



Research on the Impact of the COVID-19 Epidemic on the Development of the FMCG Industry

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ABSTRACT

The outbreak and popularity of COVID-19 has brought a major blow to the global economy. Various industries have also been affected to varying degrees. The change of the FMCG industry closely related to people's daily life is worthy of attention and research. In this paper, based on the two perspectives of consumer behavior and sales volume of the main business in the FMCG industry, combined with the methods of data analysis and comparative analysis, we study the change characteristics before and after the outbreak of COVID-19. The research results show that the outbreak and popularity of COVID-19 have prompted consumers to gradually switch their consumption channels from line to line, and have created a new consumption pattern, the O2O mode. The overall sales volume of the FMCG industry has been reduced and the sales volume varies in different consumer goods markets. This research provides basic research directions and ideas for scholars in related fields, and provides future development direction for business entities in FMCG industry, as well as consumer information and emerging channels for consumers.

Keywords: *FMCG industry, COVID-19, Consumer behavior, Consumption sales.*

1. INTRODUCTION

1.1. Research Background and Motivation

The outbreak of COVID-19 in 2019 caused a major blow to the global economy, and all trades and industries also experienced various degrees of economic recession and even depression. Whether it is trade scale or overall economic growth, the growth momentum is insufficient and flagging. The outbreak of COVID-19 undoubtedly has an important impact on all kinds of industries. In order to cope with these effects, many industries have undergone major changes in the past business models. Therefore, the study of the impact of COVID-19, many scholars in related fields as a research hotspot, carried out a lot of research and analysis, in-depth analysis of the changes in various industries under the epidemic and published their own views. Among them, the changes in the FMCG industry, which is closely related to people's daily life, are worth exploring. As the industry mostly provides necessities and daily necessities related to consumers' activities, the industry can reflect consumer's consumption level, consumption trends and consumption preferences to a certain extent, so the impact caused by the sudden COVID-19's impact has aroused great concern. Many scholars in this field have also explored

and studied one by one, and have published their own opinions and views. The development and structural optimization of FMCG industry under COVID-19, especially the changes in consumer behavior and sales, is a matter of great importance.

With the outbreak and persistence of COVID-19, it is necessary to study the change of the industry. How the consumer behavior changes caused by the epidemic, what is the changing trend and how the market sales scale of the whole FMCG industry changes are of great significance to promote the FMCG industry to resume production and sales, explore new development paths and industry business models, and provide more convenience for consumers, so as to expand the market scale and meet the new needs of consumers.

1.2. Literature Review

In the field of COVID-19's research on the related impact of the industry, scholars in this field have given many comments and research results. Yunpeng Sun et al have studied the path of COVID-19's popularity for the fast consumer company's survival and development from a macro level. It is pointed out that it is necessary to integrate innovative technology into business practice so as to improve the ability of the industry to adapt to the

new situation [1]. Some scholars also studied the recovery of FMCG industry after the outbreak, pointing out that the main reason for the recovery of sales is the rebound of traditional channel sales and the continuous innovation of the industry [2-3]. Additionally, more scholars have studied the sales situation of the FMCG industry under the epidemic situation, analyzed the reasons for the decline in sales revenue, the adjustment of sales strategy and the changes in the sales structure, and revealed the heavy adjustment of the FMCG industry to achieve business revitalization and prosperity under the background of COVID-19's popularity [3-8]. From the perspective of consumers, many scholars have also contributed theoretical results. Vesheshta and Prabha studied and quantified the differences in consumer preferences, emotions and behaviors between COVID-19 and consumers [9]. Ram Kishen et al studied the relationship between consumers and brand loyalty after the outbreak of the epidemic, and points out that the epidemic has had a significant impact on consumers' purchase decisions, and consumers' willingness to change brands has increased [10].

The precedents of these studies provide a lot of research background and theoretical experience for this study, which can better refine the research direction of COVID-19's impact on consumer behavior and sales scale in the industry, and clarify the content structure of the research. However, the current theoretical research results lack the analysis and summary of the specific change direction and trend of consumer behavior and the analysis of the structure of sales change. Therefore, in order to make up for these deficiencies, this paper will study the specific manifestations of consumer behavior changes and the subdivision structure of sales changes in FMCG industry, and deeply excavate and analyze the specific manifestations of consumer behavior changes and sales scale changes.

