

Influence of Financial Fraud Scandal on Listed Companies

--Take Luckin Coffee as an Example

Ke Li^{1, †}, Yunfan Liu^{2, †}, Jiayao Wang^{3, †}, and Yuqiao Zhu^{4, 5, *, †}

¹Department of Finance Accounting and Management, University of Nottingham Ningbo China, Ningbo, China

²Department of Financial Management, Southwest Petroleum University, Chengdu, China

³Department of Accounting, University of Carleton, Ottawa, Canada

⁴Department of Internal Business, Liaoning Normal University, Dalian, China

⁵Department of Internal Business, Missouri State University, State of Missouri, America

*Corresponding author: zhu23267@live.missouristate.edu

† These authors contribute equally.

Abstract. The revelation of financial fraud scandals will hugely impact the stock prices of listed companies. Taking the financial fraud case of Luckin Coffee in 2020 as an example, it can be shown that after the listed companies lose their investment credit, the impact on the company's development is enormous. After the fraud case of RMB 2.2 billion, Luckin Coffee's stock market continued to delist and fell into the powder sheet market. The company was in a dilemma, its development was stagnant, and it faced changes in management, equity owners, and many other aspects. Broken promises for listed companies, investment market, investors to reduce the investment confidence, management and the equity in the company all changes, the flaws of the company's financial regulation, is a great test to sound development of listed companies, Listed companies need more standardized supervision and more effective information disclosure to maintain their healthy development. This article enriches the academic literature on financial fraud and let investors know more about the impact of financial fraud on companies.

Keywords: Luckin Coffee; Financial fraud; Share price; Business governance.

1. Introduction

Luckin Coffee is one of the head brands of local coffee in China. Since the brand's official inception, the company took only 18 months to set the record for the fastest listing of a Chinese stock on Nasdaq in the U.S. In 2019, the Chinese coffee market was rapidly improving. One evidence is the top brand in the coffee industry, Starbucks' number of Chinese stores has reached 4123, surpassing the number of stores in the entire North American region during the same period. Leveraging the booming industry, Luckin Coffee has exceeded Starbucks as the number one coffee chain brand in China with 4,507 physical stores, attracting the attention of countless Chinese and foreign investors. However, the announcement on April 2, 2020, that Luckin Coffee admitted that the company had falsified transactions by up to RMB 2.2 billion between the second and fourth quarters of 2019. The news announced that Luckin Coffee's financial fraud case became a fact, and investors lost a lot of money. Subsequently, more Chinese companies were caught in financial scandals, with companies such as Akiyo being shorted by relevant institutions and the education company Tomorrow Advancing Life exposing itself to financial fraud. The market's confidence in Chinese stocks has gone all the way down, causing them to fall into a crisis of faith. Coffee is one of the most popular drinks in the world, and Luckin Coffee is located in the Chinese market while this market is hot. It can be said that the Luckin Coffee financial fraud incident is a typical case in the financial scandal of Chinese stocks, and the study of this incident has general and practical significance. This paper will use the event analysis method to analyze the business development of Luckin Coffee before and after the financial fraud, from the perspective of the company's share price and the company's ability to improve its business. Finally, the authors conclude how much the revelation of the financial fraud

scandal has affected Luckin Coffee, how it has affected the company's business, and how it has affected the company's share price.

This thesis aims to explain and study the impact of financial fraud events on listed companies, especially the impact and development of the company's stock market and operations. Taking the financial fraud case of Luckin Coffee up to 2.2 billion yuan, analyze the impact and attack of financial fraud on the most prominent local coffee company in China. By analyzing the financial statements of the enterprise event interval with model calculation and event research, the authors find the commonalities of listed companies in similar events, which reveal the impact of financial fraud on the development of listed companies. The fact proves that listed companies need more standardized regulation and more effective information disclosure to maintain their healthy growth.

This article mainly contains several aspects. The first is section two is literature review. Then sections three and four describe two event studies. Then section five is financial data analysis, and section six is conclusion.

2. Literature Review

2.1 Literature Studies on Stock Price after Financial Fraud

From the perspective of stock price fluctuation, the stock price of the listed company corresponds to the external evaluation of the value of the enterprise's assets, and the release of negative information affects investors' judgment of the investment prospect of the target company. In conformity with Gerety, M. and Lehn, K. (1997), the direct effect of abetting financial cheating does increase stock prices [1], while a statement of charges by the Securities and Exchange Commission (SEC) significantly reduces them. In the study of Marciukaityt (2006) and other scholars, The performance of long-term share price of fraudulent companies is comparable to that of non-fraudulent companies, manifesting that strengthening the intra-company control system after being accused of fraud is helpful to repair the damaged reputation and restore confidence in the company [2]. Deng Xiang (2015) studied 41 companies in the food and pharmaceutical industry that had public opinion events from 2010 to 2013, and believed that Negative news can have a significant and persistent negative impact on a company's stock price. Meanwhile, it was also crucial for listed companies to maintain a good reputation in daily operation [3]. Luan Fugui guests Zhai Ailing (2021) is based on data from 2010-2019 a-share listed companies, using OLS method of examining with the company's stock price crash risk management power, the study found that the listed company management rights and the company's share price collapse risk was positively to the relationship, the improvement of its information transparency can effectively prevent internal corruption phenomenon in management [4]. Yi Zhihong, Zhu Lin and Chen Qinyuan (2019) found in their study on the relevant text data of A-share listed companies from 2009 to 2013 that the timely disclosure of negative information not only caused negative response from the market, but also made the company's stock price more in line with its fundamental information and reduced the risk of future stock price collapse [5].

