



Consumers Reaction and Response to Covid-19

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Abstract

The outbreak and declaration of COVID-19 by the World Health Organization (WHO) as a global pandemic has had major effects on many stakeholders of the world economy, one of whom is the consumer. This perspective therefore intends to inform on the incidence of COVID-19 and report on consumers reaction and response.

Subject Areas

Agricultural Economics, Urbanization

Keywords

Consumer, Covid-19, Behavior, Consumer Behavior, Consumer Response, Impact

1. General Introduction

The novel coronavirus (COVID-19) pandemic erupted in December 2019 in Wuhan city in Hubei province of China and continues to spread across the world. China specifically Wuhan city was initially identified as the main epicenter of the epidemic with reported cases either in China or being travelers from China. On March 11, 2020, the World Health Organization announced COVID-19 outbreak as a global pandemic. By late-April 2020, COVID-19 had infected more than 2.88 million people worldwide in 210 countries, with over 198,000 deaths. The World Health Organization (WHO) has declared a public health emergency of international concern to coordinate international responses to the disease.

In collaboration with the WHO policies on fighting the pandemic, several nations across the globe have increasingly implemented strict public health measures to respond to the outbreak. These measures include social distancing; washing of hands under running water and soap, using hand alcohol-based sanitizers, quarantine, wearing face mask, partial to complete lockdown, among others.

These measures have invariably constrained economic activities with serious financial, social and economic consequences. Some of the major consequences of the COVID-19 include income and wealth losses, decreased in aggregate consumer expenditure including decreased in travel and clothing, increase in job cuts resulting in high unemployment rate. Nonetheless, in response to this, many governments have rolled out vast monetary incentive packages, as large as over 10% of the country's Gross Domestic Product (GDP) to help fight the adverse economic consequences of COVID-19. For instance, the government of South Korea announced a special Support Package with a budget of 20 trillion KRW in 2020 [1].

Similarly, the introduction of tax breaks and waivers for social security contributions, as well as extensions of deadlines for repayment of mortgages were some of the initiative rolled out by the government of South Korea to help its citizenry during the COVID-19 pandemic. Likewise in China, the government set up a subsidized 300 billion yuan credit facility for producers of masks and other health related items. In the UK, £5 billion have been allocated to the National Health Service (NHS), while in Ireland; the government has allocated €435 m for the Health Service Executive, [2].

In terms of individual financial support, the several governments are offering financial support and tax relief to their citizenry affected by the COVID-19 pandemic. The UK for example has introduced a guarantee system for 80% of the loan value for SMEs on lending and overdrafts and will provide an additional £2.2 billion funding for local authorities to support small businesses [2].

The assignment therefore seeks to assess consumer reaction to changes in income and prices of goods and service patronized during COVID-19 pandemic. It also highlights some of the factors that influence consumer reaction to income and price changes and also examine the relationship between changes in income and demand for essential products and services during the COVID-19 pandemic. The outcome of this assignment will be very significant to policy makers by providing them enough information about what how consumers are reacting to effect on the COVID-19 on their income and price of goods and services. This would help policy makers to be guided when making sound economic and social policies for people affects by the pandemic.

The assignment is organized into seven major sections. Section 1 gives a general introduction of the study by highlighting the impact of COVID-19 on the economy of several nations especially in developed countries including china, USA, and Europe where the effects of the COVID-19 pandemic are severely affected. Section 2 gives a brief overview of COVID-19 pandemic by describing the origin and dynamics of the spread of the COVID-19 pandemic. Section 3 highlights the microeconomic impact of COVID-19 on consumer expenditure. Section 4 outlines the general implications of COVID-19 on the purchasing behaviour of consumers by specifically examining the impact of COVID-19 on increase in expenditure on household essentials and job loses. Section 5 analyses

the factors influencing consumer spending or expenditure during the COVID-19. It comprehensively accesses the influence of factors such as perception and expectations of macroeconomic, fear of contagion, employment and income expectations among others on consumer expenditure. Section 6 elaborates on the practical ways consumers have reacted to changes in income and prices during the COVID-19 pandemic. Section 7 marks the final segment of the assignment with a conclusion by discussing and deducing the various

