# Analysis of the Impact of New Coronary Pneumonia on China's Economy

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**Abstract**—The new crown epidemic is still spreading rapidly around the world. It has become a thorny issue facing all countries and regions around the world, and it has had an important impact on our economy, society and life. This article analyzes the macroeconomic impact of the new crown pneumonia epidemic on the global economy, focusing on the three important economic indicators of GDP, per capita consumption expenditure of residents, and fiscal revenue and expenditure to discuss the development of China's economy under the epidemic. Finally, combining national policies from the three major economic indicators, the industry perspective expounds the impact on China's economic development and gives corresponding policy recommendations.

Keywords-COVID-19; economic development; macro impact

## **1** INTRODUCTION

The new crown virus has spread widely around the world. As of June 17, 2021, there have been more than 176.1 million confirmed cases worldwide. At the beginning of the virus discovery in February 2020, it was the Spring Festival travel frenzy, which led to the rapid spread of the virus across the country. China's Hubei Province is the most serious, and other severe surrounding areas have also seen large-scale infections. The new coronavirus is highly contagious and has a special transmission mechanism. It will incubate in the human body for up to 14 days<sup>[1]</sup>. It is mainly spread through the respiratory tract of droplets and contact. Under the call of General Secretary Xi Jinping, the whole country has united, "One side has difficulties, and multiple support"<sup>[2]</sup>, timely supply of medical supplies, and adequate supply of basic living supplies for the people. Under the call of the national "home order", the people's lifestyles, the consumption patterns of consumers and the production and operation plans of producers have been greatly changed.

# 2 THE MACRO IMPACT OF THE EPIDEMIC ON THE GLOBAL ECONOMYASE OF USE

With the improvement of the domestic epidemic situation, the global new crown epidemic has gradually unfolded. Many countries led by the United States, followed by Brazil and India, have experienced a severe new crown crisis, and the external economic environment is extremely poor. For the United States, the GDP fell by 32.9% in the second quarter, and the European Union's GDP fell by 14.4% in the second quarter. As superpowers and the world's largest economy, both set GDP decline records. In this epidemic, global demand and supply are insufficient, the market is sluggish, and many industries have suffered varying degrees of impact. In the downward trend of economic globalization, there has been an anti-globalization phenomenon in which foreign companies cancel orders and reduce international trade. It has dealt a serious blow to countries that trade in bulk commodities, rely on exports, and travel. In the face of the new crown epidemic, the central banks and the Ministry of Finance of various countries have vigorously introduced allocations and preferential policies. Many of these measures are beyond the country's tolerance. For example, the fiscal measures introduced by Japan and the United Kingdom exceed their own country's GDP. 20% of the total, most countries remain at about 10%. In the short term, these rescue policies are powerful means to help treat patients, fight the epidemic, and protect people's livelihood. These same policies will have far-reaching adverse effects on the country. As far as China is concerned, my country's accumulated foreign exchange reserves have reached 3 trillion U.S. dollars. The Fed's largescale printing of banknotes and new money supply will greatly reduce the purchasing power of the U.S. dollar. inflation. This is true for my country and other countries. The US dollar is the most influential currency in the world. Each country's foreign exchange reserves are in US dollars. After the epidemic, it will theoretically cause global inflation.

#### 2.1 Maintaining the Integrity of the Specifications

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# **3** ANALYSIS OF IMPORTANT INDICATORS OF CHINA'S ECONOMY DURING THE EPIDEMIC

In recent years, China has been in a transitional stage from rapid economic development to high-quality development. The country has been using proactive fiscal policy and prudent monetary policy macro-control measures. China's economic development is prospering and it is the second largest in the world. Economy. Since 2007, China has been in a state where fiscal expenditure is greater than income, and since 2016, the difference between expenditure and income has increased significantly, and the market is active.

