
Xiaoyu Weng
Department of Art and Science, The Ohio State University, Ohio, The United States
weng.229@buckeyemail.osu.edu

Abstract. The spread of COVID-19 has significantly influenced people's lives and brought worldwide recession. In order to society to recover faster from the epidemic, the first step is to understand the impact of the epidemic on people and changes in people's consumption habits. This paper uses the Real Personal Consumption Expenditure provided by Fred to categorize consumption into service, durable goods, and non-durable goods and to analyze the change of consumption focus of citizens. After the epidemic, overall consumption dropped, and it took almost a year to recover to the previous stage. After COVID-19, consumers are less willing to spend on service and this is the part that the government needs to put most effort on. After analyzing consumers’ consumption behavior, the government can make suitable policies to encourage consumption activities.

Keywords: List the, keywords covered, in your paper.

1. Introduction

1.1. Research Background and Significance

With the spread of COVID-19 pandemic, people’s lives have been inverted completely. The Presence of policies such as lock down, self-isolated, social distance makes the society less crowded and brings negative impacts on the whole market since shopping and consumption are not as convenient as before since all consumption is bounded by time and location and sales for all items decreased. To have a healthy economic environment, consumers’ consumption behavior is vital. Investigating the underlying logic of consumer behavior is the action that needs to be taken so that the government can find a path accelerating the recovery process.

1.2. Literature Review

Reducing various hazards and boosting perks that consumers perceive as benefits are two crucial components of marketing strategy during the pandemic [1]. During the epidemic, consumers were more cautious in their choice of consumption behavior because they no longer had an abundance of disposable income and they needed to have enough savings to withstand emergencies. In consumer behavior models, consumption is the output and this output is affected by the selecting product and places or point of purchase. Consumers consider a lot about these two behaviors to ensure their well-being during the pandemic [1]. There are many other factors that influence the purchasing behavior of the US population, such as the fear that the lockdown policy will be continuous, forgoing the purchase of one's favorite products for the sake of necessities, the disruption of the production chain by an epidemic, and so on [2]. Customers claimed that the COVID-19 shock had changed or revitalized their behavioral understanding of purchasing, indicating a deliberate turn towards spiritual consumption [3].

2. Case Description

During the COVID-19, people’s lives have been altered since significant disruption of the overall economy of the community due to the pandemic. Consumers’ rapid response to this sudden disaster is to reduce consumption and this action could cause severe results to any society. The research which studied consumers’ responses to COVID-19 based on Danmark account transaction data illustrated
that at the beginning of the pandemic, aggregate consumer spending decreased sharply around 29 percent and household liquidity increased at the same size but consumer spending recovered rapidly [4]. In the US society, related indexes have been gathered and analyzed with close details to provide rational support to crucial domestic decision making. How the US consumer responded to this unexpected pandemic and how the overall consumption recovered?

The most important indicator of consumer spending on goods and services in the U.S. economy is Real Personal Consumption Expenditures (PEC). This index measures the real levels of expenditures, which means the consumption is inflation-adjusted. The expenditures are divided into 3 parts, durable goods, nondurable goods and services. Products that can be used for more than 3 years are durable goods while nondurable goods indicate those which have average useful life for less than 3 years. Services represent the products that cannot be stored and should be consumed at the time of purchase [5]. The Figure 1 shows the total real personal consumption expenditures, expenditures on durable goods, expenditures on nondurable goods, and expenditures on services from 2017 till present. Data for all sorts of goods before 2020 increased slightly and steadily before January 2020. However, total consumption and expenditure on services and durable goods responded rapidly to the onset of COVID-19 pandemic by decreasing sharply, and the decline lasted till around June. Surprisingly, the expenditure on goods actually rose faster than before for several months after the pandemic and then started to decline. After a year of recovery, all descriptions of expenditures reverted back to previous levels and started the trend of slow growth. This article aims to understand U.S. consumers' behavioral decisions about consumption in the aftermath of the epidemic, and to identify the reasons for the relatively rapid recovery of total consumption by analyzing personal consumer consumption with each description.

![Fig. 1 Real Personal Consumption Expenditure (Billions)](image-url)
3. Analysis on the problems

3.1. Services

People's spending on services, which indicates spending on someone else’s labor of haircuts, college tuition and hotel stays to satisfy people’s wants for fashion, education and hospitality, respectively, dropped sharply during the epidemic compared to the previous period [5]. Lockdown regulations were one of the direct reasons for consumption decline since people were forced to stay at home from the beginning of the COVID-19 outbreak in March 2020 and the lockdown lasted for 3 months to decrease transmission rate and infection rate and this situation altered people’s lives completely. Citizens did not go out as usual as before and most of the time they went out to buy necessities and groceries instead of getting service. A study shows that paying for services stood for 64 percent of total spending of consumers in 2019, however, between February and April in 2020, spending on service decreased by 20 percent. Consumption on travel decreased respectively. During February to May, February and May, rail, air and road travel declined 96 percent, 91 percent and 27 percent [6]. Even after the lockdown period, social distance policies prevented entertainment places and restaurants from being overwhelmed and decreased their capacity which led to the result of decreasing sales. Spending on services renounced after April of the same year but it didn’t recover to pre-recession level till July. Since the whole society of the US entered recession period in April 2020 and requirement for service industry decreased, unemployment rose and incomes decreased, the public had to spend a higher percentage of their incomes on groceries and less on services with on other option.