2. Brief Overview of COVID-19

The novel coronavirus (COVID-19) pandemic was reported to have started in December 2019 in Wuhan city in Hubei province of China. The coronavirus disease 19 (COVID-19) is a highly transmittable and pathogenic viral infection caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), which emerged in Wuhan, China and spread around the world. According to [3], genomic analysis revealed that SARS-CoV-2 is phylogenetically related to severe acute respiratory syndrome-like (SARS-like) bat viruses; therefore bats could be the possible primary reservoir. The intermediate source of origin and transfer to humans is not known, however, the rapid human to human transfer has been confirmed widely. There is no clinically approved antiviral drug or vaccine available to be used against COVID-19. As COVID-19 began to spread across the world and households have been faced with drastic changes in many aspects of their lives.

A recent WHO report on the COVID-19 pandemic shows that there are over 1.4 million confirmed cases and over 83,000 deaths globally. By late-April 2020, COVID-19 had infected more than 2.88 million people worldwide in 210 countries, with over 198,000 deaths. Due to the high rate of human transmission, the World Health Organization (WHO) has declared COVID-19 as a public health emergency of international concern in order to coordinate international responses to control the disease. In view of this, the WHO have implemented policies on fighting the pandemic, several nations across the globe have increasingly implemented strict public health measures to respond to the outbreak. These measures include social distancing; washing of hands under running water and soap, using hand alcohol-based sanitizers, quarantine, wearing face mask, partial to complete lockdown, among others.

Additionally, many nations have also placed restrictions on the transportation of people and goods, commonly imposed in areas where the risk of infection is high, significantly disrupting outputs and exports, and hindering seeds of future growth by undercuts in investment as investors lose their confidence in the market. Social distancing, self-isolation and travel restrictions forced a decrease in the workforce across all economic sectors and caused many jobs to be lost. Schools have closed down, and the need for commodities and manufactured products has decreased. However, the need for medical supplies has significantly increased. The food sector has also seen a great demand due to panic-buying and

stockpiling of food products. This has sparked fears of an impending economic crisis and recession.

These measures have invariably constrained economic activities with negative impact on financial, social and economic variables. Some of the major consequences of the COVID-19 include income and wealth losses, decreased in aggregate consumer expenditure including decreased in travel and clothing, increase in job cuts resulting in high unemployment rate. Nonetheless, many governments have responded by rolling out vast monetary incentive packages to help fight the negative economic consequences of COVID-19.

3. Microeconomic Impact of Covid-19 on Consumer Expenditure

Recent researches have shown that the COVID-19 outbreak have had devastating effects on consumer expenditure and the economy of nations as a whole. According to the [2], consumers in many economies are unable or reluctant to purchase goods and services. Given the current environment of uncertainty and fear, enterprises are likely to delay investments, purchases of goods and the hiring of workers. Apart from these negative effects of the COVID-19 outbreak on production and investment, there is a considerable negative influence on consumer expenditures as consumers observed and adhere to the safety measures implemented by law to curb the spread of the pandemic. Large numbers of businesses have being closed down by government in many nations, required to limit trips outside and exposure to others following shelter-in-place orders. People have had to adjust to the way they lived and worked in response to uncertainty about how the future would play out, they also rapidly altered how and where they spent their money. This disruption in consumption has affected the flow of goods and services and the business cycle of the economy considerably. It has also affected the expenditure of households as they are faced with drastic changes in many aspects of their lives. These are a few areas where the COVID-19 has had significant influence on consumer expenditure.

