The Impact of COVID-19 on Chinese Economy - Curb Consumer Demand, Chinese Policy and the Prediction of Future Trend

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Abstract. In 2020, a coronavirus named COVID-19 suddenly broke out in China, which intensively disrupted the Chinese economy. Then it spread globally. The government have tried to set up lots of policies to help with the controlling of spread of the pandemic, so cities were locked down and people were confined at home. As a result, people lose tremendous opportunities to consume. Consumers, as an indispensable part in economy, their demand for goods and services in the market was seriously curbed. However, the epidemic in China is improving year by year and the economy steps into recovery stage. Several economic policies had been put into effect to stimulate the recovery and growth of China's economy. The paper investigates the impact of COVID-19 on the demand side of China and aims to figure out the effectiveness of Chinese policies during the recovery stage. Also, the paper gives some prediction of the future trend of Chinese economy based on the literature review.

Keywords: Impact of COVID-19; Chinese policy; Macroeconomic.

1. Introduction

COVID-19 greatly affects all the aspects of out lives since the outbreak of pandemic in 2020. It's significant and unpredictable. By early April 2020, COVID-19 had infected more than 1 million people worldwide in 204 countries, with over 55,000 deaths [1]. Many cities around the world had locked down to prevent the further spread of the pandemic. Transportation had been limited, which not only imposed restrictions on people's travel but also harmed the industries of the whole society. Goods cannot be delivered. People had to obey the harsh policy published by the government and were not allowed to step out of their home. Therefore, people's consumption reduced intensively. To be specific, consumer's demand for all kinds of goods and services diminished in their life, including eating, travelling, entertaining, etc. Every country, economy, and area of human activity could not ignore the pandemic that has been unfolding since the beginning of 2020 [2]. China as the first country that was affected by the outbreak of pandemic, its economic losses were even more serious than other countries. The paper emphasized how China's consumer demands were affected by COVID-19, and tried to analysis the effectiveness of the policy that were performed by the China's government during the recovery stage of the pandemic. The main factors contribute to the decreasing in consumer demands is limited transportation and negative supply shocks. Changes in demand is resulted from changing of consumer's buying behavior, which was deeply influenced by the COVID-19. The paper also narrates the consumer demand modelling during the pandemic to elaborate on the changes of consumer's buying behavior. The evolution of the disease and its economic impact is highly uncertain which makes it difficult for policymakers to formulate an appropriate macroeconomic policy response [3]. But during the recovery stage of the COVID-19, China's economy is more predictable. Several Monetary and fiscal policies had adopted by government to help with the recovery of China's economy, including reducing taxes, optimizing government spending, increasing deficit, and it really make a difference. Also, the paper gives some prediction of the future trend of Chinese economy based on the analysis of the current state if China's economy.There are already some researches explored on the impact of pandemic on Chinese firm investment, global supply chains, and consumer behaviors. So, obviously, the impact of the pandemic on China's economy triggers a heated discussion. But researchers overlooked on the impact of COVID-19 on demand side. From my

perceptive, all these consequences are affected by the curbed demands of consumers. This paper aims to fill the research gaps and provide some theoretical reference for other researchers who are also concerned on the impact of the pandemic on China's economy. In this paper, the analysis of the impact and policy can offer readers opportunities to make aware of the current situation of China's economy.

2. The impact of COVID-19 on China's economy

2.1 Backgrounds of COVID-19 Epidemic

COVID-19 will reshape our world. We don't yet know when the crisis will end. But we can be sure that by the time it does, our world will look very different [4]. In 2020, when the COVID-19 broke out, people were confined at their homes without stepping out of the room because of the policy that have been adopted by the government. The policy of "dynamic zero elimination" published by China's government essentially depends on the game between epidemic prevention and control capacity and virus transmission capacity. With the goal of controlling the spread of COVID-19, China's government isolated these cities with new cases by closing down any places that could cause cross-infect of public, including shopping malls, restaurants, parks, etc. The dramatically decrease in demands for goods and services makes it difficult for producer to gain any profits and forced many businesses to close. Thus, people lose their jobs and employment rate increases a lot. Both the economy and people's live were in the doldrums.

