

# *The Effect of Covid-19 on Retail Industry in the US*

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**Abstract:** This paper introduces a major infectious disease, Covid-19, that broke out in 2022. It spread out in a very fast speed and cause a deep influence on the people's society, especially the retail industry. The main purpose of the article is to define the specific influences or problems that retailers faced because of Covid-19, and solutions came from it. To deal with a fast infected disease like Covid-19, the government usually publish new policies. The article focused on the United State. However, a comparison between the actions of the U.S. government and the Chinese government is listed to prove a better reaction and policies. Compare to China, the U.S. government reacted less and most patient did not get a proper treatment. It caused some problems such as most stores closed, disruption of supply chain and food chain, and increasing of unemployment rate, which caused a lot of pressure on retailers who heavily relied on those factors. In order to help retailers, the U.S. government, especially the Federal Reserve, gave a lot of support on stock market, and the usage of delivery services and online shopping was also helped. Although the Covid-19 caused many problems on retail industry and lead to a severe economic recession, with the support of the government and other solutions, it was getting better.

**Keywords:** Retail Industry, Covid-19, Delivery Services.

## **1. Introduction**

### **1.1. Background**

Covid-19, coronavirus disease, is a disease caused by a virus named SARS-CoV-2. It is a dangerous contagious disease and could be spread out in a very fast speed. From the first break out of Covid-19 in China, It spread around the world after only about three months. The common symptoms of Covid-19 are fever/chills, cough, shortness of breath, or fatigue, etc. People who are infected Covid-19 have a reasonable chance of dying, and those who survived may also get sequelae. When people thinking about daily life, the retail industry is a necessary part to consider. Retail is the sale of goods and services to consumers. A retailer purchases goods in large quantities from manufacturers, directly or through a wholesaler, and then sells in smaller quantities to consumers for a profit. It is an industry that closely connected with people's daily life. In the United State, there are many different retailers. Some of them are multinational corporations, such as Walmart, Costco. Some of them are the U.S only corporation, such as Target. Different retailers have different operation models. Like Costco is a membership only grocery store, Walmart focuses most on price and affordability.

## 1.2. Related Research

Mohsin et al. described how Covid-19 pandemic impacted the consumer economy, and the countermeasures analysis with it. It used three modes of the influences on different types of retail industries include moderate, positive, and negative to analysis the market impact. The negative influence accelerated the revolution of business patterns, such as noman delivery, sinking market, indoors economy [1]. Walters et al. reviewed how Covid-19 affected the behavior and movement of people, with impacts on food supply chain as displayed by consumer psychology and behaviors and work-place absenteeism. The fact of how most nonessential businesses and institutions closed across the United States in mid-March 2021, and a new challenge appeared with order/ advisories of staying home [2]. Çakır et al. examined the impact of Covid-19 on fruits and vegetable prices in the United States and China in a difference in differences framework. The main result of the examination showed that despite the unprecedented disruption, the US. produce industry remained intact, but a long-run effects could be mixed [3].

Peel introduced an idea that one of the many factors that make the U.S. cattle and beef industry an extremely complex set of markets is the disassembly of the beef animal into thousands of different products. Before the Covid-19, the food expenditure of beef in retail grocery is about 46%. A huge impact appears because of Covid-19 [4]. Deconinck et al. pointed out that the stresses of food supply chains during pandemic came from bottlenecks for some inputs, labor shortages and shutdowns, especially in meat processing, but they believed that the biggest risk to food security during Covid-19 pandemic is not food availability, but consumers' loss of income [5]. Liu and Adam discussed how Covid-19 impact the price of dairy products in the U.S., including the changes of price. The data showed that different products had different degrees of price dropping during the pandemic [6].

Ramsey et al. collected the data of meat price in the pandemic and used both linear and threshold autoregressive (AR) models and vector error correction (VEC) models to analysis that all three meat markets are well integrated and related with Covid-19. The change of meat market showed a degree of resilience in U.S. meat supply chains [7]. Qingbin et al. assess the impacts of Covid-19 on dairy industries in China and the United States and polices that enhancing the diary industries' resilience to pandemics and other market shocks. They compared data from two countries, and summarized problems such as decreased milk prices, disruption, and difficulties of moving milk within the supply chains, worker shortages, increased production costs, and lack of operating capital [8]. Kinsey et al. used a data that before Covid-19, there is an estimated 14% of families with children were food insecure. This data exposed the problem of food insecurity in the United States. With schools closed and families out of work, food insecurity rates are expected to skyrocket because of Covid-19. It will cause a big negative influence on children [9]. Taylor emphasized the importance of online shopping due to the Covid-19. It became a necessity shopping mode instead of a mere tool of convenience. Taylor used Walmart, the biggest retailer in the U.S., as a case study to analysis and compare between physical grocery stores and online stores [10].