2.2 Literature Studies on Corporate Operation after Financial Fraud

In conformity with the research of Zhu Keying and Zhang Luoyuan (2022), as a new up-start coffee enterprise, Luckin Coffee for China's new retail model was praised in the domestic market. With the business model of subsidies, Luckin brings customers cost-effective products. But the huge subsidies and marketing expenditure make Luckin under great financial stress. Moreover, after the financial fraud was revealed, Luckin was facing high deficits and needed constant financing to maintain its operation. At the time, Luckin's image was in tattered shape, its goodwill was eroding, and financing was becoming difficult. [6]

In conformity with Xi and Huang. (2021). It is found that Luckin's board of directors and board committee are the least independent among Nasdaq-listed Chinese companies, and this business model and the composition of the company's management are more likely to lead to the problem of

financial data fraud [7]. In Beasley (1996) the empirical study of financial statements In conformity with the results of regression analysis is not fraud external members had a significantly higher proportion of the directors of the company financial fraud company, that is to say, the board of directors is independent, financial data, the lower the risk of fraud, therefore in the process of restructuring luckin coffee, they choose to introduce more external board members, And the implementation of two-year term system for reappointed directors and future appointed directors to reduce the risk of financial fraud[8].

The U.S. Securities and Exchange Commission has fined Luckin heavily for financial fraud, and the China Securities Regulatory Commission will also strengthen its supervision of Chinese stocks. confronting the macro-environment of the Chinese concept stocks are not optimistic, the capital invested in Chinese concept stocks will change into particularly waver and circumspect, so enterprises are hard to get capital assistance, financing capacity is going from bad to worse. Furthermore, Intermediaries such as related accounting firms can also increase the cost of going public to ease the burden of facing a high skate listing. Under the dual pressure of less into more funds, It is much harder for enterprises to be listed as Chinese concept shares.

2.3 Trend Prediction of Financial Fraud of Listed Companies

With the accelerated development of China's economic market, the number of listed companies is gradually increasing, the phenomenon of financial fraud of listed companies is increasingly prominent, and the forms are more and more diverse and hidden. Financial fraud leads to the lack of authenticity of accounting information, easy to cause a crisis of accounting integrity, so that the country and the majority of investors suffer huge damage, seriously disturb the order of the capital market. In conformity with Li Chengcheng (2022) although there are many cases of financial fraud in the market, but it does not play a warning role for listed companies, there are still listed companies willing to take the risk of legal liability to choose financial fraud, which is mainly because the illegal cost is low, in the face of huge fraud benefits can be almost ignored. Financial fraud personnel will be in the huge fraud benefits and low costs of violations of law and regulations to trade off, with fluke psychological financial fraud. Although the relevant laws of China have long been clear on financial fraud criminal punishment and administrative punishment, but because of financial fraud cases are rare, so financial fraud emerge in an endless stream, punishment intensity is small, promote the unhealthy atmosphere of financial fraud [9].

In today's information disclosure and perfected in the market regulation and standard, the supervision of listed companies get promoted, luckin coffee as a case of large financial fraud should be effectively avoid and guard against, for listed companies, this thesis promise enterprise shares of the financial fraud and specific business research, is the behavior of financial fraud in violation of market regulation, as well as warning, And hope that listed companies in effective information disclosure and self-regulation to improve the effective prevention and prevention of financial fraud and other events, and more researchers to participate in the case analysis, help and improve the prevention and control level of enterprises, so as to reduce and avoid financial fraud incidents like Luckin Coffee.

2.4 Summary of Literature Review

The impact of financial fraud events on the listed company is great, effective prevention and control of financial fraud and effective information supervision still has a long way to go, but it is imperative, our listed companies should be from such as Luckin coffee from the issuance of financial fraud alert, let the enterprise to effectively prevent, transparent, public, healthy development, establish a good corporate image, also let investors hold more confidence.

3. Luckin Coffee Exposed the Impact of Financial Fraud on the Company's Share Price

3.1 Brief Introduction to Luckin Coffee and Financial Accounting Fabrication

One of the maximum scales and most effective local coffee brands in China is Luckin Coffee. Its core business includes beverage (coffee juice), food (light food, lunch) and other fields. Before the short selling report was released (at the end of 2019), Luckin Coffee had more than 4500 Direct stores, exceeding its rival Starbucks by more than 200 in the same period, becoming the largest scope of café linkage brand in China[10].

Muddy Waters Research, an institution which noted for short selling, on January 31, 2020 claimed to have got a faceless short selling report of 89 pages, direct to Luckin Coffee's accounting information falsification. However, Luckin Coffee repudiated all accuses on February 3. Many American lawyers' office on April 2, 2020 published statements to remind investors that last date for the class-action complaint filed against Luckin Coffee is approaching. On the same day, Luckin Coffee announced that it admitted false transactions of 2.2 billion yuan. Owing to the fictitious transaction amount of 2.2 billion RMB, the company's share price plummeted 85% (as shown in the following figure). At Friday's closing quotation, the company fell once more by 15.94%. On April 7, they issued its suspension of trading until it exactly met supplementary information requested by the platform of NASDAQ. On April 19, their company sank into more than 4 class actions.