For instance, in the USA consumer spending in many merchant categories was pushed down by 20% to 40% [1]. This means that consumers increased and maintained relatively their expenditures on groceries while reducing their spending on recreation and real estate. It was noticed that consumer's expenditure in e-commerce has increased remarkably due to avoidance of risk of contagion of shopping in-person in malls. The implication is that the COVID-19 outbreak has impacted consumers' sentiment and consumption to a significant extent and led to consumer's adjusting to e-commerce to prevent possible exposure to the disease. Additionally, [4], confirmed the study of [1] by establishing through a survey that consumers also spend substantially less on discretionary expenses such as transportation, travel, recreation, entertainment, clothing, and housing-related expenses.

In France, a study by the EIT Food Consumer Task Force (2020) shows that

over half (52%) of consumers report financial struggles during the COVID -19 pandemic and 68% say they have had more time. Overall consumers in France during the pandemic show slightly below average increases in online shopping, planned purchases and bulk buying, but the biggest rise in buy direct from producers and suppliers (38%). Again, in Denmark and Sweden, [5] estimated a significant reduction in consumers' spending during the Danish lockdown period was estimated to be approximately 25%. The authors therefore concluded that the shutdown in Denmark reduced spending by approximately 10% among young people, with increased spending by about 5% among the elderly. In UK many consumers have adapted their shopping habits during the lockdown; people have reduced the number of visits to the shops (44%) due to the fear factor, instead supporting smaller/local businesses (34%) and shopping online more than was previously the case (16%), [6].

4. Implications of COVID-19 on the Purchasing Behaviour of Consumers

4.1. Increase in Expenditure on Household Essentials

A recent survey conducted by [7] on consumer expenditure during the COVID-19 in the United States shows that households have substantially increased their spending dramatically in an attempt to stockpile needed home goods and also in anticipation of the inability to patronize retailers. Household spending increases by approximately 50% overall between February 26 and March 11. Grocery spending remains elevated through March 27, with a 7.5% increase relative to earlier in the year.

Additionally, the study observed an increase in card spending, which is consistent with households borrowing to stock-pile goods. For the last several weeks, the perishables industry has witnessed incredible changes in grocery shopping habits including unprecedented stock up trips that left store shelves empty, huge increases in year over year produce sales and significant shifts toward online grocery shopping. This shows the extent to which COVID-19 has taken a heavy toll on the American consumer. The overall increase in grocery spending is three times as large for states with shelter-in-place orders.

In China, [8], through a study on the Impact of the COVID-19 Pandemic on Consumption, noticed and concluded that spending on goods and services were both significantly affected, with a decline of 33% and 34%, respectively; within finer categories, dining & entertainment and travel saw the greatest dip of 64% and 59%. The consumption decrease is prevalent across cities with the largest drop occurring in the epicenter such as Wuhan (by 70%).

4.2. Job Loss

A survey conducted by [4] on how the arrival COVID-19 has affected spending patterns and expectations on average between the pre-crisis wave in January 2020 and April 2020 shows that there has been a massive decline in employment

rate which fell by 5% percentage points which is larger than the cumulative drop in the employment-to-population ratio during and after the Great Recession. The hospitality and travel industry have perhaps been most hard-hit, with hourly workers facing potential devastating hardships. For example, Marriott International with approximately 174,000 employees is poised to place tens of thousands of workers on furlough, [9]. Also Hilton Worldwide has also notified lenders on 5th March 2020 borrowing a precautionary \$1.75 billion under a revolving loan to preserve money and to maintain flexibility “in light of uncertainty in the global markets” [4]. The average perceptions of the current unemployment rate increased by 11% points with similar magnitudes for expectations of unemployment in one year. Unemployment expectations over the next three to five years also increased by an average of 1.2% points, indicating that households expect the downturn to have persistently negative effects on the labor market. This has invariably affected the income levels of consumers and their overall spending which has drops by \$1000 per month between January and April which corresponds to a 31% drop in spending with heterogeneous responses across granular categories.

