

Analysis of the Impact of the Epidemic on All Industries and Psychological Analysis of Consumers

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Abstract

This essay aims to utilize the economic approach methodology developed by Gary S. Becker to analyze consumer's behavioral change found in current events. Economists from different historical points have theorized analyzing human behavior outside the market with various degrees of success, though no unified framework exists until its implementation by Gary Becker. Becker persists on using the 'Homo economicus' assumption to explain human behavior, and that market mechanism could better solve most economic and social problems. Becker provided more refined and incisive views on the economic approach, thus integrating issues that traditionally belong to sociology, demographics, education, political science, law, and sociobiology into the study of economics.

Keywords

Consumer's behavior; Psychological analysis; Economic approach methodology.

1. Introduction

In the wake of the outbreak, all walks of life have been affected to varying degrees. For those who are prepared or fit for the business model under the epidemic, the epidemic is an opportunity and vice versa is a challenge. Based on this topic, this paper aims to explore the extent to which various industries have been affected by the epidemic and its causes.

The major industries affected are film industry, transportation industry, food industry, manufacturing industry and international trade industry. In my opinion, the industry with the biggest impact on other industries is the transportation industry, which can be said to affect the whole body. To prevent further spread of the virus, the government cordoned off affected areas and closed international flights after the outbreak. Transportation industry and international trade are closely related. The weakening of the former has a direct impact on the development of the latter. International commodities in circulation are difficult or even impossible to be exported under the restrictions imposed by various countries' anti-epidemic policies. The weakening of the transportation sector has also affected manufacturing in several ways. It is difficult for manufacturers to purchase raw materials from their partners and carry out production activities.

Even if the manufacturer can continue to produce, it is difficult to sell goods on time, resulting in a backlog of goods. Such problems also appear in the food industry, the long-term unsaleable food leads to part of the spoilage, huge losses. In addition, aquaculture under the food industry has been particularly affected, with seafood sales falling to a certain extent. However, the reasons for the decline in seafood and poultry sales, unlike those of other foods, are worth pondering.

2. Summary of Methodology

Much of the resistance to fish and poultry has been driven by fear. It is certainly positive that people have a sense of precaution, but there are some irrational factors in people's consideration of the quality of food. Some people classify all food at farmers' markets as dangerous regardless of the type of food and whether it may be affected by the virus. This irrational behavior without careful consideration also has a negative impact on the development of the food industry to some extent. Finally, China's box office has continued to grow over the past five years, and theaters, an important part of the offline entertainment industry, could lose nearly 30 billion yuan in 2020 due to their shutdowns, according to an estimate by the director of the China Film Bureau.

On the other hand, the online education, e-commerce and online entertainment industries are enjoying a spring in their step. During the initial two-month lockdown, people spent most of their time at home. Offline educational institutions and entertainment venues have been hit hard. According to new Oriental, its revenue growth is expected to decrease by 10% in the third quarter of 2020 compared with the same period last year, resulting in a revenue loss of about \$80 million. However, New Oriental took timely measures to launch online live classes through its OMO system, which greatly alleviated the crisis. According to the Survey Report on the Training and Education Industry during the Epidemic released by the Training and Education Committee of the China Association of Private Education, 29% of these institutions said that the epidemic has seriously affected them, and that their operations are facing serious difficulties and they may close down. 36.6 percent of them said the impact was so great that operations were temporarily suspended; 25.4% of the institutions said that the impact is relatively large, operating some difficulties, barely maintain.

Table 1. Data from new Oriental

Transportation Industry	Film Industry	Food Industry	E-commerce Industry
Commercial passenger traffic in the first quarter fell by 58.4% year on year.	Nearly 30 billion yuan is expected to lose in 2020.	Haidilao made a net loss of 965 million yuan in the first half.	The loss of revenue from Alibaba's core e-commerce business reached 14 billion yuan.

In addition, I asked 15 people in their families about their needs for epidemic prevention supplies at all ages. In the table below, 1-5 indicates the average increased demand for masks after the epidemic, with 1 being the lowest and 5 the highest. The statistics are as follows.