3.2. Nondurable Good

Consumption of nondurable goods always occupies a large portion of one family’s household spending. At the beginning of the COVID-19 pandemic, with the spread of frightening reports about the disease and the high rate of mortality, the public lived in the panic of being infected and most of them chose to shelter at home to get through this difficult period. Also influenced by news about supply disruptions, people tended to buy and store foods and household goods as much as possible and grocery stores even limited the quantity each consumer could get because some popular goods were always out of stock. Total spending has increased by more than 40% in a number of different categories in the first half of March 2020[5]. After the irrational consumption period followed a huge decline by 25 percent on all consumption when the COVID-19 spread severely, there are still exceptions to the decline – food delivery and grocery [7]. Even though the incomes went down during this recession, consumption of groceries and foods, which are the most essential necessities for people's lives, could not be cut off. However, people’s choice has been changed. Instead of buying from brands they were loyal to before the pandemic, consumers turned to buy foods and groceries that are cheaper and more affordable, in order to save for any accident. In addition, buying groceries online was a good option, which is convenient and prevents spreading diseases. Before the COVID-19 pandemic, sales from online retailers were about 3-4 percent of the market share, and it rose to 10-15 percent after the onset; at the same time, the demand of deliverers exceeds the supply of this occupation [8].

3.3. Durable Goods

Demand for durable goods in the US has been lifted during Covid-19 pandemic, which is unusual. Consumers’ consumption on durable goods was stimulated by transferring their attention to spending from services to durable goods, also their disposable incomes were raised by the new fiscal policy [9]. Citizens are locked down at home so their consumption on traveling and eating in restaurants decrease. Instead, they needed to buy some durable goods such as cooking equipment and video game complements to spend quarantine time. Because of fiscal stimulus, disposable incomes of US citizens increased by $1.18 trillion in 2020 and three rounds of fiscal stimulus boosted the consumption of expensive durable goods, motor vehicles, recreational goods and furniture, to create a better
environment at home [10]. Consumption of luxury goods has been severely influenced by the beginning of COVID-19 pandemic. In 2020, data shows that total revenue from luxury goods in the US decreased by 25% to 30% compared to revenue from 2019[10]. Since 2020 was a tough year for luxury goods of industry and plenty of stores were facing shut down, they learnt from 2020 experiences and changed business strategies by making discount, this is quite attractive for consumers and revenues experienced a bounce back trend slowly, especially when more Chinese visitors came to the US after the quarantine regulation has been canceled in China.

4. Suggestion

Actions need to be done to attract consumers to spend more on services. Take traveling as an example, domestic subsidies are an effective way to boost people’s consumption on travel. Price discount strategy helps to attract tourists after the economic damage after COVID-19 especially in the case of luxury hotels since luxury hotels have a higher income elasticity of demand [8]. As the demand for hotels increases, demand for several complement services industries, such as airline and restaurants increase at the same time.

To increase people’s daily consumption, sending coupons is an applicable way to enhance consumers’ willingness to spend more. Attractive discounts motivate people to buy things they couldn't afford to buy before COVID-19 because even though consumers need to keep their savings during the pandemic, when they learn that they can get something they've been wanting for a long time at a very low price, it's hard for them to turn it down. Sales of complementary items for many products will also be boosted.

Because of the poor economic environment and various policies during the epidemic, many companies went bankrupt and restaurants and hotels closed down, leaving many people unemployed. The relaxation of the SME lending policy can provide more jobs, and many people who have lost their jobs because of the epidemic will be able to get a job. When the disposable incomes of those who have regained their jobs have increased, they have more confidence to spend money in various areas, such as traveling, rather than just buying essential items.

5. Conclusion

The economic landscape was significantly impacted by COVID-19, which also caused a global recession. Such an economic environment will definitely affect people's life from the aspect of consumption. This paper focuses on analyzing the changes in consumption habits of U.S. consumers in various categories of goods after the epidemic. Through the data provided by FRED, we can see people's consumption habits according to the different time period to make choices and analyze the reasons for the changes in sales of various products before and after the epidemic. The epidemic hit the service industry very hard, not only because of the various city closures, but also because people were more likely to save up for emergencies than to spend money on fleeting service providers. The epidemic only briefly affected the consumption of necessities that people still need to live on. For durable goods, even if people are reluctant to spend money on this at the beginning of an outbreak, when the situation improves, many have renewed confidence in it, and some may even be tempted to spend with a vengeance. When the changes in people's consumption habits are understood, the government can give better decisions to guide people's consumption, improve the economic environment, and bring the society back to normal. Giving government subsidies all the time will not solve the problem once and for all. Next, the research should focus on confirming the analysis of this paper with data calculations and providing a reasonable method to restore the economic environment using forecasting methods.
References