2.2 The Impact of Limited Transportation on Consumer Demand

In order to implement epidemic prevention and reduce cross-infection, China's transportation was severely restricted. During the pandemic, transportation were limited and even restricted has further slowed down economic activities [3]. Public transportation, including buses, taxis, and subways, were no longer available for people to take. As a result, people are limited in consumption. On the demand side, lost income and layoffs were the result of quarantines, morbidity and unemployment, and reduced business investment and household consumption due to a worsening economic outlook. China's primary, secondary, and tertiary industries were affected to varying extents by the pandemic. But COVID-19 have the biggest impact on tertiary industries - service industry and business industry. For instance, since 2022, Shenzhen and Shanghai, two of the nation's economic centers, have adopted quarantine measures, such as regional lockdown. Although this action had been crucial in stopping the pandemic's growth and spread, its immediate economic impact was that it caused a temporary shortage of workers and labors in both the manufacturing and service sectors. At the same time, the limitations on transportation logistics also hindered the normal flow of labor and raw materials, which had a negative impact on the majority of micro, small, and medium-sized firms. The dynamic zero policy demanded that local clusters be prevented and controlled as soon as possible. As a consequence, the movement and aggregation of people decreased, which had an immediate effect on the catering, retail, tourist, real-estate sales, and other service industries. This had an influence on urban dwellers' everyday travel and lives. Although the outbreak also helped to some extent increase demand for medical services, medical equipment, internet retail, and online education. However, because the rise of online retail demand only partially replaces offline consumer demand rather than completely replacing it, it rarely serves as a major buffer against the decline in aggregate demand. The faith in economic growth may be undermined by excessive fear and increased susceptibility to the virus, which would diminish a temporary uptick in investment and consumption. Prices had a big role in the industry's large year-over-year growth rate increase, with the exception of the upstream industrial manufacturing sector. The widespread effects of the pandemic rebound have had an impact on both the middle and downstream industrial and service sectors. First of all, the industries directly affected by the supply chain include transportation and logistics. Such as the whole country vehicle freight flow appears significant decline. Secondly, China's industry is affected by the shutdown policy,

resulting in the supply, demand, logistics and warehousing of the durable goods market are all affected by the policy to varying degrees. These further feeds through to services activity.

2.3 Consumer Demands Modeling During COVID-19

Uncertainty to traditional methods for demand planning stem from the disease progression, government interventions, economy and consumer behavior [4]. During the pandemic, the prediction of consumer demand is not practical anymore. Previously, consumer preferences and characteristics changes as the time period changes and the price promotions temporarily affects demand. COVID-19 have led behavioral changes of consumers due to the adopting of various policies and regulations by government, and the changes in GDPs. And GDP growth rate can indicate over all demand in the economy and inform the demand for products. The closure of shopping malls, stores, and restaurants directly affect the choice of consumer because of the scarcity of various choices and hence the consumer demand for different goods and services. The adoption of regulations confines people to home, which results less mobility and an increase in preference for home-consumable products [5].

2.4 Negative Supply Shocks Cause Demand Shortages.

Global virus containment responses include closing non-essential businesses, social distancing, smaller public gatherings, indefinitely postponing sporting events, canceling conferences, and requiring populations to shelter in place [4]. Brittleness in the world's supply networks during the epidemic made it difficult to distribute a variety of items. The endogenous demand can be affected by many other features like the supply shock of the economy, such as, price of goods and services, income, and consumer preference. Negative supply shock can trigger a demand shortage that leads to a contraction in output and employment larger than the supply shock itself [6]. This reduction in output and employment will gradually decrease consumer's demand. To be specific, when a worker is affected by the increase unemployment rate and lose his job, he loses the income. Due to the shock, he may choose to reduce the spending on goods and services to spend the money more rationally, like buying daily necessities or paying the rent. As a direct consequence, a decrease in supply may lead to a reduction in demand. However, we must admit that this hypothesis is challenged by the question of whether this mechanism is capable of inflicting the overall shortfall in demand.

2.5 Summaries

Therefore, the reason why COVID-19 curbed consumer demand is that public transportation have been intensively affected. People were confined at home, and shopping malls and restaurants had closed. For people, ways to entertain had been reduced, and their demand for goods and services reduced as well. Also, negative supply triggers a shortage in demand.

3. Chinese Policy Have Been Adopted to Minimize the Impact of COVID-19 on Economy

To minimize the economic impact of the pandemic, the Chinese government has effectuate different measures to address the pandemic and post-pandemic industrial recovery. To be specific, the discretionary fiscal policy that China have adopted to keep the stability of economy by increasing the aggregate demand could be divided into two parts - reducing the tax and optimizing government spending and increasing deficit.

3.1 Reducing Tax

To mitigate COVID-19's negative economic effects, China has provided a variety of fiscal and non-fiscal incentives to assist the sector. For individuals, there are two kinds of taxes - direct tax and indirect tax. By decreasing both the direct tax and indirect tax, people will have more disposable income. Because in macroeconomic, disposable income is the difference of income and taxes minus transfers payments. And the consumption is only related to the disposable income. So as the

disposable income increase, consumption increase. As a result, a decrease in direct tax can secure people's income, stimulate the consumption and help with the curbed consumer demand. But this would not be that effective because the result may affected by other exogenous factors. The same strategy have been used by Indonesia to stimulate the demand. "Incentives for decreasing Income Tax Article 25 instalments by 30% of what should be payed in instalments. Reducing the number of payments is done by notifying the head of the tax office where the taxpayer is enrolled in writing the reduction in the amount of the Article 25 Income Tax instalment. The less instalments will be valid through the September 2020 Tax Period if WP satisfies the incentive criteria." [7]. So reducing tax can definitely be considered as an effective way to crack the curbed demand.

