Relationship between epidemic prevention and control and economic development in China

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Abstract: The sudden outbreak of COVID-19 has had a dramatic impact on China's economy and is the biggest crisis humanity has faced since The Second World War. This paper mainly analyzes the impact of China's epidemic prevention and control on economic recovery and development. The focus will be on four core issues: First, the targeted preventive and control measures China has taken since the outbreak of COVID-19; Second, regular epidemic prevention and control; Third, the progress of China's economic recovery; Fourth, the major challenges facing China's economic development in the context of regular epidemic prevention and control.

Keywords: epidemic prevention and control, economic development

1. Current situation of epidemic prevention and control in China

Since the outbreak of COVID-19, the Chinese government has attached great importance to it and taken the strictest, most comprehensive and thorough prevention and control measures to resolutely combat the epidemic in a highly responsible manner for the safety and health of the Chinese people and people around the world.

Around the Spring Festival in 2020, COVID-19 broke out in Wuhan, China's ninth largest city and a major transportation hub in the country, and quickly spread to the whole country. In order to prevent further expansion of the epidemic, strict home quarantine, extension of the Spring Festival holiday, delaying the start of enterprises and other measures were taken. Wuhan, the epicenter of the epidemic, and other places even took severe measures to "lockdown" the city [1]. China closed the exit routes of Hubei province and strictly controlled the movement of people, taking unprecedented prevention and control measures [2].

In the process of epidemic prevention and control, China has always maintained a "zero tolerance" policy. In addition to sound policies and mature systems, efficient accountability has enabled Chinese officials to maintain a rigorous attitude towards epidemic prevention and control, which is why Chinese provinces have been able to implement relevant policies. Thanks to hard work, the situation in China has continued to improve and the order of work and life has been restored at a faster pace.

The United States is just the opposite. Since the outbreak of the epidemic to November 17, 2021, more than 48 million people have been diagnosed and nearly 780000 people have died in the United States, but no official has been held accountable. More bizarre, state health officials who tried to stop the falsification of epidemic data were fired, and medical experts who told the truth were cyberbullied. But some countries in the West point to the United States as a model to show off the accountability of western democracies. The US media once lamented that the US has a lot to learn from China on epidemic prevention.

As COVID-19 continues to spread globally, the risk of importation is increasing. It has brought greater challenges to China's epidemic prevention and control. Local governments pay close attention to normalized epidemic prevention and control, establish and improve the transformation mechanism of normalized prevention and control and emergency response, activate the command system in time, strengthen monitoring and early warning, and strictly implement the reporting system. Speed up regional investigation, coordinate the forces of public security, industry and information technology and public health, optimize data algorithms, improve the accuracy of push information, urge relevant places to check in place as soon as possible, and pay close attention to all prevention and control work.
2. Current situation of China's economic development after the epidemic

2020 is destined to be an extraordinary year. The outbreak of new-type coronary pneumonia has given an unprecedented "long holiday" to more than 1 billion people in China, and cities and villages across the country have closed cities and roads. The sharp decline in population mobility has a huge impact on the economy, and labor-intensive real economy such as catering, film, tourism, hotels, transportation and offline education and training has been hit hard. On the contrary, with the continuous introduction of measures such as home-based epidemic prevention, the extension of the Spring Festival holiday, and the delay of the resumption of work and school opening, emerging consumption patterns have become the first choice, benefiting industries such as medicine and medical care, online games, and online education.

According to the statistics of Evergrande Research Institute, the catering retail industry is expected to lose about 500 billion yuan only in the seven days of the Spring Festival; The average daily loss of the tourism industry exceeds 17.8 billion yuan; More than 30 concerts were postponed or cancelled, resulting in a loss of 10 billion yuan in offline entertainment. The film market started the year with a loss of 13 billion yuan. During the Spring Festival of 2020, the offline service industry was greatly impacted by the epidemic, but it promoted the development of the online economy. The game industry has seen explosive growth, with the annual turnover of King of Glory exceeding 2 billion yuan on the 30th of the year; The total viewing time of TV news programs per capita increased by 153%, and that of provincial TV stations increased by 23%. Jd.com's fresh delivery home service increased by 370% compared with the period before the Spring Festival.

Although the overall operating revenue of service enterprises in China decreased by 12.2%, the information transmission, software and information technology services increased by 13.2%. In the face of the impact of the epidemic, the demand of high-tech service industry reflects great vitality. Scenes such as home isolation and social restrictions promote the emergence of new ways of life and work, thus creating new market opportunities. Relevant enterprises showed their technical ability and creativity, quickly launched various remote meetings, teaching and other related services, effectively supported the anti-epidemic and met the social needs [3].