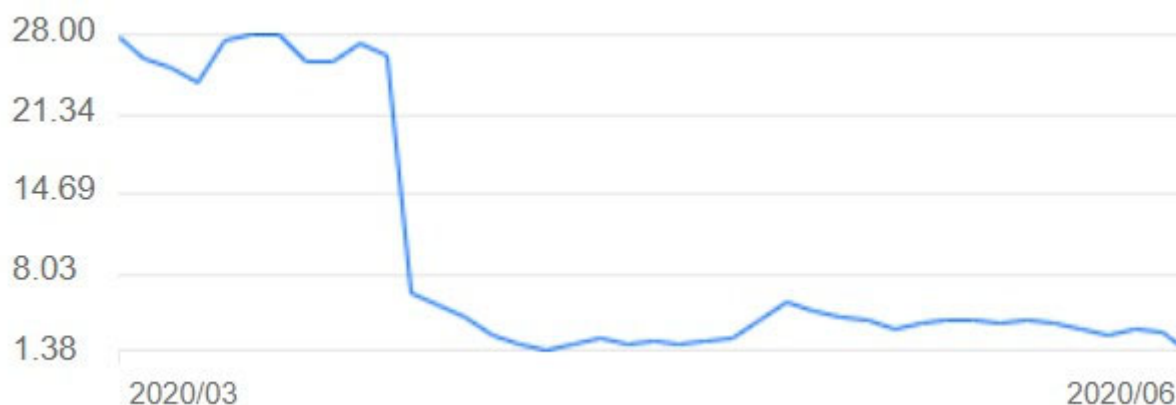


Figure 1. Share price of Luckin Coffee in 2020[11]

3.2 Methodological Used in Research: Event Study

This event study is to achieve the research purpose by comparing the varieties of sample share prices with returns around event day. The approach is chiefly applied to checkout market reaction to disclosed information and price changes around event day. Event study is in view of EMH (efficient markets hypothesis), that means, change of the share price reflects entire disclosed data of the event. Therefore, we can estimate the normal return of this period by assuming that certain events have not occurred, and then calculate the abnormal return by excluding the normal return. The Abnormal Rate of Return (AR) is able to judge the unusual extent of reaction of share price to disclosure of information.

3.3 Time and Interval Selection

Based on the assumption that the financial data of Luckin Coffee was exposed as the event date, January 31, 2020 was selected as the date of the event $t=0$. On that day, the renowned short selling firm Muddy Waters Research asserted that it had obtained an 89-page anonymous short selling report that pointed specifically to the data fraud at Luckin Coffee. The event window period was 7 days of trading preceding and following the event's occurrence day, i.e. $[-3,3]$; The selection of the estimation period was relatively special. Due to the unaudited financial performance of the third quarter of 2019

published two and a half months before the date of the event, that was, November 13, 2019, the stock price rose sharply. However, through fraudulent transactions, the corporation's earnings, cost, and expenditures were artificially raised in the relevant time by the financial performance. Avoiding the event's effects on the window period's anticipated rate of return, stock price data before November 12, 2019 was selected as the estimation period, that was 95 trading days before the window period, i.e. [-149, -54].

3.4 Model Selection

The capital asset pricing model (CAPM) creates a regression analysis of share price rate of return depending on market rate of return and individual stock return rate under the assumption that there is a linear correlation between both the rates of return of individual securities and the market profitability ratio. The formula is: $R_{it} = \alpha_i + \beta_i R_{mt} + \epsilon_{it}$, where R_{it} stands for the corporation "i's" rate of return during phase "t.", and this calculation method is as follows: (closing price of individual shares on day t - closing price of individual shares on day [t-1]) / closing price of individual shares on day [t-1]. R_{mt} is the market weighted index stock's return rate for period "t," which is determined as follows: (the closing index of the market on day t - the closing index of the market on day [t-1]). α_i is intercept, ϵ_{it} means residual, β_i is the regression slope.

3.5 Calculation of Abnormal Rate of Return and Cumulative Abnormal Return

abnormal return on investment According to the formula: $ARI_{i,t} = R_{i,t} - (i + iR_{m,t})$, $ARI_{i,t}$ is the difference between each stock's actual rate of return $R_{i,t}$ and the market rate of return $R_{m,t}$. Cumulative abnormal returns (CARs), which are stated in $CAR[-3,3]$, are the total abnormal returns for each stock within the event window period.

3.6 Data Collection

The data in this paper are all from NASDAQ. The stock price of Luckin Coffee on the NASDAQ trading platform from June 28, 2019 to February 5, 2020 is selected, and the actual rate of return and market rate of Luckin Coffee are calculated according to the daily closing price. At the same time, the normal return rate in the event window based on estimation period, and Excel calculates and analyzes the data.