5. Factors Influencing Consumer Spending or Expenditure during the COVID-19

5.1. Perception and Expectations of Macroeconomic Factors

According to [10], during pandemic outbreak such as the COVID-19 pandemic, consumer personality characteristics like risk aversion, value consciousness and materialism are significantly affected. The current COVID-19 outbreak has had a lot of adverse effects on the consumers spending spanning from subjective expectations of consumers on the effects of inflation and other macroeconomic expectations such as GDP, per capital income, fiscal policies from governments among others. There have been systematic revisions of GDP growth and inflation expectations due to news about COVID in several nations, [11]. However, it is unclear whether the COVID-19 crisis has and will result in higher or lower inflation in nations. Again, depressed demand as currently reflected in low oil prices could instead put downward pressure on inflation. This could disrupt the supply-chain that can increase marginal costs and result in higher future inflation. This suggests that the effectiveness of fiscal and monetary policy measures such as GDP and inflation are crucial to consumer spending during times like this (COVID-19 outbreak).

The uncertainty of future GDP and inflation has had major psychological effects on consumers forcing many people to adjust their social and working lifestyle in response to uncertainty about how the future would play out, they also rapidly altered how and where they spent their money. Similarly, the effect of lockdowns for instance has play key role on the decision making process of consumers. For instance, [4] discovered through a survey that people under lockdown in the US expect 0.5% points lower inflation over the next 12 months,

which partly explain the depressed spending response of household consumers. Again, the researchers noticed that individual-level uncertainty about future expected inflation during this COVID-19 increase by more than 0.6 percentage points. This suggests that the COVID-19 pandemic have some level of influence on inflation which also has significant influence on the psyche of consumers thereby affecting their spending decisions.

5.2. Fear of Contagion Factor

The COVID-19 is known to spread through human contact and most nations in their bid to prevent the spread of the COVID-19 have place restrictive measures such as lockdowns and quarantine on human movement. The fear of contagion and the restrictive orders are major factors have force most people to spend on stockpiling essential household items to stay at home. In the US for instance, federal and state governments have advice households, to prepare to stay inside their homes for multiple weeks with minimal trips outside. In view of this customers have emptied supermarket shelves in an effort to stock-pile durable goods [4].

Additionally, the fear of contagion factor, COVID-19 has also force consumers to change how they shop. One of the biggest shifts is toward packaged items and away from items that may have been handled by store staff. In the US for instance, a study by [5] indicates that nearly half (46%) of consumers are reported to be now buying more packaged items. Also a significant number are also taking steps to limit the number of people handling their food, including avoiding salad bars and other self-service items (41%), using self-checkout (36%), avoiding the meat counter, deli counter and other items that require store staff to handle food (35%) and avoiding loose items (25%). These factors have led to significant stockpiling and spending reactions, which is consistent with expectations laying a large role in household consumption decisions.

5.3. Employment and Income Expectations

The outcome of [4] suggests that lockdowns account for close to 60% of the decline in the employment to population ratio. The COVID-19 pandemic increases current unemployment estimates by staggering 13.8% points, expectations for the unemployment rate in one year increase by 13% points, and long-run expectations over the next three to five years are on average still 2.4% points higher. These results indicate that the length of heightened unemployment according to household expectations could warrant an extension of unemployment insurance benefits to ensure no sharp drop in demand once claims expire. Since we can only estimate the short-run effects of lockdowns on labor markets, these numbers are likely to be a lower bound on the total effects of lockdowns on labor markets, as continued lockdowns are likely to lead to business failures and further job loss.

Findings from the study of [4] revealed that there are large declines both in

income and wealth of consumers in the US. For example, 42% of employed consumers have lost earnings due to the COVID-19 pandemic with the average loss being more than \$5000. More than 50% of households with significant financial wealth have also reported having lost wealth due to the virus and the average wealth lost is at \$33,000. This outcome suffices the important role of wealth effects for consumption, the drop in wealth puts further downward pressure on future consumption as stated by [12].

