

Financial Fraud of Listed Companies: The Case of Luckin Coffee Incident

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Abstract: *The rapid development of China's economy has increased the number of listed companies. Some listed companies use accounting information to carry out targeted financial fraud. This behavior distorts the financial information of listed companies, seriously misleads investors' investment judgments, endangers the vital interests of investors, and undermines the fairness of the trading market. This article takes Luckin Coffee as the research object, and conducts a case study on its financial fraud.*

Keywords: *financial fraud; Luckin Coffee; fraud risk*

1. Introduction

Financial fraud generally refers to financial statement fraud. It is a deliberate misstatement or omission of figures presented in financial reports or notes to financial statements in order to deceive users of the reports. The emergence of corporate fraud is composed of three elements: pressure, opportunity, and excuses. Just like the three elements of heat, fuel, and oxygen must be present to burn, without any of the above elements, it is impossible to truly form corporate fraud. Stress may be operating or financial distress and an urgent need for capital; opportunity is when corporate fraud can be committed and can be concealed from detection or punishment; excuse is that the corporate fraudster must find a reason, make corporate fraud consistent with their own moral concepts and code of conduct, regardless of whether the explanation itself is really reasonable.

2. Luckin coffee Incident

2.1 Introduction of Luckin Coffee Company

Luckin Coffee is currently the largest chain coffee brand in my country. It has created a new coffee retail model by making full use of modern information network technologies such as mobile Internet and big data technology, and successfully entered the coffee market in my country. Luckin Coffee was incorporated in the Cayman Islands, UK in June 2017 and officially opened on May 8, 2018. Luckin Coffee was officially listed on Nasdaq in the United States on May 17, 2019, under the stock code LK. Its IPO issued a total of 33 million shares at an issue cost of US\$17. So far, Luckin Coffee has only spent 18 months from its establishment to its IPO, setting a record for the fastest IPO company in the world, with a total market value of US\$4.2 billion. By the end of 2019, the number of directly-operated stores of Luckin Coffee has reached 4,507, and the number of transaction users has also exceeded the 40 million mark.

2.2 Review of Luckin Coffee's financial fraud incident

The revelation of Muddy Waters Research, a short-selling agency, was the cause of Luckin Coffee's financial fraud incident. Luckin Coffee's financial report indicators, performance indicators and stock price have achieved a rapid growth of more than 160% within two months. This abnormal increase has attracted the attention of Muddy Waters Research, which has caused Luckin Coffee to become a short seller of Muddy Waters Research's Target. In addition, its fraud was identified by the auditors of Ernst & Young, an accounting firm. When Ernst & Young conducted an on-site audit of Luckin's 2019 financial statements at the beginning of the year, it was found that Luckin had suddenly increased many

businesses other than retail. This anomaly attracted Ernst & Young's attention. Later, through an investigation, Ernst & Young discovered that Luckin had inflated sales by purchasing huge coffee vouchers through major corporate customers, and then Ernst & Young reported to Luckin's audit committee. If Luckin does not take self-certification actions, the firm will have the right to report directly to the SEC. It was Ernst & Young's investigation that forced Luckin's management to decide to expose itself, thus officially revealing the specific inside story of Luckin's financial fraud.

3. Motivational Analysis of Luckin Coffee's Financial Fraud Incident

3.1 Pressure to cheat

Performance pressure is the fundamental motivation for Luckin's financial fraud. One of Luckin's main methods of fraud is falsely increasing income. The false transactions previously disclosed by Ruixing began in April 2019, and led to an inflated increase of 2.12 billion yuan for the whole year of 2019 (including 250 million yuan in the second quarter of 2019, 700 million yuan in the third quarter, and 1.17 billion yuan in the fourth quarter). The annual inflated costs and expenses amounted to 1.34 billion yuan (including 150 million yuan in the second quarter of 2019, 520 million yuan in the third quarter, and 670 million yuan in the fourth quarter). The inflated part is subtracted from the report data to obtain the actual income and cost, and the following adjusted financial data table1 is obtained:

Table 1: Luckin Coffee's main financial data table (Unit: 100 million yuan)

	Original data			
	2019Q1	2019Q2	2019Q3	2019Q4
Total revenue	4.79	9.09	15.42	12.66
Cost of sales	2.76	4.66	7.21	8.31
Gross profit	2.03	4.43	8.20	4.35
	Deduction of inflated effect			
	2019Q1	2019Q2	2019Q3	2019Q4
Total revenue	4.79	6.59	8.42	0.96
Cost of sales	2.76	3.16	2.01	1.61
Gross profit	2.03	3.43	6.41	-0.65

It can be seen from the table1 that Luckin's real gross profit shrank sharply in the second and third quarters of 2019 after deducting the impact of virtual increase, and its loss in the fourth quarter was 65 million yuan. It can be seen that Luckin's business operation is not as good as the external publicity, and there is greater performance pressure. Therefore, Luckin Coffee beautifies its financial statements by means of financial fraud such as inflating the company's operating income and profits, and forging that the company has better operating capabilities than competitors in the same industry, thereby attracting more investors to invest in the company [1].