1.3. Research Contents and Framework

Based on this, this article makes a theoretical and empirical analysis of the changes brought by COVID-19

to consumer behavior and the change of sales in the FMCG industry. It mainly uses data analysis and comparative analysis to carry out research. By collecting data in recent years, we use charts to analyze and compare the data obtained. It is concluded that the direction of changes in consumer behavior under COVID-19 and the emerging consumption patterns and the specific structure of sales changes. The framework of this article is as follows: the first part is introduction, the second part is theoretical and empirical analysis, the third part is the results and discussion based on theoretical and empirical analysis, and the fourth part is the conclusion.

2. METHODOLOGY

2.1. Data Sources

The data source of this article is the national annual data from 2017 to 2021 in the National Bureau of statistics, research and development report on FMCG industry and the selected sample data is from 2017 to 2020.

2.2. Data Analysis

2.2.1. Consumer Behavior Analysis

Since the outbreak of COVID-19, the fast-moving consumer goods market has been greatly impacted and brought about a series of changes in consumer behavior. The change of consumer behavior is worth our attention. Affected by the epidemic, consumers have shown significant changes in their consumption channel and patterns. The article mainly focuses on two aspects of changes of consumer behavior on fast moving consumer goods market. The first is a study on changes of consumption channel, and the other is to study the changes in the new consumption patterns given rise to under the epidemic. For the two aspects, recent several years data is be used to do comparing research.

To begin with, the consumption channel has changed from offline to online.

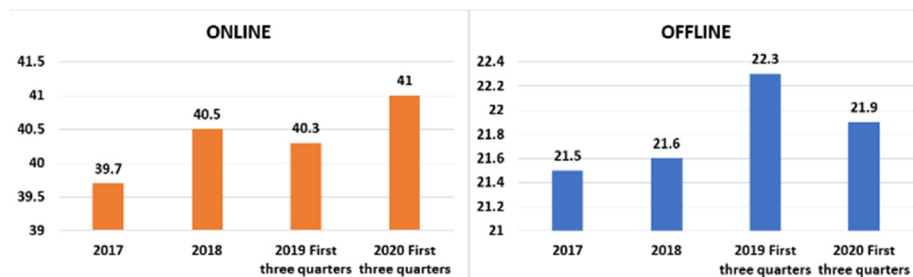


Figure 1 Proportion of sales realized by promotional activities in 2017-2020 (%)

Source: Consumer industry 2020 China shopper report, Series 2.

Note: Pictures are not commercially available

According to Figure 1, we can see that in general online sales increase steadily, especially in 2020 it reached the highest level, which are almost two times bigger than offline sales. The way and channel of offline consumption are gradually replaced by online consumption. Based on the trend analysis, online shopping is expected to maintain a steady growth trend in the era of COVID-19's popularity. It reflects the consumers under the epidemic prefer online consumption, since the effect of COVID-19 they have to reduce the outdoor activities and shopping to stay at home, which increases the demand in shopping online. The data indicates that consumers demand of online shopping will account for a large market in FMCG industry.

In other words, due to the outbreak and prevalence of the epidemic, consumer consumption channels have gradually changed from offline to online.

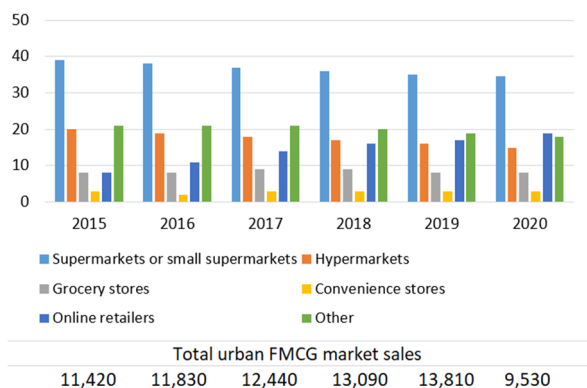


Figure 2 Proportion of sales of various channels in urban FMCG market (100 million yuan)