According to the data released by the National Bureau of statistics on January 18, 2021, the GDP in 2020 will reach 1015986 billion yuan, an increase of 2.3% over the previous year. It is expected to become the only major economy in the world to achieve positive economic growth. China's epidemic prevention and control capability is the biggest driving force for economic recovery. According to the data of China's National Bureau of statistics, the spread of the epidemic in China was basically blocked in late March. In mid-April, the operating rate of Enterprises above Designated Size exceeded 90%. GDP grew by 3.2% in the second quarter, from negative to positive.

In the first half of 2021, facing the complex and changeable domestic and international environment, China's economy continued to recover stably, the main macro indicators were in a reasonable range, and the economic development showed a trend of strengthening and improving in stability. According to preliminary accounting, in the first half of 2021, the GDP was 53216.7 billion yuan, a year-on-year increase of 12.7% at comparable prices; In 2021, the national consumer price (CPI) increased by 0.5% year-on-year, the same as that in the first quarter; Producer prices rose by 5.1% year on year, an increase of 3.0 percentage points over the first quarter; The added value of industries above designated size increased by 15.9% year-on-year, with an average increase of 7.0% in two years; The utilization rate of industrial capacity was 77.9%, an increase of 6.8 percentage points over the same period in 2020 and 1.7 percentage points over the same period in 2019; The total retail sales of social consumer goods reached 21190.4 billion yuan, a year-on-year increase of 23.0%, with an average increase of 4.4% in the two years; The per capita disposable income of residents in China was 17642 yuan, a year-on-year increase of 12.6%; China's total import and export of goods was 18065.1 billion yuan, a year-on-year increase of 27.1%, of which the export was 9849.3 billion yuan, a year-on-year increase of 28.1%; Imports amounted to 8215.7 billion yuan, a year-on-year increase of 25.9%. Against the background of increasing uncertainty and prominent imbalance in the world economic recovery, China's economy continued to recover steadily and its development foundation was more consolidated in the first half of 2021.

3. Epidemic prevention and control and economic development

Epidemic prevention and control is critical to lives, and economic development is critical to livelihoods. China's successful response to the epidemic has been to coordinate epidemic prevention and economic development, and to accurately grasp the dialectical relationship between prevention and
release, righteousness and benefit, risk and opportunity, and internal and external.

3.1. Epidemic prevention and control is a strong guarantee for economic construction

By preventing the new crown epidemic from spreading again on a large scale, production can be resumed and released, so that China's economy and society will gradually return to normal in precision prevention and control. On January 23, 2020, in the face of the sudden new crown epidemic, Wuhan decisively "closed the city." Under strict and scientific prevention and control, China has initially curbed the spread of the epidemic in more than one month, controlled the daily new cases in China within single digits in about two months, and achieved decisive results in the defense war in Wuhan and Hubei in about three months [4]; Since then, only sporadic cases or aggregated outbreaks have occurred in some parts of China and can be quickly controlled, while the global epidemic is still spreading and fluctuating again and again. In addition, China's economy will improve quarter by quarter in 2020, with an annual growth rate of 2.3%. In the first half of 2021, the growth rate was 12.7%, and the average growth rate in the two years was 5.3%. Therefore, epidemic prevention and control is a strong guarantee for economic construction. Only when prevention and control is in place can we create a reassuring development environment.

In the face of the epidemic, China chose to temporarily sacrifice its economy, put the safety and health of its people first, treated the patients and ensured a rapid economic recovery. 23,000 yuān is the per capita treatment cost for COVID-19 patients in China, of which the per capita treatment cost for severe cases is more than 150,000 yuān. By the end of June 2021, a total of 2,837 billion yuān of medical expenses had been settled for hospitalized COVID-19 patients nationwide, and 1,631 billion yuān of medical insurance was covered. More than 2.2 billion doses of vaccine have been given free of charge on the mainland. When some Western countries, faced with medical pressure, choose to withdraw ventilators for people over 65 years old, and when Lieutenant Governor Dan Patrick of Texas in the United States declared that he agreed to "risk restarting the American economy" at the cost of the lives of the elderly [5], China will protect life at all costs. China is willing to sacrifice temporary and partial economic interests for the sake of people's lives. Wuhan, with a population of 10 million, pressed the "pause button". In the first quarter of 2020, Wuhan's GDP dropped by 40.5% year-on-year. It is estimated that one more day of delay in resuming work after the Spring Festival reduces China's GDP by about 150 billion yuān. Modeling and analysis by 15 international research institutions showed that the lockdown of Wuhan and emergency responses delayed the growth of the epidemic, reducing the number of infected people in China by more than 700,000!

