Overview of Leading Catering Companies’ Profitability and Strategy Analysis under Pandemic Normalization: Recovery or Recession and Possible Reasons behind It

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Keywords: Catering Industry, Covid-19, Chinese Economy, Economy Recovery, Pandemic Normalization.

Abstract: From the first quarter of 2020, the pandemic has influenced the catering industry heavily. Many firms and organizations had no choice but to exit the market, while others used different commercial strategies to recover from this outbreak. This paper investigates the leading firms in the catering industry deeply during the past years, trying to get a clear picture about the recovery of the catering industry. And we measure the level of recovery of each firm by calculating the difference between the expected performance of the firm based on its past operating history before the pandemic to the actual performance after the Covid-19. We find out that the market sales of the industry are not recovered yet without any clear trend to increase, but the profitability does regenerate, despite the polarized level among different firms. About half of firms have net profits higher than expected in the past half-year, but another half has lower. We then studied several firms with good performance on the profitability and generalized four main methods they used to have a successful business in the new post-covid era. Although some of the factors that the companies could not control boost their successes, these four techniques could be widely applied throughout the industry to help all firms have a rapid and robust recovery under the normalization of the pandemic.

1. Introduction

The new coronavirus that appeared in Wuhan at the end of 2019 caused a massive impact on the global economy in the past two years, and various experts and scholars have conducted research on this subject for different regions (Dev and Sengupta; Susilawati et al.; AÇIKGÖZ and GÜNAY) [1-3]. China, as the origin of the pandemic, certainly experienced enormous economic damage from the Covid-19. According to the report from Xinhua.net (Yang) [4], the growth rate of Chinese GDP in the first quarter of 2020 was -6.8%, the first negative growth since the quarterly statistics in 1992. The pandemic influences various fields of industry, and the most affected sectors would be travel-dependent businesses, such as hotels, educational institutes, and public transportation, while the mandatory sectors to human life, such as workplaces, residential areas, restaurants, and shopping sites, have been recovering rapidly [5]. In this paper, we would like to study the catering industry and see how it recovers from the pandemic in this new normalization period.

1.1 Background Information

From the first quarter of 2020, the pandemic had a massive outbreak throughout China. Many places across the country have taken measures such as banning gatherings in public places, suspending public transport and hotels, and shutting down various kinds of restaurants. The sudden decrease in outgoing consumption has caused a considerable impact on retail property management.
All the industries are strongly affected by this sudden outbreak, and the economic recovery is a big issue to discuss.

As mentioned above, we focus on a particular industry - the catering industry - to analyze how this industry is affected by this outbreaking pandemic and how they can recover from it. China's catering sector was highly restricted, especially from January to March. According to data released by the National Bureau of Statistics of China, we noticed a significant drop in sales of the catering industry during the Spring Festival of 2020, a typical golden week for restaurants. Under the epidemic, due to the sudden drop in customers and numerous restriction policies, 70% of restaurants were closed, and the resumption rate of the market restaurants was only about 10% [6]. Among the restaurant chains, the proportion of stores that have been open for business is 26%, the proportion of closed stores is 73%, and the proportion of stores that have been reopened after the closure is 12%.

Also, according to data released by the National Bureau of Statistics of China, the catering industry's value-added indices experienced a massive plunge in the first quarter of 2020, which is the time when the virus started to expand in China. The index initially remained around 100%, whereas, in the first quarter of 2020, this index dramatically plunged to 64.7% in the first quarter of 2020, which created the lowest indices growth in this country. It took nine months for the index to be back over 100%. And after the fourth quarter of 2020, the catering industry seemed to recover from the sudden outbreak. The index then became relatively stable in recent months. Hence, it is evident that the pandemic had a severe influence on the catering industry, undermining the sales in the catering industry heavily.