Source: Consumer industry 2020 China shopper report, Series 2

Note: Pictures are not commercially available

Figure 2 is another evidence of the transformation of consumer consumption channels. It can be seen from the figure that the sales of offline physical stores have decreased to varying degrees, while the sales of e-commerce have increased significantly. The market share of many offline sales entities, such as convenience stores, grocery stores or supermarkets, has decreased year by year, while the market share of online e-commerce has increased sharply since 2019, and even exceeded that of other offline physical stores in 2020. The change of this trend reflects that the number of consumers on the outlet line and the amount have exceeded the trend of offline physical stores. Consumers' consumption channels have experienced offline to online changes. Therefore, it is speculated and expected that the change of this kind of consumption channels will continue. The two charts and data above reveal the change of consumer consumption channel after the outbreak of COVID-19, that is, from offline consumption to online consumption. This is mainly due to the existence of COVID-19, which greatly

reduces the opportunities for consumers to go shopping. Offline shopping will bring risks and harm to individuals' health and safety. Therefore, a large number of consumers will be forced to choose online shopping, which is a safer and more convenient way of consumption for them.

Additionally, emerging consumption pattern-O2O leads the growth of sales demand during the epidemic.

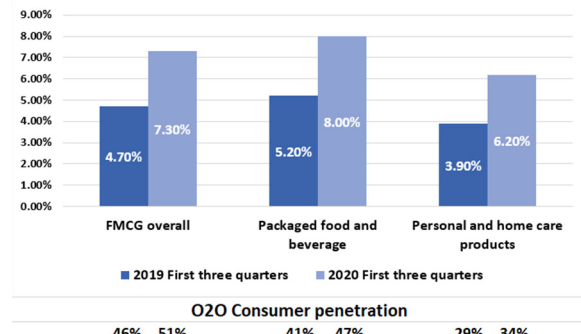


Figure 3 Proportion of o2o channel in urban FMCG market and consumer penetration rate (by category) from 2019 to 2020

Source: Consumer industry 2020 China shopper report, Series 2

Note: Pictures are not commercially available

O2O patten refers to purchasing reservations from online platforms to drive offline consumption, and finally delivering goods to consumers through distribution services. During the outbreak and epidemic period, and even the subsequent recovery stage, the substantial increase in consumers' demand for shopping convenience and safety gave birth to the O2O retail model, and made the new consumption model a hot spot in the era of the epidemic. As shown in Figure 3, in 2019 and 2020, the proportion of O2O consumption mode in the FMCG market has increased, and the penetration rate of o2o consumers in different consumer goods markets is also increasing. The O2O patten is composed of three types: local living platform, new retail platform and traditional retailers. During the epidemic, the reason for the significant increase in demand of this mode is that many retailers not only build online consumption platforms, in terms of distribution, we also cooperate with relevant enterprises to improve distribution efficiency and reduce costs, so as to meet consumers' needs for convenience and safety.

2.2.2. Sales Analysis

The outbreak of COVID-19 undoubtedly has an impact on the FMCG industry. This paper discusses the two aspects of the total retail sales of consumer goods and the changes in the sales volume of the subdivided sectors of the FMCG industry, and studies the impact of COVID-19 on the sales and distribution of the FMCG industry by the logic of the total score. Firstly, for the total size, the

data are as follows:

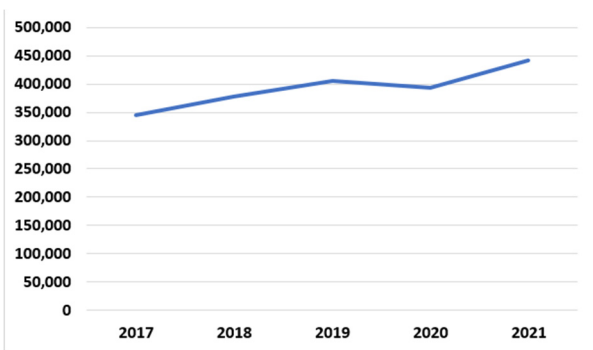


Figure 4 Total retail sales of social consumer goods in 2017-2021 (100 million yuan)