## 1.3. Objective

This article tries to find the problems or influences on retail sector and the entire society that are caused by Covid-19. There are many insufficient on the U.S. government's action to Covid-19. Many people lacked treatment and lots of retailer suffered the shortage of goods. What should the government do and how to solve it?

## 2. How Covid-19 Break Out and Affect People's Life

### 2.1. How China and U.S. React to Covid-19

The first break out of Covid-19 discovered in Wuhan, China. To cure and regulate patients, the government built Huoshenshan Hospital and lockdown the entire city. Although the Chinese government react very fast, the infected people still spread out to the entire country and world. China is a very strong country that has an intact supply chain. Even with three months of shutdown in almost entire country, the daily and food supply work still fine. The retailer undertakes a big role during that time.

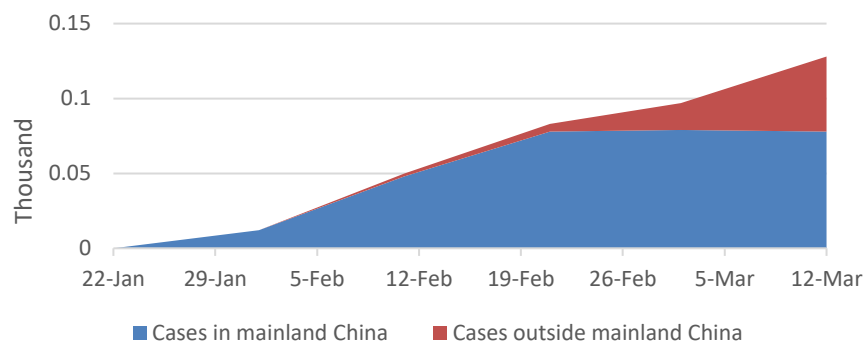


Figure 1: Increasing cases of Covid-19 from January to March.

Since the Covid -19 broke out in the United State, and more people were infected, the U.S government took actions.

### 2.2. Government Policy

The government offered free Covid-19 tests in all states, and there were testing points in almost every two or three street, so it made people very convenience to confirm their health condition. To decrease the chance of infection, the government shut down lots of unnecessary stores and did not allow employees who are not essential go to the company and got in touch with each other, so most people started working remotely. In another side, the government asked people wearing mask, or covered their face when they go to the public places. It is a mandatory order for at least grocery stores.

### 2.3. The Lack of Treatment

With the Covid-19 spread around in the U.S and more people are getting infected, the government offered the free test, but not treatment. At that period, hospitals were continually full or overloaded. For most infected people, the only choice was staying home, and infected other people such as family members. It is a vicious circle.

## 3. Problems that Costumer Faced During this Specific Period Due to the Inconvenience and Insufficient Suppliers

### 3.1. Stores Closed

As the previous paragraph mentioned, the government forced to close a lot of unnecessary places, such as shopping malls, restaurant, and cloth stores. Although the grocery store is not one of them because people had to have a place to buy supplies to maintain their daily life, many retailers still

closed due to the insufficient goods and the loss of customer because the regulation of staying home. As the only shopping option, grocery store is taking an important role, which had to fulfill most people's needs. However, there were lots of difficulties for grocery stores to conquer as well.

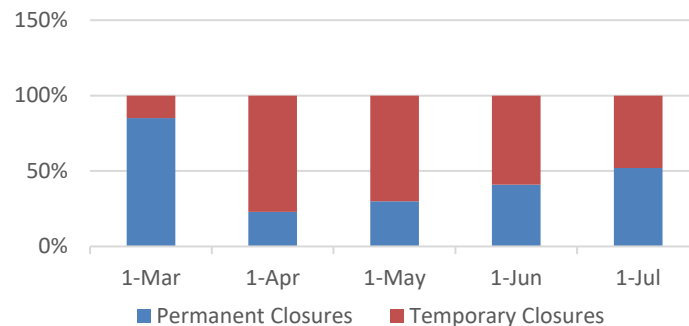


Figure 2: The share of permanently closed businesses is rising.

As shown in Figure 2, there are many, almost 80% of the U.S. stores temporary closed in March because of the regulations of government, but the number of stores that were permanent closed continually increased. It is a negative sign of the macro economy.

