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How Would the Zero-Covid Policy Impact the Chinese Transportation Industry?

Hui Su
Shanghai International Studies University, Xianda College, Shanghai 200083, China.

Abstract: The world economic growth declined from 6.0 percent in 2021 to 3.2 percent in 2022. Global trade has shrunk by 8.9% since 2020 as well (world bank data). China adopted Zero-Covid policy during 2020-2022.The Chinese transportation industry have been impacted negatively. The three perspectives: administration cost of transportation industry, the offshoring of Chinese secondary industry, Chinese financial transportation have been affected seriously. So the online-administrative system, the development of cross transportation and the adjustment of the focus on transport capacity may be the solution to reduce the impact of Zero-Covid policy on the Chinese transportation industry.
Keywords: China; Policy; Transportation; Impact

Introduction

According to the world bank statistics, the world economic growth declined from 6.0 percent in 2021 to 3.2 percent in 2022. Global trade has shrunk by 8.9% since 2020 as well. According to Georgieva, International Monetary Fund Chief, “it is way worse than the global financial crisis of 2008.” The impact of Covid on the global economy and trade is indeed enormous. Global trade also acts as a complex system that significantly affects China’s imports and exports.

The milestone of Chinese Zero-Covid policy

The first-round lockdown happened at the start of 2020 are strict. WUHAN city, Hubei province locked down the whole city. Other cities in China must offer "health code", "travel code" and nucleic acid test certificate to transport. Outsiders are required to self-quarantine (14 days) and can only enter the company if they have no symptoms.

The second lockdown from March to June 2022 is regional. Shanghai has been lockdown for nearly 2months and the regulation of other cities is that if an area is found to be infected with Covid, this area is then sealed.

The strict quarantine of Zero-Covid policy has impacted Chinese economic and trade activities from different perspectives: business shutdowns, reductions in daily consumption of residents, more administration costs, and rising logistics costs. Many of these factors had a direct relationship with the Chinese transportation industry.

Zero-Covid policy and the Chinese transportation industry

The Zero-Covid policy is negatively and significantly affecting the Chinese transportation industry. The policy affects the Chinese transportation industry through administration costs, the offshoring of Chinese second industry and the investment and finance of transportation.

Administration costs

The Zero Covid policy is a trade barrier that negatively affects the Chinese transportation industry at the start of the lockdown. It is due to the high cost of administration and time, negative effects on road and sea transport, and shortages of air transportation. The Chinese transportation industry is closely related to the restrictions and lockdowns. There are many explicit and implicit barriers: administration costs, tedious paperwork, red tape, PCR test negative report within 48 hours, and 2 weeks of quarantines.

Due to the epidemic, one might be absent from work if infected. Long-distance transport was restricted by controlled policies. The relevant companies of transportation have to reduce or even stop logistics operations due to the lack of labor. Most global goods trade was negatively affected by the lockdowns, which caused supply disruptions.

Chinese international transportation has a large portion of the road (73.80%), shipping(16.4%), and rail transportation(9.80%). Each portion is negatively affected by the Zero-Covid policy.

➤Road transportation

For the largest percentage(73.80%) of Chinese transportation is road transport, which is mainly affected by two levels of Zero-Covid policy. Level I prevention is the requirement of nucleic acid tests for all employees in the city, non-essential social and travel needs are also reduced. Level II control measures are the suspension of travel and industrial production activities. After implementing level I prevention, the traffic flow has decreased by 9% to 17%. After the implementation of level II control measures, the traffic flow decreased further by 33.7% to 46.3%. These policies on average lasted for a month(level I) and a week(level II). The impact of epidemic prevention and control measures on vehicle travel is apparently significant. (Impact of Covid-19 Prevention and Control Measures on Expressway Transportation in Guangdong-Hong Kong-Macao Greater Bay Area)

➤Shipping transportation

The next important part(16.4%) of the Chinese transportation industry is shipping. According to statistics from Sea-Intelligence, a Copenhagen-based shipping consulting agency, the total number of events of shipping suspensions in 2020 has risen to 212. Some international customers complained that the reliability of shipment is only 30% of the original, and the shipping time is often delayed from 60 to 65 days. These indicators mark a decline in the scale of Chinese global transportation.

