The Impact of Covid-19 on Consumers’ Behavior: Evidence from China

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Abstract. The Covid-19 epidemic has had a significant impact on the economies of various countries around the world. Almost all industries, including the consumer sector, are facing unprecedented difficulties. This study mainly focuses on the changes in consumer behavior during the epidemic. By observing the changes in consumer focus in recent years and utilizing various data to support the discussion, and borrowing theories such as total demand and total supply from economics, the paper analyzes and demonstrates the changes in consumer behavior, their causes and impacts. The research results found that Covid-19 can change consumers’ consumption psychology, methods, and objects, and changes in consumer behavior may have a certain negative impact on China’s economy and society. Based on the analysis of the trend of consumer behavior changes by exploring changes in consumer behavior, the paper provides feasible solutions, which may promote the economic development and reduce the burden brought by the epidemic.

Keywords: Consumers’ behavior, consumer psychology, fiscal policy.

1. Introduction

Since December 2019, multiple cases of viral pneumonia, known as Covid-19, have been reported in Wuhan, Hubei Province, China, causing a significant impact on people's normal life. National policies are adjusted according to the severity of the epidemic, and people repeatedly live in home quarantine and resumption of work and production. In these three years or so of the epidemic, both China and global economic growth have suffered indelible damage. Due to the fact that many people who lost their jobs or left the labor market during the pandemic have not yet returned to work, the labor force has decreased, leading to labor shortages in developed economies, increasing supply chain challenges and inflationary pressures. Meanwhile, due to slow progress in vaccination and limited stimulus spending, employment growth in developing countries remains weak. These are all part of the reasons for the global economic damage. According to the World Economic Outlook report released by the International Monetary Fund (IMF) in October 2021, the world economy experienced a deep decline of 3.1% year-on-year in 2020. Developed economies experienced a decline of 4.5%, while emerging markets and developing economies experienced a decline of 2.1% [1]. The epidemic has also had a profound impact on market demand. Aggregate demand is the total demand for goods and services within a particular market, it is the combination of consumption, investment, government spending and net export. During the pandemic, due to factors such as low confidence in future consumption prospects, reduced disposable income, and restrictions on domestic and foreign imports to prevent the spread of the virus, there was a significant contraction in total demand. Through these impacts, it can be seen that Covid-19 has a significant impact on China and even the global economy, and has an indelible impact on consumer behavior.

The paper mainly focuses on the economic impact brought by Covid-19, using China as an example to explain changes in consumer behavior. By exploring changes in consumer behavior, it can determine the trend of consumer behavior changes, find corresponding solutions, and strive to achieve the goal of economic development.
2. Literature Review

In recent years, many studies have explained the harm to the economic and market demand of various countries brought by COVID-19, and also proposed changes in household income and consumer behavior of residents and discussed this. The literature uses various data as a argument to speculate and study, showing that Covid-19 has a significant impact on the world economy. On the one hand, the epidemic has accelerated the spread globally, the uncertainty rises sharply, and the investor confidence is frustrated, which will cause the financial and capital market to be turbulent; The pause key brings pressure on economic operations from the two aspects of consumer and production [2].

In essence, due to the outbreak of major epidemic diseases, the border between countries around the world, restricted liquidity crisis caused by the atrophy of global demand and the interruption of supply chain [3]. From the perspective of the capital market, since the emergence of the epidemic, the global financial market has fluctuated significantly, and US stocks have melted four times in less than two weeks. Global trade, supply chain and multinational investment have also received great impact. The "World Investment Report of 2021" issued by the Trade Conference shows that the total foreign direct investment in the world has dropped by more than one-third, and it has fallen to $1 trillion (2019 is $1.5 trillion), threatening to sustainable regions develop. Durant, the acting secretary-general of the Trade Conference, said, "The new crisis in the most productive investment type - the green space investment of industrial and infrastructure projects has a huge negative impact. This means that as a global economic growth and development engine international production has been seriously affected" [4]. Some literature also proposes that after the outbreak of the epidemic, many industries in China cannot resume work, so most industries and industrial chains have suffered huge losses. For example, tourism, catering, and entertainment. From an economic perspective, because the consumption concept of residents has tended to be rationalized and forced to reduce consumption on China's short-term economic development, the influence of the tourism, catering industry, and entertainment industry in the short term has also further spread. Some literature uses research by Kumar and ABDIN (2021) in India to display the pure-required consumption model that appears after panic purchases under the epidemic. Receive the impact of the epidemic and change [6].