### 3.2. Disruption of Supply Chain

Due to many people got infected of Covid-19 and the shutdown order from the government, many factories and famers ceased working. It caused a huge negative impact on production chain and supply chain, which means factories and famers could not produce and provide enough goods to grocery store as usual. The limitation of goods made grocery store very nervous: Same or even bigger needs verses smaller supplies. The dominating needs of customers are foods, which include meat, vegetable, seafoods, and dairy markets, but those are also the goods that are difficult to produce and transport during the pandemic. When retailers could not sell enough goods due to the limitation of goods, they wish to increase their performances from other markets such as beauty or clothing. With the influences of inflation and different reasons, the price of goods increased, but the income did not rise as well.

### 3.3. Unemployment

As the increase number of infected people and the order of shutdown, many companies took actions, for instance: close, reduce the staff, or salary cut. With the rise of unemployment and salary cut, a negative circle was established. people did not have money to spend on unnecessary things, so companies or factories could not earn enough profits, then more salary cut, and unemployment will happen. The grocery store was deeply suffered in it.

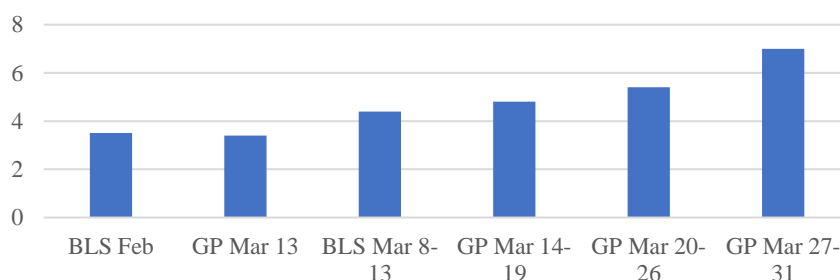


Figure 3: U.S. Unemployment Rate From Feb 2020 to Mar 31.

## **4. Solution**

### **4.1. Government Support**

After describing the negative economic trend in the U.S. and difficulties of retailers during the pandemic, how retailers handled the situation? There are many big retail corporations in the U.S., for example: Target, Walmart, Costco, etc. Those are listed companies that can borrow money from stock market to maintain stores and daily cooperation. With the increasing of unemployment rate, the stock market also being affected, but the Federal Reserve took part. It released a huge amount of money to maintain the market, so most listed companies in different industries, such as retail, transportation, were still having an increasing in stock price, which give those listed retailers a huge help. The problem of shortage goods still existed in big retailers, but their scale made them able to undertake those losses. Those big retailers were like mainstay of the industry to maintain people's life while small or middle retailers could not insist in the pandemic.

### **4.2. Delivery Services**

As many people did not want to go out because of Covid-19, delivery services such as Instacart, Door Dash, Shipt, etc. helped retailers solve the problem. The delivery services usually come up with an app that offered choices of surrounding grocery stores, a list of goods, one by one shopping, and delivery service to customers. The app has real-time update to ensure the inventory, and the staff who take care of shopping will also communicate with client person to person to ensure what they need and get. Due to grocery stores on delivery services are close to home, the delivery usually finished in few hours. It is a very convenient for most people and bring a new part of income for retailer.

### **4.3. Online Shopping**

Online shopping or e-Commerce is a new industry raised up recent years. It offered people a view of goods online with pictures of video, but not products in physical stores that are able to touch. A general opinion that online shopping can save the cost of rent of stores and operation fee, which is a main cost of retailers. Online shopping website such as Amazon also offer more diverse goods, if something can't find in physical retailers, online stores will always have surprise. Due to the reason of less or little cost, online retailers often give customer discounts or offer a cheaper price compared to the physical retailers. Walmart is one of earliest retailers that operated both physical and online stores, which is a very successful story of online store because the good reputation that physical Walmart accumulate. Online shopping is very convenient, the deficiencies compared with hours delivery services is the longer transport time and unable to transport fruit and cooked foods.

## **5. Conclusion**

After the introduction of Covid-19 and the analysis of the influences on retail industry caused by Covid-19, a vivid image of people's life in the U.S. should appears. The U.S. government ought to provide more treatments for people and ensure the normal operation of food supply chain. Since problems such as stores closed, disruption of supply chain, and increasing number of unemployment, appeared, the government supported retailers on financial way. Delivery services and online shopping also contribute to help retailers. Walmart is a successful example on transform physical stores to online stores and doing very well during Covid-19. Therefore, after the disruption of Covid-19, retailers will know the big trend of e-Commerce and the future business mode that they should work on. The U.S. government will also learn and accumulates experiences from Covid-19 on how to handle the big infectious diseases and deal it in a better way next time.

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