#### 3.1 GDP indicator

The GDP reflecting the national economy is the most direct indicator reflecting the national macroeconomic operation <sup>[3]</sup>. Affected by the new crown epidemic, GDP in the first quarter of 2020 decreased by 6.8% year-on-year, and in the second quarter of 2013-2020 in Figure 1 and the GDP growth rate from the GDP growth rate in the first quarter of 2020 in Figure 2, we can see that from 2013 to 2019, the GDP in the first quarter showed a sustained high speed. Stable positive growth. The economic development in the first quarter of 2019 slowed down compared with the first quarter of 2018, but it also reached a growth rate of 6.4%, achieved a total output value of 1972.3 billion yuan, and reached the macroeconomic target of 6.1%. By the first quarter of 2020, under the influence of the new crown epidemic, the gross domestic product was only 18,366.93 billion yuan, which has caused a huge impact on the country's macro operation strategy.

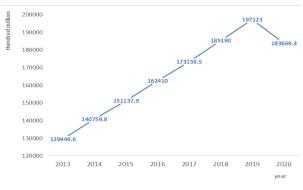


Figure 1 GDP in the first quarter of 2013-2020

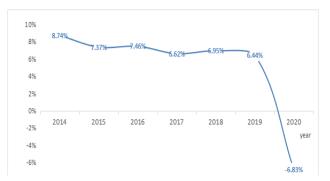


Figure 2 GDP growth rate in the first quarter of

As the epidemic has faded in China, the economic situation is improving, production and work resumed gradually, and service industries such as catering, accommodation, and tourism have gradually improved. Consumption, investment, and imports and exports have gradually improved. GDP rebounded in the second quarter and rose year-on-year. 3.2%, achieving a GDP of 22549.55 billion yuan, and the growth rate has turned from negative to positive. The first quarter and the second quarter can be roughly regarded as the epidemic and after the epidemic,

there has been a wave of resumption of production and work, a wave of consumption, and a significant increase in market vitality

#### 3.2 Per capita consumption expenditure of residents

As one of the "three carriages" of driving the economy <sup>[4]</sup>, consumption has experienced a huge decline during the new crown epidemic. According to Figure 3, the cumulative increase in per capita consumption expenditure of residents in the first to fourth quarters of 2019 was 5.4%, 5.2%, and 5.7. %, 5.5%, the maximum fluctuation does not exceed 0.5%. In the first quarter of 2020, it fell sharply to -12.5%. In the second quarter, the decline narrowed by 3.2% when the epidemic was basically under control.



Figure 3. Accumulated growth of per capita consumption expenditure of residents

The epidemic has led to a decline in consumer income. According to data from the National Bureau of Statistics of China, the cumulative increase in the disposable income of residents in the first and second quarters of 2020 will be -3.9% and -1.3%, respectively. The decrease in residents' income is accompanied by a decrease in the price index. The rise has severely hit consumers' desire to consume, and many communities have restricted the number of visits and the number of people. Consumers consume more of the necessities of life, while reducing the consumption of luxury goods. At the same time, under the call of the country to "contribute to home isolation", the contactless way of purchasing daily necessities has become more and more accepted. People have increased their use of the Internet, and online consumption has also become the mainstream of people's consumption. Many people have switched from offline consumption to online consumption, which has greatly accelerated the development of the Internet. In general, consumer spending fell during the epidemic. In the first and second quarters, per capita consumer spending increased by -12.5% and -9.5%. With the decline in income, the decline in expenditure is inevitable. The epidemic is in the second and third quarters. It is not possible to determine when it will recover from month to month. The overall consumer confidence is low, and savings are the mainstay.

#### **3.3 Fiscal revenue and expenditure**

The outbreak of the new crown epidemic in 2020 has caused a setback in the country's economy. In the case of a 6.8% decline in GDP in the first quarter, the fiscal deficit will further increase. In terms of fiscal revenue, according to the Ministry of Finance, the country's general

public budget revenue was 9.6176 billion yuan, a year-on-year decrease of 10.8%. As a public emergency, the new crown epidemic has irresistible factors. It directly affects the country's fiscal revenue and expenditure.