3.7 Data Analysis

Use Excel to analyze the data in the estimation window [-149, -54]. According to the result analysis α is 0.0005, β is 0.8306, then the yield curve of Luckin Coffee is $y = 0.8306x + 0.0005$

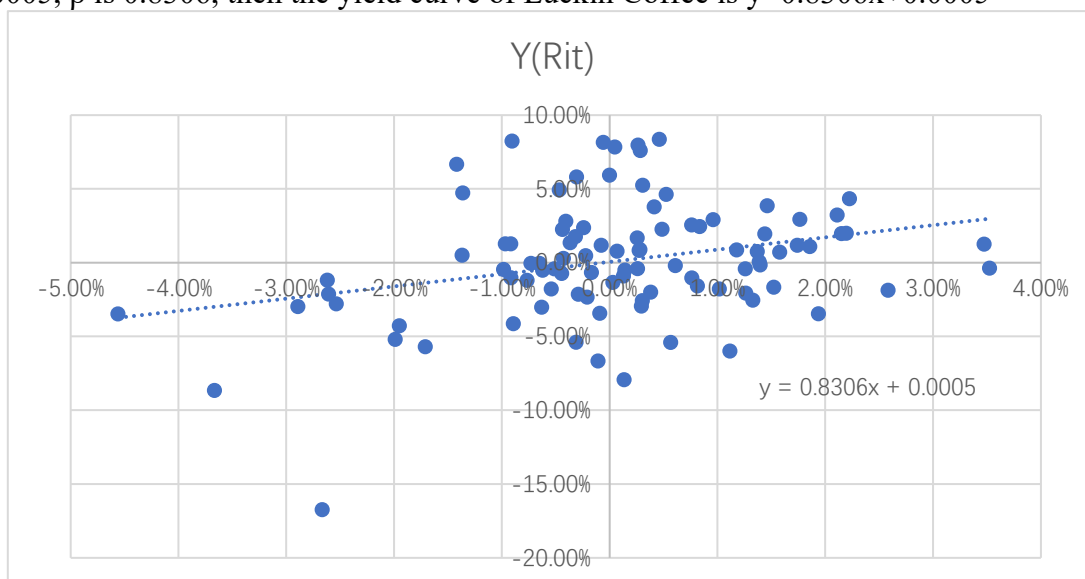


Figure 2. Luckin Coffee's yield curve

Then select a total of 7 days from January 28, 2020 to February 5, 2020, as that of the occurrence timeframe, and get the AR and CAR or this time period through Excel. This relevant data and charts are as follows:

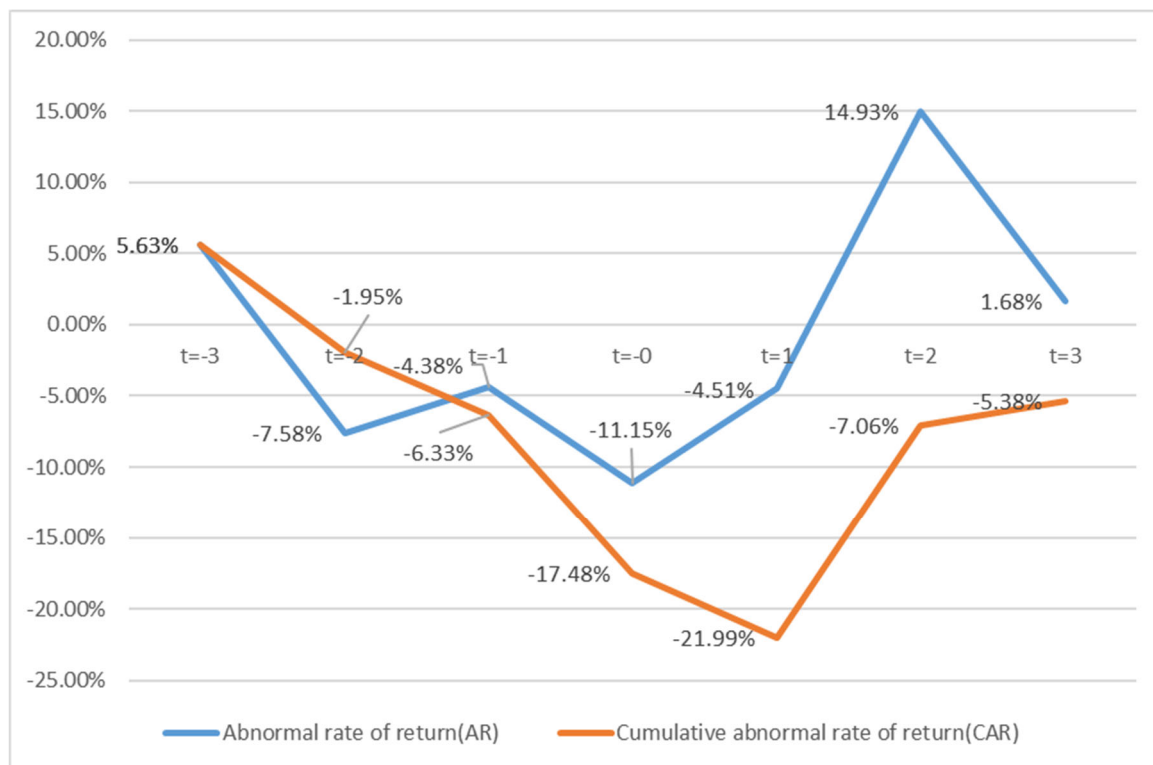


Figure 3. AR and CAR of Luckin Coffee

It can be seen from the figure that before and after the short selling institutions exposed the falsification of financial data, the abnormal return AR was -4.38% and -4.51% respectively, while on the day of the disclosure, the abnormal return was -11.15%. It shows that on the day of the event, the market reacted more strongly to the fraud of financial data than before and after the event. As the abnormal yield AR fell slightly before the announcement had been exposed, there may have been possibility of information leakage. On February 3, 2020, that is, t=1 in the figure, Luckin Coffee denied all allegations of muddy water, and the abnormal yield AR began to rise, which in the immediate aftermath had a favorable effect on the stock's price.