3.2. Epidemic prevention and control has promoted the growth of domestic demand

While traditional industries are under threat, China can also foster a digital economy and new industries to boost economic development. China's economy is also bound to be hit by the pandemic, which has plunged the global economy into its worst recession since the end of World War II. In 2020, investment in the health and social work sector grew 26.8 percent, while total fixed asset investment increased only 2.7 percent year on year. From January to August 2021, the added value of the pharmaceutical manufacturing industry increased by 30% year-on-year, much higher than the average level of the manufacturing industry.

The epidemic has impacted traditional industries, but also promoted the accelerated growth of digital economy and emerging industries. Taking this opportunity, China has made every effort to promote new base stations, with a total of 1.037 million 5G base stations built; Help small, medium-sized and micro enterprises, accelerate the modernization of the industrial chain, and show strong potential in emerging industries such as intelligent manufacturing, unmanned distribution, online consumption and medical health. While China's economy is stable and improving, the momentum of high-quality development is also prominent: In the first half of 2021, the contribution rate of domestic demand to economic growth exceeded 80%; From January to August, the national online retail sales increased by 19.7% year-on-year, and the value-added of high-tech manufacturing increased by 13.1% on average in two years. We should not only fight a prepared war to prevent and resist risks, but also fight a strategic initiative war to turn danger into opportunity, which is the practical enlightenment of China's response to risk challenges.

3.3. Epidemic prevention and control support has promoted the growth of foreign trade

Under the severe epidemic situation abroad, China can still cooperate with more and more countries to promote the recovery of the global economy. Continue to reduce the negative list of foreign investment
access and relax the threshold for foreign investment access; Implement the Hainan Free Trade Port Law and build a free trade port with Chinese characteristics with high quality and high standards; the Belt and Road cooperation document was signed with more than 200 countries and 32 international organizations. The 140 were "The Belt and Road" [6]. In the first eight months of 2021, more than 10000 China Europe trains will be launched, reaching more than 170 cities in 23 European countries and transporting more than 50000 kinds of goods.

Foreign defense input and opening-up cooperation should be carried out simultaneously to contribute China's strength to the world under complex situations. Global anti epidemic practice has proved that it is precisely because China takes the lead in controlling the epidemic situation and returning to work and production that it can ensure the role of the largest supplier of global anti epidemic materials and promote global anti epidemic cooperation and economic recovery.

According to the data released by the General Administration of Customs on July 13, 2021, the total import and export value of China's goods trade in the first half of the year was 18.07 trillion yuan, a year-on-year increase of 27.1%; Among them, the export was 9.85 trillion yuan, an increase of 28.1%; Imports reached 8.22 trillion yuan, an increase of 25.9%. In a single month, China's total import and export value in June was 3.29 trillion yuan, an increase of 22% year-on-year, and has achieved positive year-on-year growth for 13 consecutive months; Among them, imports increased by 24.2% year-on-year, which was lower than the previous value of 39.5%, but still maintained double-digit growth; Exports increased by 20.2% year-on-year, higher than the previous value of 18.1%, and the trade surplus of that month was 332.75 billion yuan. Experts said that China's import and export toughness has been continuously enhanced since 2021, but affected by the high base effect in the second half of 2020, the growth rate of import and export in the second half of 2021 may slow down compared with the first half of 2021. It is expected that the growth rate of China's import and export is expected to maintain double-digit growth in 2021.

![Figure 1. Import and export between China and major trading partners in the first half of 2021](image1.png)

Figure 1. Import and export between China and major trading partners in the first half of 2021

| Rank | Country / Region | Export amount from January to February 2021 | Proportion of export amount from January to February 2021 | Export amount from January to February 2020 | Proportion of export amount from January to February 2020 | Year on year growth |
|------|------------------|--------------------------------------------|----------------------------------------------------------|--------------------------------------------|----------------------------------------------------------|---------------------|
| 1    | China            | 4688                                       | 9.60%                                                    | 2924                                       | 6.51%                                                    | 60.32%              |
| 2    | U.S.A            | 2518                                       | 5.16%                                                    | 2612                                       | 5.81%                                                    | -3.59%              |
| 3    | Germany          | 2511                                       | 5.14%                                                    | 2380                                       | 5.30%                                                    | 5.51%               |
| 4    | Netherlands      | 1222                                       | 2.50%                                                    | 1143                                       | 2.54%                                                    | 6.98%               |
| 5    | Japan            | 1130                                       | 2.31%                                                    | 1072                                       | 2.39%                                                    | 5.45%               |
| 6    | Hong Kong, China | 931                                        | 1.91%                                                    | 682                                        | 1.52%                                                    | 36.56%              |
| 7    | The republic of Korea | 927 | 1.90% | 840 | 1.87% | 10.34% |
| 8    | France           | 885                                        | 1.81%                                                    | 877                                        | 1.95%                                                    | 0.91%               |
| 9    | Italy            | 874                                        | 1.79%                                                    | 846                                        | 1.88%                                                    | 3.31%               |
| 10   | Belgium          | 740                                        | 1.52%                                                    | 740                                        | 1.65%                                                    | 0.01%               |