1.2 Recovery of the Catering Industry

With the strict actions and appropriate regulation policy, the Covid-19 finally was controlled in the middle of 2020 in China. The economy was then started to recover, and individuals no more needed to do quarantine. The catering industry, one of the most critical industries of people’s lives, certainly also experienced recovery. Different newspapers media got strong confidence in the sector, stating the industry will soon return to its pre-epidemic level (GT staff reporters; Yang) [7, 8]. And during the one and a half years after the Covid-19, accustomed to the normalization of the pandemic, catering businesses have practiced different long-term strategies for the challenge: The most common ways are starting a takeaway business to sell their food online and deliver that food to the household who purchased it and some firms just chose to dismissal some workers to minimize their cost of production. Under this situation, different firms used different strategies and tried to recover their losses in the recent months. Due to the vast difference between the decision of Covid policy of different firms, there must be a pretty disparate recovery level for these firms.

1.3 Purpose of This Study

Given all the situations and information in our minds, we now have a blurred image of the Chinese catering industry. It seems the most challenging time was passed: the government had lessened the restriction and control, the economy started to grow, and people are looking forward to consuming the delicacy in the restaurants after three months quarantine. But how exactly is the recovery of the catering industry? Does it return to its pre-epidemic growth trend? After searching around the Internet, we did not find any formal academic papers discussing it. All the reports from the press of financial organizations are biased, presenting polarized viewpoints on the industry for different reasons. Hence, our intention of writing this paper is to use the data from the leading companies (all listed catering firms in China), applying the empirical method to see how well the recovery of the catering industry right now, under the pandemic normalization. After researching the industry, we have a clear understanding of the restaurants under the new post-covid era. We would like to find out several policies as suggestions to all firms in the industry, helping them overcome the difficulties of the Covid-19 and recovery rapidly to their pre-epidemic level or even go beyond it.
2. Methodology

To study the impact of Covid-19 on the catering industry and its recovery under pandemic normalization, we collected the financial summary report from all listed companies in China (mainland, Hong Kong, Macao, and Taiwan). These reports contain one firm’s income statements, balance sheet, cash flow statements, and share indices for every half year since the date it appeared on the market. For this research, we mainly focus on the total sales revenue and net profits in each period, and we extracted these parts from the datasets for all forty firms. We divided the dataset into three parts, pre-pandemic (before 2020), during pandemic (first half of 2020), and pandemic normalization (second half of 2020 till now). To measure the impact of the Covid-19 on the industry and how well the industry recovers, we calculated the difference between the actual performance of firms and their expected outcomes. With the pre-pandemic data of each firm, we created the ordinary least-squares models between periods (half-year) and profits/revenue for them as equations (1) and (2). In these models, R or P stand for the revenue/profits for firm k at period i.

\[
R_{ik} = \alpha_0 + \alpha_1 \times \text{Period}_i + \epsilon_{ik} \tag{1}
\]

\[
P_{ik} = \beta_0 + \beta_1 \times \text{Period}_i + \epsilon_{ik} \tag{2}
\]

Equation (3) shows how we measure the impact \(D_R\) of Covid on the half-year period i of firm k’s revenue. Namely the percentage difference of real revenue from the expected revenue. Equation (4) is the same equation as the equation (3), we calculate the impact \(D_P\) of the pandemic on the half-year period i of firm k’s profits. With these models, we calculate the impact of Covid-19 on each firm’s revenue and profits at the period 2020 first half-year, 2020 second half-year, and 2021 first half-year, all periods after the breakout of the pandemic. We believe that values of the first half-year of 2020 measure the direct damage of the epidemic on the companies, and other two periods can be used to check whether firms recover back to their pre-pandemic growth trend. Part of the results are showed in table 1 below.

<table>
<thead>
<tr>
<th>Firms</th>
<th>(D_{R_1})</th>
<th>(D_{R_2})</th>
<th>(D_{R_3})</th>
<th>(D_{P_1})</th>
<th>(D_{P_2})</th>
<th>(D_{P_3})</th>
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<tr>
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<td>-165.7</td>
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<td>0.015</td>
<td>-193.5</td>
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<td>Yum China</td>
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<td>Xiabu Xiabu</td>
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<td>12.76</td>
<td>-7.75</td>
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<td>5.08</td>
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<td>Quanjude</td>
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<td>-54.79</td>
<td>-54.62</td>
<td>-368.8</td>
<td>-307.6</td>
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<td>Ajisen</td>
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<td>Best Food</td>
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<td>-156.9</td>
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<td>-95.45</td>
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Table.1. The difference from expectation of forty firms
Table 1 stores the difference between real and expectational revenue and profits for all forty firms in Chinese catering industry. \( D_{R1} \) is the difference for revenue at the first half-year of 2020. \( D_{R2} \) and \( D_{R3} \) measures revenue difference at the second half-year of 2020 and first half-year of 2021. \( D_{P1} \), \( D_{P2} \), and \( D_{P3} \) are the differences for profits.