This study combines the impact of COVID-19 on China and the global economy and market demand. Take China as an example to explore the impact of COVID-19 on consumer behavior, and to analyze the advantages of consumer behavior solution to help the domestic economy and consumption model.

3. Changes in the Consumption Market

3.1. The Impact of Covid-19 on Consumers’ Behavior

3.1.1 Consumption capacity

As mentioned earlier, Covid-19 is a highly contagious disease that causes significant harm to the human body. The virus has been constantly mutating from the beginning to the end of the epidemic. Its damage has been similar to that of a cold, with a high probability of death from the initial infection.

First, at the beginning of the epidemic, the high mortality rate of Covid-19, the rapid spread of the virus, and people's unfamiliarity with the disease and unknown lifestyle caused great fear of Covid-19. After the epidemic, many industries were shut down and unable to resume work, resulting in significant losses for most industries and industrial chains. Many companies were forced to go bankrupt or lay off workers. Unemployment during the epidemic is a typical frictional unemployment, with an increase in unemployment rates. Combining the decrease in people's income, it can be seen that their disposable income has decreased and their consumption ability has significantly decreased.

Second, especially at the beginning of the epidemic, most people purchased a large number of protective equipment such as masks, alcohol, and drugs to ensure their own safety. However, people were unable to enter the protective equipment market in a short period of time, and the quantity of these items could not rapidly increase in the short term. Demand exceeded supply, resulting in a
shortage of these items and rising prices. People's purchasing power has also decreased, and their spending power has weakened.

3.1.2 Consumer psychology

In January 2020, the World Health Organization announced that the COVID-19 was a public health event of international concern. The government has also taken a series of measures to seal down the city, suspend production, and establish a shelter hospital to isolate infected individuals in response to this severe situation. Due to the suddenness of the epidemic and its rapid and dangerous outbreak, as well as the importance of preventing the epidemic through various means promoted by the country and people, such as online publicity and school warnings. After understanding the severity of the epidemic, people also deeply realize the importance of preventing viruses. As mentioned earlier, people's demand for epidemic prevention and daily necessities is definitely increasing, and their demand for safety in goods and consumer environments is also further increasing. And because people are isolated at home for a long time, many leisure and sports activities cannot be carried out for a few months, making life more boring. Therefore, people's spiritual needs have increased, and the demand for online entertainment activities has also increased.

3.1.3 Consumption method

Because the national policy is to suspend work, production, and education, all work is carried out online, and people across the country are quarantined at home, so the offline payment method will be restricted. Residents have a strong willingness to consume online, and they all use the form of online shopping. However, sometimes the delivery methods of takeout and express delivery are also limited, and people tend to use less contact with the outside world for consumption. For example, based on the community as a unit, homeowners within the community will elect administrators to summarize the needs of each household and communicate with merchants for procurement, achieving the goal of shopping and buying groceries at home, allowing people to purchase daily necessities and food without leaving their homes, and achieving the goal of normal life when unable to go out.

3.1.4 Consumption object

Because people's awareness of safety increases during the epidemic, most people's consumption targets tend to epidemic protective supplies, such as masks, protective clothing, alcohol, disinfection, drugs, etc. [7]. Vaccination, medical insurance and other products will also increase. Taking the mask as an example, from the following chart as an example, by 2020, the total output of Chinese masks has been maintained between 3.88 and 5 billion. However, because COVID-19 began to outbreak around 2020, and this time is the most serious time, people can see that the output of the mask has soared to 10.06 billion, which is twice as much as the output in 2019. The 2021 of 2021 was more. The output is also more than from 2017 to 2019, 9.25 billion (shown in Figure 1). Through the data, it can clearly learn about the importance and increase of the importance of epidemic protective supplies such as masks [8].

**Figure 1.** The production of face masks in China from 2017 to 2021 (Unit: 100 million) (Photo credit: Original)
At the same time, due to the change of consumption methods, consumer targets will change. The consumption method of people buying daily necessities has shifted from offline to online, so consumer targets will also change from retailers such as offline supermarkets and department stores to online platforms that can purchase fruits and fruits for online. When people go out, people restrict travel, and people can only be at home. Therefore, people's online entertainment, such as cinemas, bars, playgrounds and other places, the cost of spending on tourist attractions is also greatly reduced. On the contrary, people spend time and money on platforms such as games, online videos. Therefore, the overall consumption structure in China has also changed during the epidemic.