Source: National Bureau of Statistics

Note: Pictures are not commercially available

Figure 4 reflects the change in the total retail sales of consumer goods in the past 5 years. From the chart, we can see that the total retail sales of social consumer goods show an increasing trend in 2017-2019 years, but in 2020, due to the outbreak of COVID-19, the total sales volume

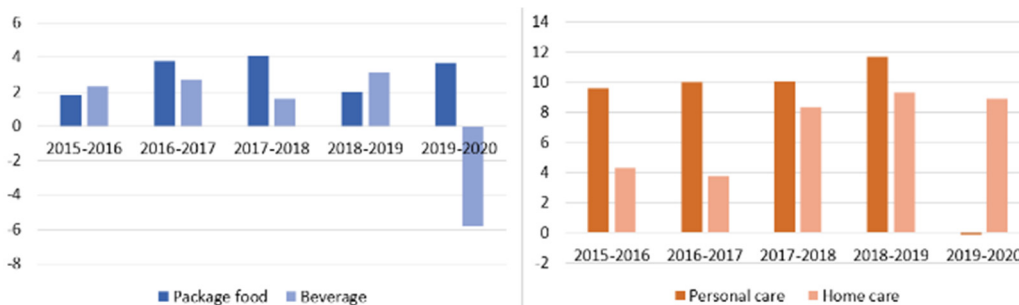


Figure 5 Sales growth rate of urban FMCG market from 2015 to 2020 (%)

Source: Consumer industry 2020 China shopper report, Series 2

Note: Pictures are not commercially available

The impact of COVID-19 on different FMCG markets is different. Based on a variety of prominent consumer products markets, the paper is divided into two groups: a comparative study of packaged food and beverage, the other is a comparative study of personal care products and home care consumer goods. For the first group, as shown in Figure 5, after the outbreak of the epidemic, the sales growth rate of packaged food surged, while the sales scale of beverages showed negative growth, showing a strong contrast between the two. This is because for packaged food, consumers spend more time at home due to the epidemic, and their demand for daily necessities has increased significantly, resulting in a surge in the sales of packaged food, such as instant noodles, frozen food or other staple foods. However, due to the rapid decline of consumers' social demand, boiled water has become the main daily beverage rather than beverage, which has led to a sharp decline in the sales scale of beverages.

in 2020 decreased substantially, which reflected that the outbreak of COVID-19 made the FMCG industry suffer from overall impact, and the scale decreased and the economy declined. Among them, the data decline in 2020 is due to the impact of COVID-19's impact on social demand, the decline in purchasing power of consumers, the decline in purchasing power for non-essential necessities, resulting in a decline in the market share of non-essential commodities in the FMCG industry. Even if there is an increase in demand for daily necessities, the overall sales volume will still decrease from the type and quantity of consumer goods.

However, the volume of retail sales of consumer goods in 2021 has also greatly recovered. This is due to the effective control of COVID-19 in the country. During the recovery period of COVID-19, the opportunities for consumers to go out and social networking increase, and the social demand increases. This leads to the new online consumer channel and the consumption channel of offline stores, which drives the sales volume of the whole market to surge. This is also caused by the psychological factors of retaliatory consumption. Secondly, for the Consumption product types, the graphs are as follows:

The second group is the comparison of personal care products and family care products. Similarly, as can be seen from Figure 5, the sales of consumer goods in personal care decreased by 0.2% in 2019-2020 years, while the sales of consumer goods in home care showed a growth rate of 9%. The reasons behind this phenomenon are analyzed. Due to the increase of domestic consumers' time at home and the significant reduction of social demand during the epidemic, the demand for consumer goods in cosmetics and skin care products is reduced, resulting in the reduction of the sales scale of personal care consumer goods. However, as previously analyzed, the epidemic has promoted online shopping, so the products sold online will use the marketing means of promotion and discount, while consumers who prefer online consumption will choose to store a large number of household necessities, such as toilet paper and napkins, because they spend a long time at home, resulting in a surge in the sales of household care

consumer goods during the epidemic.