3.2 Opportunities for Fraud

3.2.1 Internal control deficiencies

This is not the first time Luckin Coffee has been exposed to flawed internal controls. At the end of 2018, Luckin's independent accounting firm pointed out two major deficiencies in its internal control: one is that the company lacks sufficient financial personnel; the other is that the company lacks corresponding financial reporting procedures and systems. Lax internal control later became one of the drivers of fraud incidents.

3.2.2 Defects in the business model

From the perspective of business process, Luckin places an order through an app or a small program, and pays directly through a third-party payment platform. Although Luckin said that the whole process of receiving and paying is completed by a third-party payment service provider and can guarantee the transaction data, in fact, the third-party payment method Tenpay does not provide a statement, and certified public accountants cannot verify customers by checking WeChat statements. The authenticity of the payment leaves a lot of room for Luckin to falsify key operating data. In addition, when customers place an order online, a three-digit meal pick-up code will be automatically generated, and this meal pick-up code should be continuous in each store. But in fact, the order system of Luckin Coffee can distort the sales results through discontinuous numbers, and inflate the number of orders by

skipping numbers or interspersing false orders in real orders, so that the number of online orders of Luckin Coffee is difficult to trace, even if counterfeit cases are difficult to identify.

3.2.3 Disadvantages of audit mode

Luckin adopts a new retail business model. Customers place an order through the App or a small program, and pick up the meal according to the corresponding order number generated. Due to the large number of stores, the data under the ordering mode of apps and small programs has not yet been included in the scope of review by audit agencies. In this way, it is difficult for audit agencies to verify the actual number of orders when the data is difficult to obtain and some of them have no access path. This incident also reflects that the auditors of the intermediary agency lack manpower and material resources, which may lead to the failure of the audit due to the loopholes in the audit procedure and the deliberate concealment of the applicant. The inherent drawbacks of the audit model and the limitations of auditing under the new business model provide opportunities for corporate financial fraud.

3.3 Fraudulent excuses

Excuse factors After Luckin Coffee revealed its financial fraud, its chairman Lu Zhengyao did not immediately respond to the matter directly, but issued a document to encourage front-line employees. And promise the truthfulness and fairness of the company's information disclosure. All indications are that Luckin Coffee's excuse for fraud is self-rationalization of its fraudulent behavior[2].

4. Analysis of Luckin Coffee's financial fraud methods

4.1 Inflated sales revenue

From April 2019 to December 2019, Luckin Coffee mainly inflated its revenue by 2.12 billion yuan by exaggerating the daily sales volume of a single store and the net selling price of a single product.

4.1.1 Falsely increasing the sales volume of commodities

First, a special trading method. Luckin Coffee does not set up a cash register, and all transactions are completed by the online APP, which provides an opportunity for it to inflate its income by "jumping the number when picking up the meal code". Using this method, the number of orders in the same store in one day is exaggerated by as few as 34 orders, and as many as 232 orders. According to the financial report for the third quarter of 2019, the daily sales volume of a single store of Luckin Coffee was 444 pieces, but after the muddy water field investigation showed that the daily sales volume of a single store of Luckin Coffee was only 263 pieces, which was exaggerated by 69%. Sales per store per day were inflated by at least 88% in the fourth quarter. The purpose of inflating the sales volume of goods is thus achieved.

4.1.2 Falsely increasing the unit price of commodity sales

The main product of Luckin Coffee is coffee drinks. According to the financial report for the third quarter of 2019, the average selling price of each cup of Luckin coffee is 11.2 yuan, and the price of drinks in sales has increased as the subsidy has weakened. Under the circumstances, the average selling price of each cup of drink should be increased, but calculated from 25,843 pieces of real customer data collected by muddy water, Luckin's actual average selling price of each cup of drink is only 9.97 yuan, so the unit price of product sales is actually exaggerated. From 9.97 yuan to 11.2 yuan, the false increase was as high as 12%. According to muddy water calculations, under the real situation of an average store sales of 263 pieces and an average price of 9.97 yuan, the store loss rate is about 28%. From this, it seems that Luckin store has not realized its so-called profit. If Luckin wants to make a profit, it needs to achieve an average price of 13 yuan or a daily sales volume of more than 800 pieces. Obviously, Luckin still has a big gap from this.