CAR continued to decrease from 5.63% to -6.33% three days before the disclosure of the financial data fraud event, and quickly fell to -17.48% on the day of the disclosure, which also indicates the existence of information disclosure. On the first trading day after the disclosure of the news, the cumulative abnormal return continued to decline, but on the same day, Luckin Coffee issued an announcement denying accounting fraud. It shows CAR denial rose rapidly from -21.99% to -7.06% on the second day, and continued to rise in the subsequent short term, indicating that the market reacted strongly to the exposure of financial data fraud, but after the denial, the market reaction gradually improved. However, the cumulative abnormal return continued to be negative. These two indicators comprehensively reflect the impact of the exposure of false financial data on Luckin Coffee's share price.

According to the linear regression equation calculated in the estimation period and market rate of interest in the time frame, expected normal rate of interest in the time frame is computed, as illustrated in the accompanying table:

Table 1. Luckin Coffee event window yield and market yield

Date	X (R _{mt})	Y(R _{it})
2020/1/28	1.24%	6.71%
2020/1/29	3.78%	-4.39%
2020/1/30	0.54%	-3.88%
2020/1/31	0.43%	-10.74%
2020/2/3	1.14%	-3.51%
2020/2/4	0.75%	15.60%
2020/2/5	-1.85%	0.19%

The following figure shows the data of AR and CAR in form of a table according to time difference to more intuitively see the size change of the data:

Table 2. AR and CAR of Luckin Coffee

Time Difference	AR	CAR
t=-3	5.63%	5.63%
t=-2	-7.58%	-1.95%
t=-1	-4.38%	-6.33%
t=0	-11.15%	-17.48%
t=1	-4.51%	-21.99%
t=2	14.93%	-7.06%
T=3	1.68%	-5.38%

3.8 Event Study Summary

(1) Luckin Coffee's share price dropped dramatically on the day the source disclosed there was financial misconduct, but in the next few trading days, the share price rebounded, possibly because there was no empirical and official information. After the scandal, the stock market and investors' doubts about the company's confidence eased, and the share price returned to the normal fluctuation range within a few trading days, but just the rumors of fraud have had a great impact on Luckin Coffee's stock price.

(2) When $t=0$ and $t=-1$, it can be seen that the disclosure of the financial fraud scandal has a great impact on Luckin Coffee's share price, corporate credit and investor confidence. When $t=-1$, AR and CAR reached -4.51% and -21.99%, indicating the intuitive reaction of investors after receiving this information - a sharp reduction in investment confidence in the company, which has a great impact on Luckin Coffee's stock market and company development.

4. Luckin Coffee Admitted the Impact of Financial Fraud on the Company's Share Price

4.1 Research Methods and Time Interval Selection

The event analysis method is event study method. Based on the financial data admitted by Luckin Coffee, it is assumed that the event date is $t=0$, and April 2, 2020 is selected as the date of the event. On that day, Luckin Coffee issued an announcement and admitted 2.2 billion yuan of false transactions. 5 trading days both prior to and following the event's occurrence time make up the event window, i.e. [- 2,2]; The estimation period is 81 trading days before the window period, i.e. [- 93, - 12].

4.2 Model Selection and Calculation Method

The Capital Asset Pricing Model (CAPM) is chosen as the model to create a regression linear link between both the return rate of individual securities and the market profitability ratio, similar to the previous research event. The calculating technique continues to be the difference between the stock's real rate of return and the market rate of return, which is used to determine the abnormal rate of return $AR_{i,t}$. The AR for each stock within the event window period, is added up to form CARs.

4.3 Data Collection

The data in this paper are all from NASDAQ. We selected the stock price of Luckin Coffee on the NASDAQ trading platform from November 18, 2019 to April 6, 2020, and calculated the actual rate of interest and market rate of interest of Luckin Coffee according to the daily closing price. At the same time, we calculated the normal rate of return in the window period according to the estimation period, and used Excel to calculate and analyze the data.

4.4 Data Analysis

Use Excel to analyze the data in the estimation window [-93, -12]. According to the result analysis α is 0.0038, β is 0.5502, the yield curve of Luckin Coffee is $y = 0.5502x + 0.0038$. Then, the five-day period from March 31, 2020 to April 6, 2020 is selected as the time window period. The abnormal yield and cumulative abnormal yield during the event period can be calculated by Excel. The relevant data and charts are as follows:

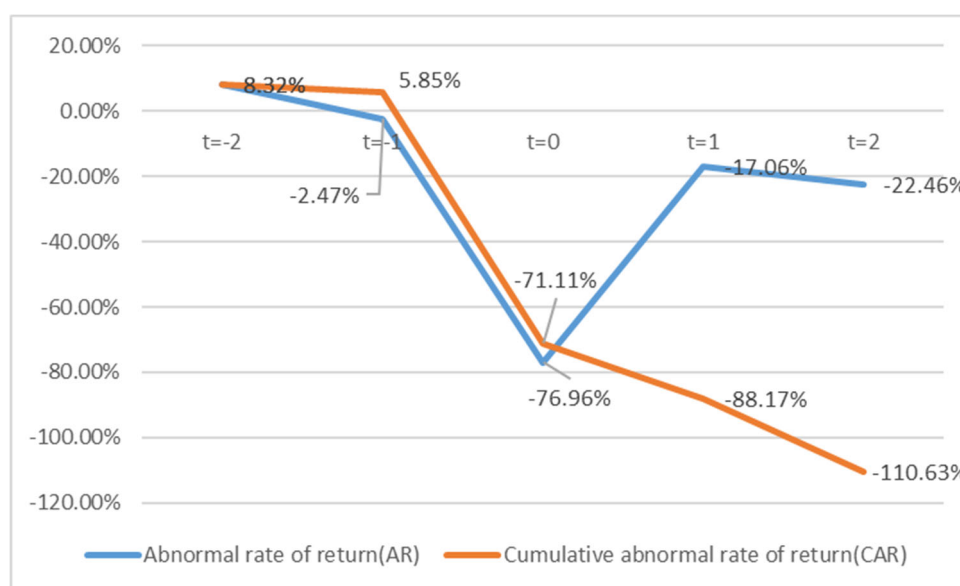


Figure 4. AR and CAR of Luckin Coffee

It is able to see from above figure that before and after the announcement of Luckin Coffee admitting the falsification of financial data, the abnormal rate of return AR was - 2.47% and - 17.06% respectively, while on the day of the announcement, its abnormal rate of return was - 76.96%. It shows that the market's response to the recognition of financial data fraud on the day of the event is stronger than before and after the event. If a large abnormal rate of return is generated before the announcement, it indicates that there is a possibility of information disclosure.

The CAR changed from 8.32% to 5.85% two days before the announcement of financial data fraud was issued, and rapidly dropped to - 71.11% on the day of the announcement, demonstrating that no information has leaked. After announcement date, the cumulative abnormal rate of return showed a unilateral downward trend, showing that the market is not hopeful about the announcement. The statistic, however, shows that Luckin Coffee's CAR of return remained negative following the

announcement. These two metrics accurately depict how the announcement affected the stock price of the company.

4.5 Event Study Summary

(1) It can be seen from the data and charts that during the event period when the financial data is admitted to be false, the company will usually be greatly affected and the stock price will fluctuate greatly. On the day before the company's announcement, the company's share price and abnormal rate of return began to drop slightly due to the leakage of information or the falsification of third-party data. On the day of the event, the company issued an announcement acknowledging accounting fraud. According to official statistics, the share price fell by 80%, according to official records, and trading was halted numerous times throughout the day. The corporation's share price and abnormal rate of return dropped significantly, indicating that the announcement had a direct impact on the trading share price, and caused heavy damage to the company's operating conditions.

(2) When $t = -1$ day, the abnormal rate of return of Luckin Coffee decreased slightly to -2.47% ; when $t = 0$ day, the abnormal rate of return reached the minimum value of -76.96% ; when $t = 1$ and $T = 2$, the share price gradually eased, and AR increased, but it was still lower than the AR before the financial data was falsified, and it was always in a negative state.

(3) The cumulative abnormal rate of return of Luckin Coffee always keeps a positive number from $t = -2$ to $t = -1$ days, but the CAR rapidly drops to -71.11% when $t = 0$ days. The cumulative abnormal rate of return continues to increase from $t = 1$ to $t = 2$ days, and it always keeps a negative number. This effectively shows that the announcement of financial data fraud has led to the obvious depreciation effect of the company's market value in the short term. It should be noted that the event study method can only effectively reveal the short-term performance of the company in this case, and cannot confirm the change of long-term performance.

5. Luckin Coffee 2019 and 2022 Financial Data Analysis

5.1 Financial Statement Analysis of Luckin Coffee

5.1.1 Analysis of Asset and Liability Structure

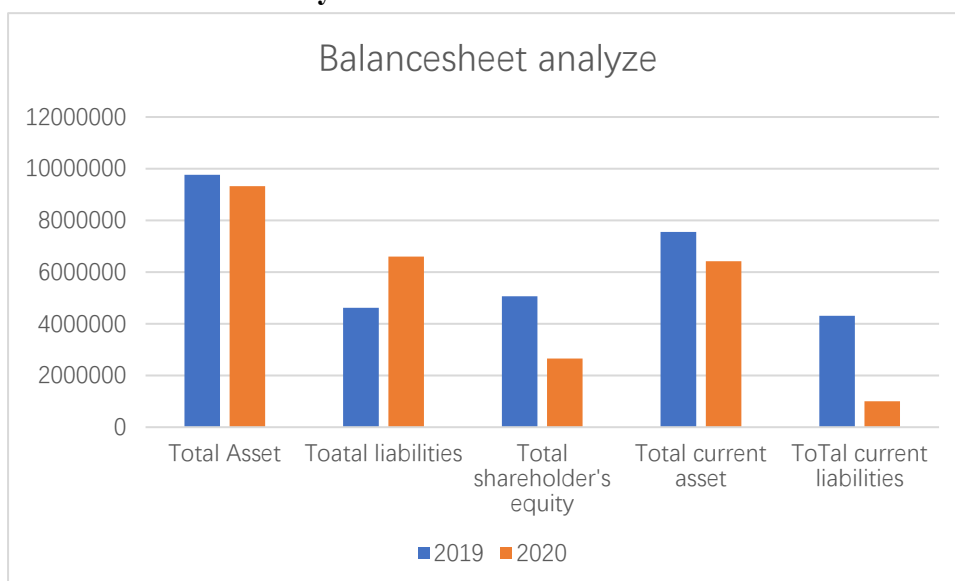


Figure 5. From Luckin Coffee financial statements (Thousands of RMB)

The above table shows that the financial fraud of Luckin Coffee has seriously affected the asset and liability structure of the company. The total assets of Luckin Coffee showed a decreasing trend, and the total liabilities increased due to some consequences of the financial fraud compensation.