6. Ways Consumer have Reacted to Changes in Income and Prices during the COVID-19

The recent impact of the COVID-19 on consumer expenditure has been the main reason for several consumer behaviour trends: immoderate hedonic consumption, stressing emotional status and social value of purchase and consumption processes rather than functional benefits of a purchased item. As consumers experienced the changes brought by the COVID-19 in the economy inevitably influenced factors that predetermine consumer behaviour. During the COVID-19 outbreak, consumer personality characteristics like risk aversion, value consciousness and materialism are significantly affected [10]. Frugality, which is defined as one-dimensional consumer lifestyle trait characterized by the degree to which consumers are both restrained in acquiring and in resourcefully using economic goods and services to achieve long-term goals” [13], a feature that was common only to a comparatively small number of consumers during prosperity years, in the context of downturn becomes a common purchasing predecessor. There are several reasons for frugality during crisis period such as the COVID-19: real budgetary constraints, guilt about luxury spending during economic and pandemic crisis, credit squeezes, increased bargaining power of consumers, pent-up demand [14].

During pandemic outbreak such as the COVID-19 which has effects on macro and micro economic variables, both consumer status and expectations concerning employment, income, products and services and prices influence consumer beliefs and behaviour [15]. Due to decreased income and caution to be more responsible with spending, consumers change their behavioural patterns: they become less wasteful, judge products and services in a different way, are more comparative in shopping [15].

Again, changes in materialism, risk aversion and value consciousness influence consumer decision making process: consumers make adjustments for product, promotion, distribution and price judgments, namely, relying less on advertising imageries, and more on product attributes, prices and convenient shopping places [10].

According to [16] during pandemics such as the COVID-19, consumers adopt fundamental behavioural patterns, which serve as guidelines for their purchasing behaviour, their “emotional responses towards crisis”. Various consumers might hold very different emotional responses towards pandemic crisis which, subse-

quently, may lead towards different changes in consumption of products and services. In view of this, [17] was identified six major emotional responses towards realities of pandemic and economic crisis:

1) ***Reduce spending in order to “survive”***. The behaviour is based on consumption reallocation, making savings by reducing product quantity and quality (separately, or both). This is the most common way to cope with pandemic and economic crisis [18]. Consumers might start consuming less, avoiding any unnecessary purchases as well as downgrading product quality by choosing cheaper products [15]. Again, [11] identified two types of customers, who sharply reduce their spending. Those, who are forced to reduce spending as much as possible, are called “slam-on-the-breaks”, others, who economize, but not as sharply as “slammers”, are named “pained-but-patient”.

2) ***To reduce spending in order to make some savings***. Some consumers, whose budgets are not significantly reduced, become more risk averse, and restrain from unnecessary purchases in order to allocate some savings for the future. They anticipate the situation in the future to be worse due to decreased income and/or increased prices. Reduction of spending, again, is made either compromising on product quantity and/or quality.

3) ***To concentrate on short-term increase of life quality, as long it can be afforded***. Such consumers are called “lived for today”. Usually these are younger individuals with little financial or social liabilities, who are unlikely to change their consumption habits unless serious financial problems, like unemployment, occur [11]. Sometimes bigger luxuries, like furniture, can be replaced by small luxuries, like cosmetics [19]; however, the pattern of hedonic consumption remains.

4) ***Improve life quality by consuming more products and services***. Since not all sectors are equally hit by pandemic crisis, consequently, not all individual income are affected negatively. At the same time, prices of numerous products decrease. Therefore some consumers might be willing to consume more products or services of certain categories, as sellers are forced to offer very favourable sales deals.

5) ***Improve life quality by consuming better quality products and services***. Consumers might not change or narrow the amount of consumption, but not compromise on product quality. On the contrary sometimes they purchase higher quality products (organic food, etc.), as they perceive that there will be positive long term effects on health, safety, etc [19]. Various product categories serve different needs and are purchased in various ways. According to [19] changes in consumption during pandemics are dependent on whether the products are perceived as essentials, treats, postponables or expendables. Consumption of essentials should be the least affected by effects of pandemic outbreaks.