3.2 Optimizing Government Spending

The government spend more of its spending on infrastructure, such as high-speed rail and the Internet. During the pandemic, most high-speed railways were suspended for a long time, which greatly affected the operation and development of high-speed railways in China. The development of the online and delivery industries is particularly important during the pandemic. People could not leave their home, so they had to buy necessities online. Increasing Government spending will shift AD curve to the right, which will increase total output and GDP, thus easing the economy and driving economic recovery. Public transportation belongs to the basic infrastructure of the society, so investing in building up and recovering public transplantation can help to stimulate the recovery of demands of consumers.

Data show that since August 2022, 51 cities in 31 provinces and the Xinjiang Production and Construction Corps have put into operation 278 urban rail transit lines, with a total length of 9,098 kilometers, and 2.97 million trains have been put into operation, carrying 1.96 billion passengers and 1.17 billion inbound passengers. In August, the number of passengers increased by 100 million or 0.33%, month-on-month, and by 200 million or 11.37%, year-on-year. This month, the new operation mileage of 31 kilometers, new operation line 1, Fuzhou Metro line 6 (China's transportation, 2022).

3.3 Increasing Deficit

Due to the outbreak of COVID-19, imports in Chins dropped 4% year-on-year to US $ 299.54 billion and exports from China fell 17.2% year-on-year to US $ 292.45 billion in January - February 2020 as combined (Economic-New economic world order, 2020). This indicate that the consumer demand on both the domestic market and external market have declined. In the short term, the outbreak of COVID-19 in January 2020 has had an immeasurable impact on economic exchanges between China and other countries. In the early days of the pandemic, China's lockdown, home quarantine, reduced travel and shutdowns inevitably reduced trade between the country and the rest of the world. At the same time, some countries use the virus as an excuse to block trade policies and hinder China's exports. The emergence of the COVID-19 pandemic has increased the difficulty of offline transactions and the uncertainty of the international market. The risks of obstructed cargo transportation, drastic changes in exchange rates and changes in foreign trade policies have emerged one after another, profoundly changing the pattern of global trade. Now, China is facing balance of payments deficits. The balance of payments is a record of all the economic transactions between residents of that country and resident in other countries. Currently, under the condition of COVID-19, the causes of the deficit of China are the declining economic activity in trading partners. The deficit can be improved by controlling tariffs and subsidies, so that China's import and export to accelerate the recovery, on the right track. This reduce the risk that country is tied to local firms for supplies. Greater choice, lower prices, and flexibility in sourcing were sup- posed to be distinct advantages of an open trading system [8].

4. Future Trend of Chinese Economy

By the end of the first quarter of 2020, China's outbreak will be effectively under control, and the country's economy has also launched its post-epidemic recovery period. So we can just briefly give some prediction to the trend of Chinese economy during the recovery period of the pandemic. The experience of post-COVID-19 economic recovery is of great significance for achieving sustainable and high-quality economic development [9]. The COVID-19 epidemic, which has impacted economic growth and people's quality of life, is currently testing China. The recession which China intimate was a reflection of the difficult choice that policy makers had to make [10]. At the beginning of the COVID-19 pandemic in 2020, China proposed the "six guarantees"; employment, the means of subsistence for the majority of people, market actors, energy and food security, industrial and supply chain stability, and grassroots operations. Now that the epidemic has been effectively controlled, China will focus on the recovery and stimulation of the internal and external circulation of the economy. The inner loop is to stimulate people's spending, such as tax breaks and other subsidies for merchants who offer shopping incentives. Local financial institutions will be encouraged to participate in the activities and implement more preferential measures in the field of consumer credit, including interest-free installment loans and refund of consumer funds. At the same time, ensure people's employment, to provide people with more employment opportunities. The current pattern of global trade matters a lot to China. Under the impact of the epidemic, China's import and export have been greatly affected. Therefore, by reducing tariffs and increasing import and export subsidies, China's external circulation, namely, foreign trade, can be activated. Protecting locals' employment and market entities is especially crucial in light of the epidemic's effects. Only when the survival of residents' employment and market entities can be guaranteed, consumption potential can be triggered. In order to ensure that small and medium-sized businesses have the ability to compete in the market, policymakers should strengthen support for small and medium-sized businesses, which includes more than just financial, fiscal, and tax help.

5. Conclusion

The reason why COVID-19 curbed consumer demand is that public transportation has been intensively affected. Even with the development of online market, consumer demands are still curbed compared with period before the outbreak of pandemic. For people, ways to entertaining had been largely reduced, and their demand for goods and services reduced as well. Also, negative supply triggers a shortage in demand. Reducing tax, optimizing government spending, and increasing deficit are all useful policy that can stimulate the demand and help with the curbed demand. Continue to encourage people to spend to drive the economy. At the same time, we must ensure that the employment problem is solved. During the epidemic, many companies were unable to carry out normal business activities due to the impact of epidemic prevention and control, thus closing down. People's employment is affected, there is not enough income, and demand is forced down. Therefore, the government will make great efforts to ensure that the operation of companies resumes, and the unemployment rate is improved. In the recovery stage, it is particularly important to protect residents' employment and market entities. Only by ensuring the employment of residents and the survival of market entities can we stimulate consumption potential.

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