3. Empirical Results

We first tried to visualize the impact of Covid-19 on each firm. To do this, we made a time-series data of revenue and profits for every firm. And then, we created the scatter plot between revenue/profits over periods (half_year). We also added the prediction line by finding the OLS of the points before the pandemic (equation (1) and (2)). By doing that, we could directly see the gap between the actual value and expected value.

As shown in figure 1, the x-axis represents different periods (half-year), and the y-axis stands for the revenue in 100 million RMB (Chinese Yuan). Each red point on the graph is a specific combination of sales revenue and time. The green vertical line is when Covid-19 surged in China, and all redpoint left to it belong to the pre-pandemic group. The blue line is the OLS of red points in the pre-pandemic set, and it acts as a prediction line for our model. We also notice a huge gap between reality and expectation on the right side of the green line. And these gaps are shown by the black line segments in the plot. This graph tells us that there’s a significant impact of Covid-19 on Café de Coral’s revenue, and it seems this firm does not recover from the pandemic yet as the gap enlarged this year. The reason behind it can be the strict social distancing policy of Hong Kong, where Café de Coral’s largest market is. According to a report from Time out, body temperature checks and hand sanitizer will be given to guests upon arrival, and guests are required to download and use LeaveHomeSafe tracing app or leave their information within the premises (Ancheta) [9]. And by the notification from the Hong Kong government [10], this policy continued from the beginning of 2020 until at least September 2021. This will significantly discourage the consumers to the restaurant, and it’s unlikely that the market sales will recover back to the pre-covid level with this policy.

Figure 3 is the same graph as figure 2, but it visualizes the impact of Covid-19 on one firm’s profits. As we can notice from this graph, there’s a significant drop in profits for Café de Coral in the first half-year of 2020, just after the appearance of Covid and the enactment of the social distance policy. After that, however, the profits quickly recover back unlike the stability of the revenue. This may be due to decreasing employee size, closing loss-making stores, or even the expansion to areas with less restrictive social distance policy like mainland China.
The above two figures provide us with the method to analyze the influence of epidemic on a single firm’s revenue and profits. But what we are more interested in, and the subject of this study, is to find the impact on the whole catering industry. Therefore, we analyzed the difference between reality and expectation of profits/revenues of all forty firms. Then, after dropping several outliers, we made the boxplot of revenue and profits for the entire catering industry.

Figure 3 is the boxplots of the difference between actual and expectational revenue for three periods after the Covid-19. We noticed that the differences are mainly below zero and are pretty stable during the one and a half years just after the pandemic. The average increased slightly during 2020 but decreased even lower than the 2020 first half in 2021. This increase is probably due to the potential retaliatory consumption when the lockdown is ended (Zhang) [11]. This indicates that the total market sales did not recover back to the original trend before the pandemic and became even far from the expected value. Covid-19 has changed the lifestyle of consumers, consumption concepts, and consumption habits, making people favor more of take-out and dining environment (Zhang et al.) [12]. Once the habit is formed, it’s hard to change it unless something with equal impact, like this pandemic, happens. Therefore, the catering industry needs to develop a new business strategy and model to succeed in the post-epidemic era.
Figure 4 is made in the same way as figure 3 but for the profits. We noticed that there are considerable differences between the behaviors of revenues and profits. Instead of maintaining stable for three periods, profits quickly recovered back to the original trend in just a half year. Additionally, the average difference is about 0 in the last two periods but not negative as revenue. Based on figures 3 and 4 above, we can say that although the size of the market shrinks after the Covid and does not recover after the normalization of the pandemic, firms do find a way to maintain high profits and continue the growth. One possible reason for the recovery of profitability of the industry is probably due to the cut both labor and land costs by closing some stores and investing more in the take-out business. Another explanation is that the catering industry has become more and more centralized. Covid will be the end of small business, and only giant corporations may be the only survivors in the post-pandemic economy (Kwak) [13]. And various other papers also indicate the significant impact of the pandemic on the small and middle-sized enterprises (Bartik et al.; Dai et al.) [14, 15]. We will expand and develop this point in more detail in the later section, but we have a clear idea that companies found their way to overcome the difficulties and survive during and after the pandemic.