4.2 Inflated costs

While Luckin Coffee inflated sales revenue, it simultaneously inflated related costs to achieve profit balance. According to the investigation report of Muddy Waters, the prospectus published by Luckin and the financial statements released in the second and third quarters of 2019, it was found that Luckin Coffee exaggerated the advertising expenses in the third quarter of 2019 by more than 150%, especially

the Focus Media advertising expenses. In the third quarter of 2019, Luckin Coffee's financial statements disclosed that the company's advertising expenses were 382 million yuan, but according to the analysis of the click-through rate data of CTR market research company, Luckin Coffee's actual advertising expenses on Focus Media were 46 million yuan. The inflated amount of advertising expenses alone is more than 300 million yuan. Through the calculation of the real sales amount of the store, Luckin's fictitious store profit amounted to 397 million yuan in the third quarter, while the difference between the advertising expenses disclosed by Luckin and the actual advertising expenses investigated by Muddy Waters was about 336 million yuan. It is relatively close, and it can be inferred that Luckin is likely to transfer out the inflated income through advertising fees.

4.3 Related transactions

Muddy Waters' report also revealed signs of complex related party transactions. Luckin once raised US\$865 million through additional issuance to purchase coffee vending machines and develop an "unmanned retail strategy". Luckin's related party Wang Baiyin just established a company mainly engaged in the sales of coffee machines in August 2019, and the company's address is close to Luckin Coffee's Xiamen headquarters, becoming a partner of Luckin's "unmanned retail strategy". Prior to this, Luckin transferred 137 million yuan to Wang Baiyin through the acquisition of Baowo Automobile. Based on this, it can be guessed that the 137 million yuan that Luckin transferred to Wang Baiyin during this process is likely to be transferred back to Luckin again, that is, Luckin may have withdrawn cash by purchasing a coffee machine from a related party company.

4.4 False transactions

From April to December 2019, Luckin Coffee carried out a series of false transactions with a number of third-party companies. According to the purpose of implementation, it can be divided into two categories: one is falsely increasing sales revenue; the other is falsely increasing costs, as shown in Table2: Beijing Chexing Tianxia Consulting Service Co., Ltd. and many other companies have falsely increased sales by swiping orders; The role of third-party companies represented by Zhengzhe International Trade (Xiamen) Co., Ltd. in the false transaction chain is to inflate costs and expenses, including raw material procurement, takeaway delivery business, labor outsourcing business, etc [3].

Table 2: Luckin Coffee False Transaction Situation

Fake transaction subject		Purpose of implementation	False trading methods	Transaction Implementation Results
Luckin Coffee	Third party companies			
Luckin Coffee (China), Luckin Coffee (Beijing) Co., Ltd.	Beijing Shenzhou Youtong Technology Development Co., Ltd., Beijing Chexing Tianxia Consulting Service Co., Ltd. and many other enterprises	Inflated sales revenue	Using "personal and corporate bill fraud", "API corporate customer transaction fraud" and forging bank records, establishing a false database, and forging card consumption records	A total of 0.123 billion pieces false coffee coupon orders were made, with an inflated income of 2.12 billion yuan
	Zhengzhe International Trade (Xiamen) Co., Ltd. and other third-party companies	Inflated costs	Fictitious raw material procurement, takeaway delivery business, labor outsourcing business and fictitious advertising business	Inflated costs of 1.34 billion yuan

5. Analysis of the causes of Luckin Coffee's financial fraud

5.1 The business model makes it difficult to make profits

Luckin Coffee spent a lot of money on promotion in the early stage to realize the scale of the coffee market and the popularity of the company's brand in a short period of time. Specifically, it launched large-value coffee discount coupons, including free first cup, buy two get one free, 3.8 discount

coupons and other price subsidy preferential policies, etc., have allowed Luckin Coffee to quickly acquire a large number of consumers. This business model has two obvious defects: one is that the cost is too high and the ability to maintain expansion is insufficient; the other is that the profit is too low and the price war is difficult to last. Therefore, even though Luckin has accumulated a large amount of traffic in a short period of time, it is difficult to convert the traffic into profits and stay in the company, which increases Luckin's costs.