3. RESULTS AND DISCUSSION

3.1. Results

In order to explore the impact of COVID-19 on the FMCG industry, this paper focuses on the two dimensions of the change of consumer behavior and sales in the industry. Combined with data and charts, the data analysis and comparative analysis are used for detailed analysis and research. The results show that the outbreak and prevalence of the COVID-19 have a great impact on the industry of fast consumption, and consumer behavior is particularly obvious from the consumer perspective. It is mainly reflected in the changes of its consumption channels and consumption pattern. The effect of COVID-19 gives rise to new consumption channel which changes from offline shopping to online shopping and new consumption pattern—O2O. From the point of view of market sales, the sales volume of the FMCG industry has shrunk dramatically during the outbreak period but exists differences in different types of consumer goods and the recovery period has picked up.

3.2. Discussion

The above research results show that the reasons for the change of consumer behavior can be attributed to the reduction of domestic consumers' social needs and the increase of home time under COVID-19, forcing them to change their consumption channels and consumption patterns. Some scholars have studied this field. Bassirou POUYE pointed out that COVID-19 has increased consumer demand for e-commerce. COVID-19 is an unknown challenge in the field of e-commerce [11]. This study is similar to that of the previous research. However, the difference is that when studying the content of consumer behavior change, this paper points out the increasing demand for online consumption and e-commerce, and points out that the emergence of the new online consumption mode O2O is more profound. In addition, most of the studies in the field of consumer behavior mentioned before are about consumer preferences and the changes of consumer emotions under the epidemic. These studies tend to change at the subjective psychological level, while this paper focuses on the changes of objective consumption phenomena and consumption patterns.

For the second research area of this article, the conclusion of COVID-19's impact on the sales of FMCG industry is mainly from the whole to the local analysis method. First, we have studied the increase of retail sales in the whole social level, and then made a partial comparative study among different consumer products. Most of the literature mentioned above is studying the changes of sales and sales in the whole market. The same

point of this paper is that it studies the market situation during the outbreak period and the recovery period after the epidemic, but the difference is that on the basis of macro research, this paper subdivides the FMCG industry, combines and classifies different market segments, and compares and analyzes the reasons for the change of sales. In general, this paper studies the changes of sales with the logical structure of total score, and obtains detailed conclusions.

4. CONCLUSION

Based on the background of the outbreak and popularity of COVID-19, this paper focuses on the research on the impact of the industry on the FMCG industry. The two major consumers in the FMCG industry, namely consumers and distributors, are studying the changes in consumer behavior and the changes in the sales volume of the FMCG industry. To provide the development direction for the FMCG industry that exists and develops in the background of COVID-19. Based on this, this paper collects data and carries out data analysis and comparative analysis, and collects relevant data of the year before and after the outbreak of COVID-19, and compares them in the form of charts. It is found that the outbreak and popularity of COVID-19 have a great impact on the industry. In terms of consumer behavior, the main performance is that consumer consumption channels gradually change from offline to online, and consumer consumption patterns appear in a new mode, O2O pattern. In terms of market sales of FMCG industry, it is mainly reflected in the decline of overall sales scale and the changes of different sales in different consumer goods markets. The future research of this research topic will be broad. The main reason is that in the context of COVID-19's persistent pandemic, the research on the change of FMCG industry is very important. All the subjects in the industry should pay attention to these changes and related research results, which will provide more suitable development strategies for the industry's main body to match the background of the times and gain more profits. These findings in the article can provide consumers in this industry with the market direction and information of consumption, and improve their consumer surplus value to a greater extent. In addition, relevant scholars in this field also need to pay attention to these research findings, continue to explore the research direction and provide more research angles and information, so as to form a more comprehensive change system of FMCG industry under the background of epidemic. However, this paper only provides preliminary basic industry research, it selects representative consumer goods markets, such as food market and nursing product market, and studies the consumers of the whole industry as a whole. In the future research, it is feasible to continue to study a specific field in the FMCG industry in depth or select different consumer subjects for hierarchical research.

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