3.2. Changes in Consumer Behavior

3.2.1 Aggregate demand and aggregate supply

Covid-19 has a large impact on aggregate demand and aggregate supply. Regarding aggregate demand, as mentioned before, it is the sum of domestic consumption, investment, government spending and net export. This is because of the restrictions imposed by the state to prevent the epidemic and control the number of infected people, as well as the reduction of people's incomes and investor confidence during the epidemic. Due to these reasons, consumption, investment, and export all declined, and therefore aggregate demand also declined. The outbreak of the epidemic occurred during the Chinese New Year, which is the time when people spend more money to buy new year's goods. Affected by the epidemic, people have to change the original plan, as far as possible to reduce going out, cancel the gathering, the whole population to prevent the epidemic so that the consumer demand is greatly reduced, the economic structure of the domestic demand-based economy has been a huge impact [9]. Among them, the service-based tertiary industry was the most affected, the country's service-based tertiary industry's contribution to GDP has reached more than 60%, so the impact of the epidemic on the economy in the short term is larger, but in the long term there is no great impact, because the impetus for economic development has not disappeared but only delayed the release of the epidemic with the successive resumption of production, the destructive force of the epidemic will gradually weakened [10]. The impact of Covid-19 on aggregate supply is mainly the obstruction of the flow of factors of production, including labor, capital, land and entrepreneurship, so that enterprises are facing the obstruction of business, stopping work and production, and industry chain breakage. At the same time, prices will rise as people's demand increases in the short term due to panic and supply exceeds demand.

3.2.2 Beneficial and damaged industries

Beneficial and damaged industries were both present in the epidemic, with the majority of them being damaged. The tourism, food and beverage, and entertainment industries have all suffered significant losses, as people have stayed at home for most of the time due to the epidemic, and have been unable to leave their homes. However, some industries have found new opportunities for growth due to the epidemic: Covid-19 has significantly raised awareness of health and safety, and sales of medical and protective products have risen sharply. The insurance industry has also grown due to the dangers of the epidemic. At the same time, certain e-commerce platforms will also benefit from the shift from offline to online consumption.

3.2.3 Unemployment

As mentioned earlier, due to the impact of the epidemic, aggregate supply will be reduced due to the obstruction of the flow of factors of production, and enterprises will face business disruption and closure. At this point, enterprises will lay off workers, more workers can not work and get income, and the unemployment rate rises. Macro data shows that in the run-up to the outbreak, the unemployment rate climbed from 5.3% to 6.3% in a month's time, an increase of 1% and a new high since the data was published in 2018. For societies, unemployment drains resources, creates re-distributive pressures and distortions, exacerbates poverty, restricts labor mobility, and fuels social unrest and conflict. At the same time, for individuals, people take on more stress in their lives when they are unemployed and are prone to mental or physical injuries and illnesses.
3.2.4 Direct costs

The costs of outbreak prevention and control are significant. The state has been limiting the cost of nucleic acid testing, and later on, providing nucleic acid testing free of charge. At the same time, the deployment of tens of thousands of healthcare workers around the country, the purchase of various medical devices, the development of vaccines, the establishment of square pod hospitals, and the free distribution of supplies around the country all require a large amount of investment in order to alleviate the pressure on the people and effectively prevent the development of the epidemic. Figure 2 below shows that in 2020 and 2021, China's total health costs are significantly higher than in previous years. The total cost for the two years combined is 14.7 trillion yuan, which is about the same as the total cost for the three years 2016-2018 combined. This shows how much pressure epidemic preparedness puts on the national government.

3.2.5 Beneficial and damaged industries

During the pandemic, there were both profitable and damaged industries, with the majority being affected. Due to the impact of the epidemic, people spend most of their time at home and cannot go out, resulting in a significant reduction in their spending on the tertiary industry. The tourism, catering, and entertainment industries have all suffered heavy losses. However, some industries have also discovered new development opportunities due to the pandemic. Covid-19 has significantly improved people's awareness of health and safety, resulting in a rapid increase in sales for businesses producing medical and protective equipment. Due to the danger of the epidemic, the insurance industry has also developed. Meanwhile, due to the shift of people's consumption patterns from offline to online, some e-commerce platforms will also benefit from it.