However, evidence from crisis period in Korea (1997-1998) demonstrates, that consumers in this period make savings on food, clothing, housing, medical care, and educational expenditures [20] [21] while food items normally fall into the

category of essentials. Also economic crisis in Mexico in 1994 had an impact on spending on luxury goods, durable and semi durable items, however, food consumption in absolute quantities remained moderately affected, although it demanded bigger shares of total consumer budget [22].

Conclusively, evidence from current COVID-19 pandemic in USA suggests that consumers make significant savings in grocery stores by selecting cheaper brands and decreasing purchases [23]. Although the empirical evidence shows how fast moving consumer goods category purchases are affected during the COVID-19 outbreak is rather contradictory, in all cases, purchased product quantity and quality, or at least one of them, were affected.

7. Conclusions

The arrival of the COVID19 pandemic resulted in major economic downturns around the world with large drops in employment, equity markets, and personal income which have consequently affected consumer spending. To curtail the rapid spread of the COVID-19 pandemic, many governments of nations working in collaboration with the WHO have imposed precautionary measures such as the regular washing of hands, using alcohol-based hand sanitizers, observing social distancing, wearing face masks, imposing restrictions in movements, and quarantine among others. These measures with the goal of slowing the spread of the pandemic have had adverse impact at the macro and micro levels in several nations.

Specifically, these measures have had effects on income and prices of goods and services which have forced consumers to react to their spending lifestyle in numerous ways. A critical review of recent studies carried out in the United States on the impact of the COVID-19 on consumer spending established that government policies and measures in curtailing the spread of the pandemic have had devastating impact at both the macro and micro levels of the economy. Specifically, restrictive measures such as the lockdown have led to a dramatic decline in employment, income levels and general consumer spending as well as a bleak outlook for the next few years ahead.

Again, in response to these effects, consumers have reacted to the income and price changes by adopting frugality measures such as reducing spending in order to “survive” (based on consumption reallocation, making savings by reducing product quantity and quality), reducing spending in order to make some savings, (reduction of spending, again, is made either compromising on product quantity and/or quality), concentrating on short-term increase of life quality, as long it can be afforded (sometimes bigger luxuries, like furniture, can be replaced by small luxuries, like cosmetics), improving life quality by consuming more products and services (consumers willing to consume more products or services of certain categories, as sellers are forced to offer very favourable sales deals) and improving life quality by consuming better quality products and services, (consumers might not change or narrow the amount of consumption, but

not compromise on product quality).

This study established that epidemic outbreaks such as the COVID-19 can significantly create economic and social crisis in future. Since the issue of how the COVID-19 have affected consumer spending on goods and services is largely understudied, it is very imperative to conduct more studies on the effects of pandemics at the macro and micro levels. Nevertheless, this assignment is not without limited as most of the data collected were from secondary sources mostly from works done by researchers who used only small sample of consumers in their studies. Since most of the estimation sample is fairly small it is difficult to emphatically make a generalization for the overall impact of COVID-19 on consumer reaction to spending.

Again, majority of these studies done by scholars might be subject to partialities emanating from their career paths, academic training, or experience. However, this is also strength of the method, which was based on the views of people with experience in a range of areas with different cultures. Therefore, these results might be valid for contexts that resemble the region that was analyzed. Finally, studies done on COVID-19 are fresh and still on-going and mostly centered in Asia, Europe and America but do not include those done in Africa. This further makes it extremely challenging to generalize the outcome of these studies for the whole world.

Moreover, findings from majority of the empirical studies were based on data from credit and debit card transactions of consumers and not information on actual cash payments and withdrawals. This also suggests that in a different type of payment method. Nevertheless, the findings of this study highlight the impacts of COVID-19 on consumer reaction on spending from various angles. It also provides a useful resource as it adds to the growing literature and existing information on COVID-19. It also serves as important reference point for further researches on the impact of COVID-19 on consumer spending.

Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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