➤Airline transportation

Airline is least affected by the Zero-Covid policy as it has the fastest reaction and the least time cost to adjust. The average transportation time for airlines is 6 to 12 days, for railroads is about a month, and for shipping is 1.5 to 2 months. However, China lacks the potential to switch to air transportation during the pandemic as there is only 0.01% in transportation. In 2022, there is around 250 civil airports in China. Meanwhile, there are approximately 14,400 private-use and 5,000 public-use airports, heliports, and seaplane bases in the United States. The lack of airline transportation makes it less reactive to accidents and therefore slower to achieve the fluctuating demand during the pandemic. It harms Chinese transportation overall due to the lack of available subsidies.

The offshoring of Chinese secondary industry

The Zero-Covid policy made it difficult to produce the same amount of product during the pandemic. It broke the supply chain, where buyers of industrial goods are encouraged to switch from Chinese to other countries' industrial products. These countries such as India, and Vietnam, had the potential such as lower labor costs. The US also had the need to reshoring companies to provide jobs. From China's perspective, it is offshoring, attracting investments, and settling factories away from China. Therefore, Chinese transportation is largely affected.

Countries such as those have the potential to maintain their increase in trade and production, one main factor is the Chinese labor cost ($1071 per month), which is especially higher than in nearby countries. It is 5 times that of Indonesia ($183 per month) and 3 times that of Vietnam ($281 per month). The weakening of labor cost advantages in China caused low-end manufacturing in Southeast Asian countries during the pandemic. Many countries such as India and Vietnam had an increase in trade and production during the pandemic: In 2021, India's merchandise exports surged by 43.3% to $394.8 billion. In 2021, India's service exports increased significantly by 16.7% to $237.1 billion. Vietnam's merchandise exports also rose by 6.4% to $281.4 billion.

There had been the potential of offshoring from China to nearby south Asian countries and US. The Zero-Covid policy acted as a trigger that encouraged many countries to adjust the location of production. From China to other countries, the global industrial chain of the manufacturing industry is shifting. Chinese transportation, which is a strongly related factor to Chinese industrial production, is negatively affected.

According to the correlation coefficient between port throughout and Secondary industrial added value, it is as high as 0.996, meaning that a large portion of the Chinese transportation industry is closely related to manufacturing. The offshoring of various factories from China will negatively impact the demand for transportation in the long run implicitly.

Chinese transportation and finance

There is a close relationship between Chinese transportation and finance. The financial system of transportation encourages the smooth transfer of capital, such as borrowing and investment.. However, the Zero-Covid policy and the potential of being lockdown decreased the attraction of international investment in transportation. The policy may delay the development of the transportation industry through finance in the long run.

The financial system overall is a tool including options, trust, insurance, credit rating, commercial factoring, etc. It provides direct information and strong security during the process of trade.

The flow of currency during international transport and logistics themselves creates lags. In other words, there are differences in time between the agreement in trade, sending goods or cash, and receiving them. If the financial market generates property rights, transportation, and insurance documents during trade and logistics instead, these documents can represent the value of goods. The non-cash transaction is therefore available.

There are high initial and ongoing needs for capital: cost of purchasing vehicles such as ships, planes, and trains, maintenance of those vehicles, and related infrastructures such as ports, airports, and railways. China's transportation requires massive funds. At the same time, global capitals actively seek investment opportunities to gain profits and increase value. The supply and demand of such funds can only be realized in the international financial market. If China's financial system is fully constructed, it will soon promote China's international transport and logistics.

The Zero-Covid policy is an obstacle to building a complete financial system of the transportation and logistics industry. China is a manufacture-based country and has huge demands during the pandemic. The production of anti-epidemic medical supplies largely depends on China. Many other goods, such as food with long shelf life, are in need. It is a perfect opportunity to increase production, maintain the transportation and logistics industry, attract investments, and build its financial system. However, due to the Zero-Covid policy, many orders were made but could not be shipped out. Raw materials could not be shipped to China. The lack of production slowed the transportation industry, and therefore delayed the completion of the financial system of transportation in China.

Solutions

In order to reduce the impact of Zero-Covid policy on Chinese transportation industry. There are several suggestions for improving the transportation industry. The first solution is to switch to online administrative system. So the government and corporations have paperless paperwork with higher efficiency in making transactions and attracting investments.

The second solution is to set air transport as a valid complement for sea transport. Government can increase investment, provide more subsidies, decrease taxes, build aviation logistics infrastructure, and allow private airports to improve the flight network and transportation competitiveness.

The third solution is to adjust the focus of transport capacity from separated cargo transportation to container transportation. This improves the quality and competitiveness of ports rather than the number of ports as the future needs for transportation would increase slowly but steadily.

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