In order to help companies tide over the difficulties, in accordance with the decisions and deployment of the Party Central Committee and the State Council, in 2019, the value-added tax rate and corporate pension insurance rates have been reduced. Due to the large scope and extent of the impact of the epidemic, the reduction or exemption was introduced in 2.3 this year. The policy implementation period will be extended to the end of this year. Tax reductions and exemptions for companies with a higher degree of damage were implemented, and the taxation of individual industrial and commercial households was increased. In the first half of 2020, the corporate income tax was 2,337.6 billion yuan, a year-on-year decrease of 7.2%. In addition, various policies such as new energy vehicles, export tax rebates, medical insurance and social insurance, and administrative expenses have been improved and improved in different strengths. The above policies are expected to reduce taxes and fees to 250 million yuan.

In terms of fiscal expenditures, the national general public budget expenditures were 1,16411 billion yuan, a year-on-year decrease of 5.8%. Compared with fiscal revenue, it is 5 percentage points lower, and the deficit gap increases. Among the few expenditure growth subjects, only social security and employment expenditures, agriculture, forestry and water expenditures, and debt interest payments have seen different levels of growth. The country spends a lot of money on fighting the epidemic. From the investigation and tracking of cases, the establishment of epidemic prevention points, to the detection and treatment of suspected cases, and the sanitation and disinfection of public places, expenses will be incurred. During the period, the allocation for the epidemic reached 899.33. 100 million yuan. For the "six guarantees" work to ensure employment and the people's livelihood, the state has also allocated various degrees of transfer payments from the central government to local governments in 2020, totaling 1,684.42 billion yuan, and 53.9 billion yuan in employment subsidies <sup>[5]</sup>.

# 4 THE IMPACT OF THE EPIDEMIC ON CHINA'S THREE MAJOR INDUSTRIES

#### 4.1 Primary industry-agriculture

China's agricultural development situation has been very good. In the first half of 2020, the added value of agricultural production increased by 3.8% year-on-year. During the epidemic, in order to ensure the basic survival needs of the people, the supply of agricultural products has always tended to increase steadily. When the epidemic first broke out, there was a panic buying of agricultural products. The market was too late to respond, and there was a short-term shortage of supply. In fact, the prices of agricultural products also rose along with the trend, and the producer price index of agricultural products reached 139. In the epidemic, food safety issues at home and abroad frequently occur, and people are paying more and more attention to the basic security of life, highlighting the important position of agriculture in residents' lives.

China is paying more and more attention to food safety issues, and food safety issues have always been a focus of public attention. During the two sessions, Li Keqiang mentioned food safety issues and strengthened government departments' supervision of food safety issues. After the good momentum in the first quarter, the agricultural output value in the second quarter increased by 3.9% year-on-year. The agricultural area increased, and the planting structure continued to be optimized. Summer grain harvests were harvested. The output of rapeseed, milk, and poultry and eggs rose sharply. The decline in sheep production has narrowed by 8.7%, and the agricultural development situation is good. This year, China's summer grain imports have fallen by more than 9 million tons year-on-year. As a major food country, my country has basically not relied on imports, but the world is facing a food crisis this year. The United Nations issued an early warning: The world is welcoming the most serious food crisis in the past 50 years. Australia has the lowest wheat production in the past ten years, and many grain exporting countries, Russia, Vietnam, and Kazakhstan have stopped exporting grain. As the development trend of subsequent agriculture is rising, it will become more and more secure and stricter.

#### 4.2 Secondary industry-industry

The industry, which is the core of the three major industries, suffered severe setbacks during the epidemic. From the first quarter to the second quarter, it is a process from suspension of production and work to resumption of work. In the first quarter, the added value of industrial production dropped sharply by 8.4%. Industry is a pillar industry for the country's economic development and a pillar industry that drives economic development. However, it suffered heavy losses during the epidemic, and many companies with poor anti-risk capabilities were dragged down. Think about this data from the perspective of the production method of accounting for GDP. The measures to close cities in various regions, traffic obstructions, the lack of timely raw material supply and the interruption of the industrial chain, and the failure to produce the final product in time, then this data is easy to accept. In the second quarter, the industrial production value increased by 4.8% year-on-year, and profits gradually increased. There are three reasons for the growth of industrial profits: First, the continuous expansion of supply and demand, the gradual recovery of the epidemic, manufacturers have begun to resume production and enterprises' orders have increased. Second, the decline in the prices of industrial products narrowed. In June, the decline in the ex-factory price index and the purchase price index of industrial producers narrowed for the first time, avoiding the trend of continuous expansion of the decline. Third, the production cost has fallen. Also in June, the cost per hundred yuan of operating income of industrial enterprises fell for the first time. Among the 41 major industrial sectors, 37 industries have seen an improvement, turning from negative to positive or decreasing in decline, of which 25 industries have positive profits. With the gradual popularization of 5G this year, the scale of new infrastructure has gradually increased, the hightech manufacturing industry has continued to drive, and the national economy has gradually recovered. From the perspective of the supply side, the resumption of production and work does not only require the presence of the company's labor force, but also the use of transportation as an intermediary. From the procurement of raw materials, production, to the transportation of the final product to the final sales link, all aspects are missing. No, they are very useful. From the demand side, it is necessary to increase policies and measures that benefit consumers, such as duty-free shops, stall economy, and consumer vouchers, to restore consumer confidence.