3.3. Feasible Solution

3.3.1 For businesses: fusion of new sales channels

Residents' consumption is more inclined to online, showing the trend of online and offline consumption integration. Therefore, enterprises should change their marketing strategies according to this consumption pattern, integrate new marketing channels, develop online buying and selling, and realize the integration of online and offline. Since China began to develop e-commerce as early as about 20 years ago, promoting the connection between goods and people on the Internet. And right now, Covid-19 is even more making people endeavor to try to fully link all economic activities through the Internet. Therefore, the company's integration of the new online consumption and marketing situation is favorable for the epidemic at that time and in the future.

3.3.2 For businesses: expanding into new areas

As mentioned before, even though the epidemic has traumatized most industries, there are some that have profited from it. For example, in healthcare and insurance, the study holds that companies...
can capitalize on the change in consumption patterns brought about by the epidemic and expand into new areas by seizing the consumer windfall in medicine and education. For example, under the epidemic, many brands that did not originally produce masks have also started to produce masks. Not only can they capitalize on people's demand for masks to generate more revenue, but they can also choose to donate masks to gain a better reputation, which will do better than harm.

3.3.3 For the government: expansionary fiscal policy

The government can use expansionary fiscal policy to increase and stimulate the aggregate demand of the society by reducing taxes, increasing spending and thus expanding the fiscal deficit. In this way the reduction in aggregate demand will improve. Fiscal policy should plan to scale down other government expenditures and provide targeted financial support to combat the epidemic, including subsidies for patient care, vaccine research and development, and epidemic prevention and quarantine involving material and human resource costs. Subsidies are important to mobilize the population to fight the epidemic while effectively achieving epidemic prevention goals, and increased spending increases aggregate demand.

3.3.4 For the government: promotion of healthy consumption

The government should strengthen the education and publicity of healthy consumption, because the health of the population is especially important under the epidemic, people need to know a certain amount of knowledge to prevent the spread of the virus, and only when the epidemic is under control can China reduce the impact of Covid-19 on China's economy and life. Therefore, to strengthen the education of healthy consumption, help people set up good values, for example, can be used in propaganda films, school education and other ways to achieve education and publicity, to create a good atmosphere for the development of the domestic market.

3.3.5 For the government: supervision of commodity services

It is also very important to improve the supervision of the quality of commodity services, as viruses may follow the packaging of commodities to every household, so it is also very important to eliminate the disinfection of commodity trading and distribution. In addition, the phenomenon of price gouging and substitution of good for good also needs to be strictly regulated to stabilize the consumption of the population.

4. Conclusion

This paper focuses on China as an example to explore the change of consumer behavior under the influence of Covid-19. Firstly, the paper discusses the changes in consumer behavior and the reasons for the changes. Under the epidemic, people's physical health and mental health have been greatly affected. Physically, people are easily infected with viruses and weakened, and the demand for protective products is greatly increased. And in order to prevent the epidemic, the state almost banned the entry and exit of the country or even in and out of the city, and people's spending on offline entertainment venues and tourist attractions has been reduced. Psychologically, people's boredom, anxiety, fear and other emotions generated by the home office have increased their mental needs, and the consumption of online entertainment software has increased. The operation of companies has been problematic due to national policies such as work stoppages and production stoppages, so companies are facing closures or layoffs, the unemployment rate has increased, and the income that workers can earn has also decreased due to unemployment and living at home, and people's ability to spend money has weakened. The restrictions of home isolation and inability to go out have caused a change in the way people consume, with people being unable to do their daily grocery shopping and other activities that they pay for offline, and switching to online consumption. Thus, it can be seen that by the influence of Covid-19, the consumption psychology, consumption ability, consumption mode, consumption object and consumption structure of Chinese residents have been changed.
Secondly, this paper discusses the impact of these changes in consumer behavior and the epidemic itself.

Through the analysis, it is clear that the change of consumer behavior will affect the country's aggregate demand and aggregate supply, and the national economy and prices will be affected in the short term. The change of consumer behavior also has different impacts in different industries, which is more damaging to the tertiary industry, which is mainly in the service industry, but also has some benefits to the pharmaceutical and insurance industries.

Finally, this paper proposes some solutions to these effects. This includes suggestions for the company's future development and national government policies. Now the epidemic has basically ended, the country's economic situation and people's lives have gradually returned to normal, it is believe that in the future, through the continuous efforts of the national government and the people, the country's economy will gradually warm up and get better and better, the people's living standards gradually rise, and various companies and industries can take advantage of the changes in people's consumer behavior under the epidemic to seize the opportunity for development, and make progress.

References