Figure 5. The scatter plot between difference of reality and expectation of revenue and profits in the first half-year of 2021

Lastly, we would like to investigate the relationship between revenue recovery and profitability recovery by using one graph. We tried to do this for the period 2021 first half-year as it’s the period we considered normalization (less policy restriction but still influenced by the Covid). For figure 5, we put the percentage difference between reality and expectation of revenue as the x-axis and the
difference of profits as the y-axis. We could explicitly see that under the normalization of the pandemic, almost every firm has less revenue than expected, but the profits do not have a particular distribution. About half of firms have a profit higher than the expectation and another half lower. An equal number of firms has a positive and negative difference in profits, and we cannot notice any clear and significant relation between the recovery of revenue to the recovery of profitability. This is a polarized result. Though the firm’s recovery level of profits is equally distributed around zero, the range of difference is enormous. Thus, we can conclude that even though the drop of market sales from the Covid-19 impact is still not recovered right now, some firms do find their own way to deal with the normalization of the great pandemic, but some firms are struggling right now. We would like to summarize how some firms recover their profitability in such a short time and apply their model to the entire industry in the next part of this paper.

4. Business Analysis

The analysis above clearly shows the recovery of revenue and profitability of the leading firms in the Chinese catering industry. And we get the conclusion that most firms’ market sales do not return back to the pre-epidemic trend, and their profitability has a polarized behavior. With some companies still suffering from the pandemic influence, many already overcame the difficulties and earned more than pre-epidemic expectations. In order to find what decisions made during the pandemic made some of the firms successful, we chose four particular firms to study. To analyze the decisions made for pandemics, our team chooses companies that rely heavily on the sales income of restaurants and have almost recovered from pandemics. (Green tea restaurants, Haidilao, Xiabuxiabu, Ajisen China, Jiumaojiu).

Within the periodic reports that these companies published, our team found four distinct decisions directly related to the pandemic. The reaction toward the pandemic is different from the public’s anticipation. Companies that occupy a large portion of the market share and are self-supported prefer to expand, and companies that adopt alliance strategy favor cutting down the number of restaurants. Overall, companies are developing their delivery service via online take-out platforms and improving their labor efficiency.

4.1 General Trend of Catering Business

In order to recover profitability, most catering companies applied the Take-out platform to increase their income level and reduce labor costs to limit their labor expense.

(1) Developing the Take-out Platform

According to the Chinese National Bureau of Statistics, there are 2171 billion dollars spent in the Catering business until June 2021 [16]. In addition, the research conducted by Iimedia search companies also indicates that 665 billion dollars are spent on Take-out platforms, and over 45.6 billion people are using take-out platforms for food service [17]. Concerning the catering business, the Take-out platform has become a pivotal tunnel for gaining sales income. Famous delivery platforms such as Eleme and Meituan improve the delivery service and efficiency, making the customers much more satisfied than traditional methods. For leading corporations, their table turnover rate is approximately 3-4 times a day before 2020. Therefore, leading companies had limited resources for extra dishes. Due to the loss of customers caused by the pandemic, catering companies developed various reforms for take-out services such as pot-pickup service of Haidilao, half-cooked dishes of Jiumaojiu, and the self-heating bag of Ajisen China to attract more customers online.

(2) Reducing Labor Cost

To increase their profitability, companies had to choose to reduce the wage expense to deal with the loss of sales income. Haidilao’s staff costs decreased from 41.7% for the six months ended June 30, 2020, to 35.6% for the corresponding period in 2021, and Jiumaojiu cut the number of waiters to save labor costs. The effect of this strategy is pronounced: Jiumaojiu has 696 million yuan for labor cost in 2019 and 747 million yuan in 2020, the labor cost increases by only 51 million yuan, which is
almost negligible with respect to the increase in the number of restaurants. As a consequence, waiters and waitresses suffer a drop in overall wage during the pandemic [18-21].