#### 4.3 Tertiary Industry-Service Industry

As an industry that accounts for an increasing proportion of China's economy, the service industry is the industry that has suffered the most and the most direct victims. The tertiary industry is gradually entering a glorious stage in the Chinese economy. The industrial structure is continuously optimized, the types of services are gradually increasing, and the service structure is being upgraded <sup>[6]</sup>. Service consumption services with the Internet as the trend are spreading across the country. The traditional service industry is getting closer and closer to the Internet, and has gradually become an inseparable whole, such as online "points" such as Meituan Takeaway and Ctrip. The consumption service model of "dining" and offline "experience" has gradually become an indispensable part and service mode for people. People's consumption ability has become stronger, and the contribution rate of the service industry to GDP has also been continuously improved. As shown in Figure 4, the contribution rate of the tertiary industry to GDP increased from 2010 to 2019, from a contribution rate of 39.0% in 2010 to a contribution rate of 61.5% in 2018, and its momentum has surpassed that of industry. As of 2016, this value has been fluctuating around 60%. With the trend of China, this value has room for improvement. In developed countries such as Europe and the United States, this value can reach about 75%.

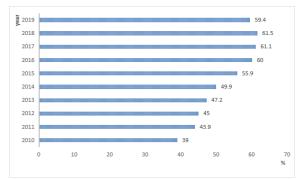


Figure 4 The contribution rate of the tertiary industry to GDP from 2010 to 2019

The service industry is in the stage of rapid development, and offline traditional service stores did not develop any development during the epidemic. In the first quarter, the value-added of service industry production fell by 5.2% year-on-year, and in the second quarter it rose to 1.9%, which is a change from negative to positive. The information technology service industry, information transmission, financial industry and similar online service industries have increased significantly, but for those offline service industries such as catering, wholesale and retail, and accommodation, they have suffered heavy losses. The added value of the accommodation and catering industry is the highest. While the decline in the second quarter has narrowed by 9.7% and 8.5%, the second quarter is still -8.1% and -26.8%. Due to this kind of "home isolation" restrictions on eating, drinking, and playing, you cannot go out. Many of these industries are substitutable. Therefore, the service method and consumers' purchase of services have changed-online services have replaced offline services. Services, online finance, mobile games, e-commerce retail, and express logistics are all growing. Not only the industry, but also the employment of residents have caused great problems. According to statistics, in 2018, the number of people employed in the tertiary industry in my country reached 359.38 million,

accounting for 46.3% of the total number. In the country's "three guarantees" policy, it is necessary to protect people's livelihood and work, and the "six stability" is also to stabilize employment. The epidemic has dealt a blow to the service industry and its employees. However, the service industry is still an industry with great potential and room for growth. Whether in terms of GDP contribution rate or employment contribution rate, the service industry will be in the future. Will be further promoted, and the status will be further consolidated.

# 5 CONCLUSION

The form of the global spread of new crown pneumonia is not optimistic. People around the world are actively fighting the epidemic in "real combat", so as to control the spread of the epidemic as soon as possible and minimize the impact on all aspects of the world. Combining the results of the analysis of the Chinese economy in the previous article, in view of the existing problems, it is necessary to further dig the root causes of monetary policy, fiscal policy, and new channel industry security policies to resume normal economic development as soon as possible.

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