Table 2. Needs for epidemic prevention supplies at all ages

10-15	15-18	18-24	24-40	40-70
3	4	5	4	3.5

After obtaining the information, I asked them for their views on the reasons for the differences in requirements. Most people think that the reason why there is little demand for masks among people aged 10 to 15 is that they are too young to have sufficient awareness of prevention against the epidemic. The reason why people aged 15 to 18 have a higher demand for masks is that people in this age group have a better ability to obtain information on their own. The biggest reason for the new demand among 18 - to 24-year-olds is that they are more concerned about the epidemic than people of other age groups; The reason for the low demand for masks among people aged between 40 and 70 is that some of them are reluctant to change their lifestyle due to long-term habits.

3. Related Work

"Economic Analysis of Human Behavior" is a book by American economist Becker, which mainly studies the application of economics to analyze and solve different aspects of people's lives. Many phenomena during the 2020 new crown epidemic can be explained using the relevant theories in this book.

During the epidemic, consumers' sales behavior of hoarding masks, thermometers, disinfectant and other supplies in large quantities can be interpreted as "extreme impulsive behavior" in "broad irrational behavior" in Becker's "Economic Analysis of Human Behavior". Consumers' psychological conditions during the epidemic were in a state of jealousy and panic compared with usual. In order to ensure their own safety, everyone began to be in an irrational consumption pattern. In fact, ordinary medical surgical masks are safe enough for most people, but most people still rush to buy N95 or even N99, these masks only need to be used by doctors who directly contact patients with new crowns. In addition, the remaining shelf life of some masks is not very long (manufacturers sell masks produced in 2018 and stocked in warehouses due to market demand), but consumers' behavior of buying in large quantities and not using them up leads to unnecessary waste. In short, consumer irrational consumption behavior during the epidemic not only led to the irrational operation of the market, but also led to a period of time in short supply of masks. In the end, the government had to order to limit the number of masks purchased per person at a time, and offline in many areas Pharmacies and community neighborhood committees have also begun to implement purchase restrictions, that is, the purchase of masks needs to be purchased by appointment, or neighborhood committees can distribute masks to residents on a household basis.

In the market, we can also find many phenomena about the interaction between the epidemic and economic development. Why did the price of masks rise during the epidemic, but the number of purchases continued to rise? Becker's book mentions: "Rising prices will increase the quantity of supply." According to online survey data, many people will use masks repeatedly because they cannot buy them during the Spring Festival in 2020. This group accounts for 84.2% of the total survey participants. The shortage of masks has caused manufacturers that did not produce masks to switch to the production of masks. In a short period of time, the supply and purchase of masks have increased. At the same time, the competition between mask manufacturers has also given consumers more choices, that is, they are more inclined. Buy masks that are cost-effective and safe for big brands.

All the above phenomena support the viewpoints mentioned by Becker in his book: "Prices and other market instruments allocate scarce resources within the social sphere, thus restricting the desires of participants and coordinating their behavior" and "A monopoly market can better satisfy consumers' preferences, and consumers prefer to choose cheap and high-quality brands".

4. Conclusion

To clarify possible conflicts in definitions of "economics," the definition "the allocation of scarce means to satisfy competing ends." is used in "the economic approach". The economic approach to human behavior comprises three main assumptions: the maximization of utility, market equilibrium, and stable preferences. In Becker's view, all human activities contain utility maximization, regardless of the nature of activities or the decision unit's background. The source of utility can be market goods and services or other non-monetary factors. The process of utility maximization is the satisfaction of individuals' basic tastes, which determines the preference patterns; these patterns are assumed to be stable and do not change substantially over time and space. The materialization of preferences depends on allocating scarce resources through markets, which effectively constrains the participants' desires. To summarise the economic approach to human behavior, Becker wrote: "All human behavior can be viewed as involving participants who maximize their utility for a stable set of preferences and accumulate an optimal amount of information and other inputs in a variety of markets." [1]

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