risk management, enhance the ability to resist risks, strengthen the coordination of financial supervision, strengthen the functional supervision of financial institutions, prudential supervision and capital constraints.

Most western countries are implementing monetary financing; China should do the same. In order to achieve GDP growth in China, the policy choice should be based on fiscal policy and coordinated with monetary policy. The government should break the taboo that the deficit rate should not exceed 3%, and should greatly increase the issuance of treasury bonds (Budget Review Center of the Ministry of Finance, 2020). The central bank should adopt policies like QE, trying to lower the yield of treasury bonds, and should help with the issuance of treasury bonds.

## **4. Mitigating the Impacts on China's Economy**

### **4.1 Proactive Management of Epidemic Prevention and Control**

At present, China's epidemic prevention and control has made great strategic achievements, and the epidemic prevention and control work has also entered the normal prevention and control state from the emergency state (Yang, 2020). However, China's foreign import pressure continues to increase, and the risk of domestic epidemic rebound always exists, so we must constantly improve the normalization prevention and control mechanism.

### **4.2 Active and Orderly Resumption of Work and Production**

After the COVID-19 pandemic situation is effectively controlled, we should promote comprehensive recovery and production in a timely manner and promote stable economic and social development.

### **4.3 Increase in Bank Credit Supply**

We should guide financial institutions to increase credit supply and increase support for the real economy, especially those enterprises that are greatly affected by the epidemic (Budget Review Center of the Ministry of Finance, 2020). At the same time, through the establishment of a better factors market distribution system, the reform of factor market distribution will further release economic vitality and promote high-quality economic development, thus bring in finance to support the development of the real economy. First, it is necessary to strengthen the adjustment of counter-cyclical monetary policy, and increase financial supports for the manufacturing industry and private small and micro enterprises, which will help enterprises resume their work and production in an all-round way; Second, support commercial banks to raise capital through issuing convertible bonds, perpetual bonds and preferred shares, so as to enhance their ability to absorb losses as they serve the real economy.

### **4.4 Improve Industrial Productions and Supply Chains**

At present, the global production arrangements are reshuffling. China should seize this opportunity and actively adjust China's industrial productions and supply chains, and strive for more international integration (Zhao, 2020).

## 5. Conclusion

The COVID-19 pandemic has brought great impact to the needs and supply of the economy and society, but impact of the epidemic is short-term, external and hopefully controllable. The whole world should unite to promote and control the epidemic situation, while actively tapping the potential of various factors, and join force on the healthy and stable development of the economy and society.

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