Owner's equity has also shrunk significantly due to the plummeting stock price and operational problems.

5.1.2 Income statement Analysis

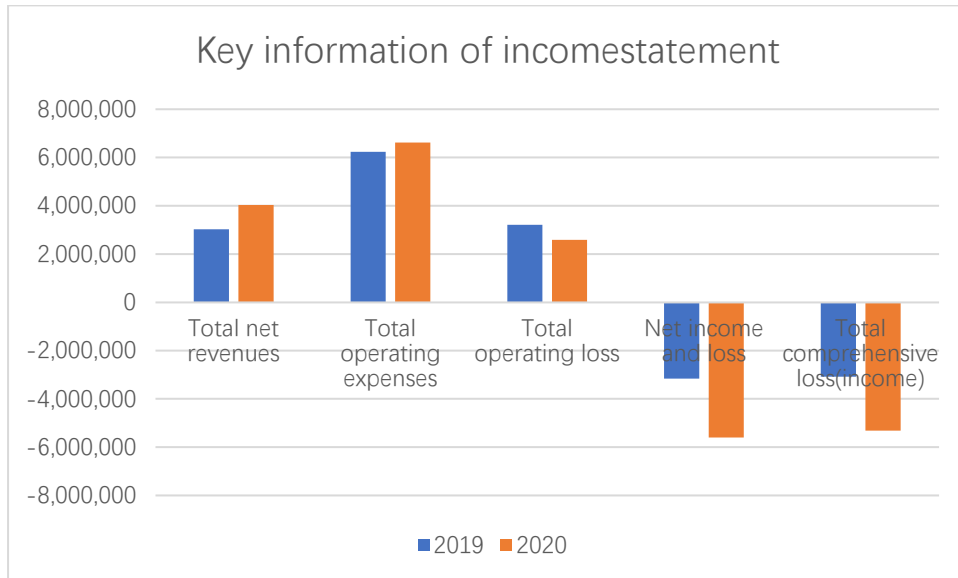


Figure 6. From Luckin Coffee financial statements (Thousands of RMB)

Total revenue, as well as total net income and total operating expenses and operating losses did not decline with the financial fraud, indicating that the company remained in business. But net loss increased a lot due to some additional expenses caused by the financial fraud. And this also shows that the financial fraud caused the company to lose a lot of money.

5.1.3 Cash Flow Statement Analysis

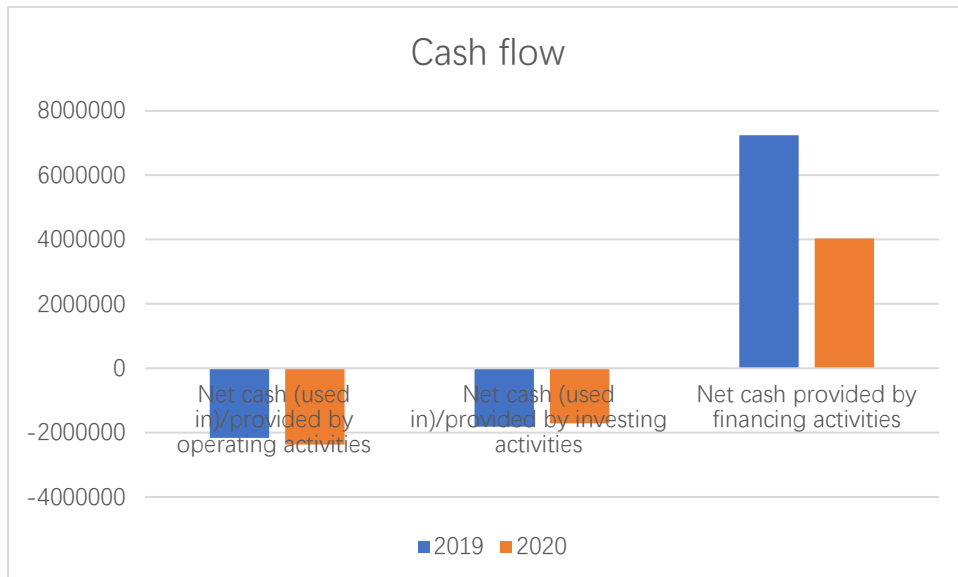


Figure7. From Luckin Coffee financial statements (Thousands of RMB)

As we can see from the cash flow statement, the company's operating expenses and investment expenses remain basically the same, which means that Luckin Coffee is still in business and selling goods. However, the funds obtained from investments have been significantly reduced due to the impact of financial fraud.

5.2 Solvency Analysis

5.2.1 Short-term Solvency Analysis

The current ratio is used to analyze the short-term solvency of Luckin Coffee in 2019 and 2022. The Current ratio in 2019 is 1.75 and the current ratio in 2020 is 6.41. By analyzing the current ratio we can see that the short-term solvency is stronger in 2020 than in 2019, but 2019 is closer to the normal current ratio value of 2, while 2020 is far beyond this value. This indicates that there is an anomaly in 2020 due to the financial fraud of Luckin Coffee. The anomaly is mainly related to the fact that there are many fees related to the financial fraud, but these fees are included in the non-current liabilities. Therefore, the table shows that the ratio in 2020 is greater than in 2019, which does not indicate that the solvency in 2020 is better than in 2019.