Gross Profit Margin. Since its establishment, Luckin Coffee has been benchmarking against Starbucks. In order to quickly occupy the market, it has expanded a large number of stores in a short period of time, which also requires a lot of funds to support it. Through the comparison of Table 3 and Starbucks' Gross Profit Margin, we can know Luckin's sales profitability [4].

Table 3: Comparison of Luckin Coffee and Starbucks Gross Profit Margin

Gross Profit Margin %	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2	2019Q3	2019Q4
Starbucks	58.79	58.54	58.87	58.84	58.41	58.55	58.65	67.83
Luckin Coffee	-128.88	-44.61	-34.63	-24.38	-16.65	-4.27	19.39	-554.57

It can be seen from Table 4 that Starbucks' gross profit margin has remained above 58%, and its profitability is stable; although Luckin's gross profit margin has improved overall, it did not become positive until the third quarter of 2019, which is quite different from Starbucks. Gross profit margin fell off a cliff in the fourth quarter. It can be inferred from this that there are certain problems in Luckin's business model, which makes it difficult for Luckin to turn losses into profits even if the sales volume is good. The specific loss points are likely to be the high cost of attracting newcomers and bottomless money-burning subsidies.

5.2 Wrong business philosophy

Table 4: Luckin financing time and amount

Time	Financing Amount	Financing method	Investor
2017	60 million yuan	Personal loan	Qian Zhiya, Chen Min
2017	94.7 million yuan	No interest loan	Lu Zhengyao's company
2017	227.5 million yuan	Interest free loan	Shareholder Star Grove
2018	147.6 million yuan	No interest loan	Lu Zhengyao's company
201805	350 million yuan	Finance Lease	Everbright Financial Leasing
201806	300 million yuan	Mortgage	TTCO TRUST
201806	\$189.9 million	Angel round financing	Lu Zhengyao's company
201806	\$200 million	A round of financing	JOY CAPITAL,GC,LEGEND CAPITAL,Centurium Capital
201811	\$200 million	B round of financing	JOY CAPITAL,GC,CICC,Centurium Capital
201903	45 million yuan	Mortgage	Zhongguancun Science and Technology Rental
201903	60 million yuan	Secured loan	SPD BANK
201904	\$150 million	B+ round of financing	BLACKROCK

The senior management team of Luckin Coffee is the former team of Shenzhou Car Rental. The style of the team's business philosophy is: find the outlet - fast financing - burn money to expand - quickly IPO - raise the stock price - cash out. The capital operation team controlled by the Shenzhou Department opened the road to financing. Using the development model of financing expansion-refinancing-reexpansion, Luckin's expansion speed is beyond the reach of other companies. From April 2018 to April 2019, the number of Luckin's offline stores increased from 290 to 2,370 in one year, and as of the end of 2019, the number of Luckin stores has exceeded 4,500, thus surpassing the more than 3,300 stores of the established coffee company Starbucks to become the number one in

China. Corresponding to the rapid increase in stores, Luckin has frequently raised funds in three years (Table 4). According to Luckin's prospectus, the large amount of loan funds and two rounds of financing required for Luckin's development come from the previous The members of the Shenzhou team represented by Lu Zhengyao, and the development of Luckin are also very similar to the past experience of the Shenzhou team. They all adopt the money-making model of burning money investment-expansion-cash out. Therefore, the rapid expansion of Luckin Coffee has traces of copying the cash-out experience of Shenzhou Car Rental. Similarly, the possibility of Luckin financial fraud cannot be underestimated [5].

6. Governance countermeasures of Luckin Coffee's financial fraud

6.1 Reshape corporate ethics

The management personnel of Luckin Coffee should reverse their wrong business sense, and should not blindly do whatever it takes for the company's size and operating profits. In addition, managers should set an example for their employees to bring motivation to continuous learning and improve the quality of all staff, especially financial staff, who should be proud of being honest and true.

6.2 Improve the business model

Luckin should start from user preferences and gain user stickiness by launching products with its own competitiveness. It should invest a lot of money in improving product quality instead of obsessing about blind expansion and product packaging. On the other hand, it is not a long-term solution to develop sustainable marketing methods and blindly issue a large number of discounts and more coupons. Luckin Coffee should find its own business growth point and increase the added value of its products.

6.3 Adjust the company's external structure

From the perspective of the audit institution, the Luckin fraud incident shows the failure of Ernst & Young's audit work. Therefore, when conducting audit work, the certified public accountant must not only check the statements of the listed company, but also analyze whether the business model of the listed company will bring This puts forward higher requirements for certified public accountants to give full play to their professional skepticism, continuously improve their own capabilities, and put forward higher requirements for their audit work.

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