Figure 2. Analysis of top 10 countries with global total exports in 2020 and January February 2021

Monetary unit: USD 100 million
From January to February 2021, the total global export volume was 4883.3 billion US dollars, an increase of 8.72% over the same period in 2020. Among them, China's export volume from January to February 2021 was 468.8 billion US dollars, accounting for 9.60% of the total export volume, ranking first, with a year-on-year increase of 60.32% over the same period in 2020.

![Graph showing export amounts](image)

**Figure 3. Comparative analysis of export amount of top 10 countries / regions in the world from January to February 2021**

From January to February 2021, the total global import volume was USD 4752.3 billion, an increase of 5.19% over the same period in 2020. China's import volume from January to February 2021 was 365.6 billion US dollars, accounting for 7.69% of the total import volume, ranking the second, with a year-on-year increase of 22.06%. Vietnam, Hong Kong and China all increased by more than 20% over the same period from January to February 2021.

| Rank | Country / Region     | Import amount from January to February 2021 | Proportion of import amount from January to February 2021 | Import amount from January to February 2020 | Proportion of import amount from January to February 2020 | Year on year |
|------|----------------------|---------------------------------------------|----------------------------------------------------------|---------------------------------------------|----------------------------------------------------------|--------------|
| 1    | U.S.A                | 4117                                        | 8.66%                                                   | 3854                                        | 8.53%                                                   | 6.81%        |
| 2    | China                | 3656                                        | 7.69%                                                   | 2995                                        | 6.63%                                                   | 22.06%       |
| 3    | Germany              | 2112                                        | 4.44%                                                   | 1997                                        | 4.42%                                                   | 5.73%        |
| 4    | Japan                | 1141                                        | 2.40%                                                   | 1090                                        | 2.41%                                                   | 4.63%        |
| 5    | Netherlands          | 1077                                        | 2.27%                                                   | 1007                                        | 2.23%                                                   | 7.03%        |
| 6    | France               | 1062                                        | 2.23%                                                   | 1041                                        | 2.31%                                                   | 1.99%        |
| 7    | Hong Kong, China     | 975                                         | 2.05%                                                   | 773                                         | 1.71%                                                   | 26.10%       |
| 8    | Britain              | 934                                         | 1.97%                                                   | 1048                                        | 2.32%                                                   | -10.88%      |
| 9    | The republic of Korea| 865                                         | 1.82%                                                   | 797                                         | 1.76%                                                   | 8.48%        |
| 10   | India                | 825                                         | 1.74%                                                   | 791                                         | 1.75%                                                   | 4.35%        |

**Figure 4. Analysis of top 10 countries with global total imports in 2020 and January February 2021**

*Monetary unit: USD 100 million*
Figure 5. Comparative analysis of import amount of top 10 countries / regions in the world from January to February 2021

In the global stage of COVID-19's popularity, China's economy has become the locomotive of the world economic recovery. The United States began a trade war against China in the trump era. However, judging from the trade data of the past eight months in 2021, the United States suffered a disastrous defeat, and the goods imported by the United States from China increased by 22.7% year-on-year. The US attempt to raise import tariffs on Chinese goods has not weakened China's competitiveness.

The surge in China's import and export volume is under the U.S. strategy of actively suppressing China, which has shown that the U.S. strategy has failed, and the United States has paid a heavy price for it. The United States is the world's largest economy, but it is not the largest exporter of industrial products. China has replaced the United States as the world's factory, so it has also become the largest manufacturer and exporter of industrial products.

Under the severe external economic environment and the serious impact of the epidemic on the global economy, the import and export trade has maintained steady growth and the structure has been continuously optimized. The stability of import and export trade has also laid a good foundation for economic stability and created good conditions for steady growth and employment.

4. Conclusion

The country's achievements in economic development have not come easily. We must cherish them, continue our efforts, and continue to consolidate the good trend of epidemic prevention and control. We will persevere, pay close attention to the detailed normalization of epidemic prevention and control, and constantly promote the high-quality development of China's economy.

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