5.2.2 Long-term Solvency

The gearing ratio and shareholders' equity ratio were used to analyze the solvency of Luckin Coffee in 2019 and 2020. The stockholders' equity ratio is the ratio of stockholders' equity to total assets, which reflects how much of the company's assets are invested by owners. Shareholder equity ratio should be moderate. A small equity ratio indicates that the company has too much debt, which tends to weaken the company's ability to withstand external shocks; when the equity ratio is too large, the company is not actively using financial leverage to expand its operations. The gearing ratio reflects the ratio of borrowed financing to total assets, which reflects the proportion of total funds provided by creditors. The higher the gearing ratio, the worse the long-term debt repayment ability.

The equity ratio in 2019 is 0.52 and the equity ratio in 2020 is 0.28. We find that in 2019, the shareholders' equity ratio is moderate, indicating that the company has a normal debt structure, as well as a good repayment capacity. But in 2020, there is a significant decrease in the shareholders' equity ratio, which indicates that Luckin Coffee is overly indebted and weak in its ability to withstand external shocks. The Asset-liability Ratio in 2019 is 0.47 and the Asset-liability Ratio in 2020 is 0.71. We find that compared to 2019, 2020, the gearing ratio has increased significantly, which indicates that the proportion of funds raised through borrowing is increasing. Through the above two indicators, we find that the company's solvency has become weaker due to the financial fraud of Luckin Coffee.

5.3 Operational Efficiency Analysis

The impact of asset restructuring on the operating efficiency of Luckin Coffee is illustrated by comparing the total asset turnover ratio of Luckin Coffee in 2020 and 2021. Total asset turnover ratio is the ratio of net sales revenue to average total assets of a company over a certain period of time, and is described by the ratio of the scale of asset investment to the level of sales. A higher total asset turnover ratio indicates a stronger sales capacity and more efficient asset investment. The Asset turnover in 2019 is 0.45 and the asset turnover of 2020 is 0.39. By calculating the total asset turnover ratio of Luckin Coffee, we can see that the total asset turnover ratio in 2020 is greater than the total asset turnover ratio in 2019. Therefore, the operating efficiency in 2020 is lower than that in 2019. From here we can see that the financial fraud has a negative impact on the company's sales capacity and the efficiency of its asset investment.

5.4 Profitability Analysis

The operating margin is used to analyze the profitability of Luckin Coffee in 2019 and 2020. The operating margin measures the efficiency of a company's operations and reflects the ability of the company's managers to make a profit from their operations. The operating profit ratio in 2019 is 1 and the operating profit ratio is 1.08. By calculating the operating margin of Luckin Coffee in 2019 and 2020, it is found that Luckin's financial fraud did not have a significant impact on Luckin Coffee's ability to sell its products and profitability.

5.5 Financial Data Analysis Summary

In general, whether from the financial data, the total assets of Luckin Coffee have decreased, the long-term liabilities have increased significantly, the asset and liability structure has become unreasonable due to financial fraud, and the income and owner's equity related to financing or investment has also decreased significantly. Still, from the perspective of all aspects of corporate

capacity, financial fraud has reduced the company's solvency and operating capacity. Therefore, through the analysis of the financial data of Luckin Coffee, we can know that financial fraud has caused Luckin Coffee to suffer huge losses.

6. Conclusions

Luckin Coffee is one of the head brands of local coffee in China. Since the brand's official inception, the company took only 18 months to set the record for the fastest listing of a Chinese stock on Nasdaq in the U.S. In 2019, the Chinese coffee market was rapidly improving. One evidence is the top brand in the coffee industry, Starbucks' number of Chinese stores has reached 4123, surpassing the number of stores in the entire North American region during the same period. Leveraging the booming industry, Luckin Coffee has exceeded Starbucks as the number one coffee chain brand in China with 4,507 physical stores, attracting the attention of countless Chinese and foreign investors. However, the announcement on April 2, 2020, that Luckin Coffee admitted that the company had falsified transactions by up to RMB 2.2 billion between the second and fourth quarters of 2019. The news announced that Luckin Coffee's financial fraud case became a fact, and investors lost a lot of money. Subsequently, more Chinese companies were caught in financial scandals, with companies such as Akiyo being shorted by relevant institutions and the education company Tomorrow Advancing Life exposing itself to financial fraud. The market's confidence in Chinese stocks has gone all the way down, causing them to fall into a crisis of faith. Coffee is one of the most popular drinks in the world, and Luckin Coffee is located in the Chinese market while this market is hot. It can be said that the Luckin Coffee financial fraud incident is a typical case in the financial scandal of Chinese stocks, and the study of this incident has general and practical significance. This paper will use the event analysis method to analyze the business development of Luckin Coffee before and after the financial fraud, from the perspective of the company's share price and the company's ability to improve its business. Finally, the authors conclude how much the revelation of the financial fraud scandal has affected Luckin Coffee, how it has affected the company's business, and how it has affected the company's share price.

This thesis aims to explain and study the impact of financial fraud events on listed companies, especially the impact and development of the company's stock market and operations. Taking the financial fraud case of Luckin Coffee up to 2.2 billion yuan, analyze the impact and attack of financial fraud on the most prominent local coffee company in China. By analyzing the financial statements of the enterprise event interval with model calculation and event research, the authors find the commonalities of listed companies in similar events, which reveal the impact of financial fraud on the development of listed companies. The fact proves that listed companies need more standardized regulation and more effective information disclosure to maintain their healthy growth.

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