4.2 Opposite Strategies toward the Pandemic

For the catering industry, Pandemic is, without a doubt, a disastrous event; yet, it also becomes an opportunity to redistribute market share. By our observation, leading companies show opposite attitudes for the Pandemic: Companies such as Haidilao, Jiuxiaojiu, and Green Tea Restaurant are more risk-loving, but traditional catering businesses such as Ajisen China are more risk-averse.

(1) Rapid Expansion (risk-loving)

Even though that Haidilao’s sales income suffered from the pandemic, it still decided to expand rapidly. According to the interim report in 2021 of Haidilao, the expenditure of raw materials and consumables used increased by 95.5% from 4348.2 million to 8502.4 million dollars, which accounts for 42.3% of expense in 2021. In fact, Haidilao has been expanding since 2019: Haidilao company opened 302 new shopfronts in 2019 and 544 new shopfronts in 2020. The outcome of this strategy is debatable: sales income recovers much faster than other catering businesses, but the profit remains in a limited stage. As the form shows, Haidilao’s profit level is 94.8% less than the expected profit. It clearly shows that the rapid expansion strategy has the drawback of decreased profit. The reason behind the abnormal decision is the ambition of Haidilao corporation. During the pandemic, a large portion of self-supported restaurants closed, which, for numerous large corporations, became a chance to occupy the market share. Yet, Haidilao’s profit level dropped drastically, which forced Haidilao to adopt a new “Woodpecker plan” to close 300 restaurants with low table turnover rates and profit in November 2021 [20, 21]. A similar approach is also applied by Xiabuxiabu, another hotpot company in China [22, 23].

Not only Haidilao, but other leading catering businesses also aim at the opportunities in pandemic; Green Tea restaurants had 163 restaurants in 2019, and the company decided to open 22 more restaurants in 2020. Moreover, the company is launching 60 more restaurants in 2021. The restaurants of Jiuxiaojiu corporation increased from 63 to 233. These companies’ sales income recovers much faster than other companies, but the expense level rises dramatically. In a word, even though the catering market during the pandemic is an opportunity for all catering corporations, it also increases the risk of Cash flows and expansion strategy [24].

(2) Cutting Down the Number of Restaurants (risk-averse)

Cutting down the number of restaurants is the strategy for catering businesses that are less “aggressive.” Unlike companies that apply rapid expansion, traditional companies prefer a more subtle way for the challenge caused by Corona Virus. Ajisen China, a company that originated from Japan, has been in China for more than ten years. In 2020, Ajisen China applied the strategy of cutting down the number of restaurants. Specifically, Ajisen China closed 77 restaurants during the pandemic to reduce the unnecessary costs of labor, utility, and rent expense. These actions, despite making the sales income about 34% less than the expected sales income, but the cutting-down strategy successfully reduced the proportion of the loss. In 2021, Ajisen China is gaining back its strength and preparing for its next stage of recovery plans [25, 26].

By reading the annual report of these businesses, our team observes that companies with different attitudes toward risk and operation mode make the decision differently. However, the epidemic is merely normalized for several months, which makes it impossible to judge whether these strategies are efficient or not.

5. Conclusion

The great pandemic suddenly appeared in our world had a magnificent impact on every aspect of our lives, and the catering industry, which required offline and face-to-face contact, certainly endured one of the severe influences from the pandemic. Our team collected and analyzed the financial data of all forty catering companies on the Chinese stock market, concluding that the decrease of market sales is not recovered now, but some firms did find ways to deal with and make
profits under the normalization of the pandemic, and some are still facing a hard time. With the quantitative results, our team started to dig into the specific strategies and their results; by reading the analytic papers for five typical firms, our team summarized four primary methods used by firms to adjust the altered market under the normalization. In order to regain profitability, almost all catering businesses developed their take-out service and reduced the expense of labor. However, with respect to controlling a number of restaurants, different companies show opposite attitudes toward Pandemic Normalization; traditional companies prefer to reduce their size, but younger companies are more ambitious for occupying new market share. With this in mind, the performance catering companies are approaching a stabilization, despite without apparent trend of the increase of market sales, are ready for the new challenges under and after the normalization of the pandemic.

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