Research on the Relationship Between Financial Fraud and Short-selling Risk of Listed Companies

——Taking Luckin Coffee as an Example

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Abstract. The financial fraud of listed companies is a major obstacle to the effective operation of China's market and a key concern of academic circles. At present, the financial fraud of listed companies in China is becoming increasingly diversified, complicated and hidden, and its potential risks are becoming increasingly obvious, which has attracted the attention of short-selling institutions. Taking Luckin Coffee as the research object, this paper makes a complete and systematic study on the causal logic of fraud, risk and short selling, explores the three major fraud motives of Luckin Coffee, such as cash demand, governance demands and operational pressure, combs and analyzes the risks existing in in five aspects, such as information disclosure, listing model, business model, ownership structure and internal governance, as well as the short selling behavior of Muddy Water Research based on risks, and puts forward relevant suggestions to listed companies.

Keywords: Financial fraud, short-selling risk, Luckin Coffee

1 Introduction

The establishment of China's securities market system was relatively late, and the system is not perfect. Many enterprises want to go public as soon as possible, but it is difficult to meet the conditions of domestic listing, so they choose the path of overseas listing. Among them, the United States has become the first choice for listing because of its mature financial system, active market and inclusiveness. However, due to the different legislation between China and the United States, there are different requirements for supervision and management of listed companies and information disclosure. China enterprises listed in the United States are not fully aware of the information disclosure system in the American securities market and face many risks (Sun Mengxue, Wang Xiaofang, 2023)[1]. In recent years, many Chinese stock companies have been shorted by short-selling institutions because of financial fraud, and their market value has fallen rapidly, and even suffered delisting in serious cases.

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In China's securities market system is not perfect, many Chinese stock companies do not pay attention to their own short-selling risks, thinking they are lucky enough to implement financial fraud, and they are easily listed as the target of attack by short-selling institutions (Dong Min, 2021)[2]. Under this background, this paper studies the relationship between financial fraud and short-selling risk of listed companies, hoping that enterprises can pay attention to compliance management, correctly disclose their own situation, follow the rules of capital market and corporate professional ethics.

2 Research Status at Home and Abroad

Financial fraud refers to the intentional act of bringing economic benefits to fraudsters by illegal means such as financial fraud, which eventually leads to injuries or losses to others. Its main manifestations are: Forging or altering accounting records or vouchers, concealing or deleting transactions or events, recording false transactions, deliberately using improper accounting policies, and deliberately preparing financial reports in violation of accounting standards. In recent years, financial fraud of listed companies is common. Huang Shizhong, Ye Qinhua et al. [3](2020) combed the fraud events in the past ten years, and found that 104 listed companies had financial fraud from 2010 to 2019, among which Dongguan Kingsun Optoelectronic Co., Ltd., Geeya Technology Co., Ltd., and Cloud Live Tech Group also had repeated fraud. From the research point of view, scholars mainly analyze fraud events from both the motivation and the result.

In terms of motivation research, Guo Tiezheng [4](2015) analyzed the cases of fraud in Green Land, summarized six reasons for fraud, and put forward seven suggestions from the perspective of external supervision. Huang Shizhong [5](2019) analyzed the deep-seated reasons of financial fraud of listed companies from eight aspects, and put forward eight corresponding countermeasures. Niu Yiheng [6](2020), from the perspective of fraud risk factors and game theory, summed up the three factors that induce corporate fraud: Executives favoritism, enterprises evading the punishment of supervision departments, and enterprises covering up illegal acts. Liu Liyan [7](2021) pointed out that, due to the information gap between listed companies, securities regulatory authorities and investors, listed companies have the opportunity to implement financial fraud. Sheng Yijie and Pan Xiaoxi [8](2022), taking Kangmei Pharmaceutical as an example, summarized the motivation of its fraud into three aspects: Financing demand, supervision and management failure, and management looking for excuses.

In the aspect of results research, Qian Yu and Xu Liwen [9](2014) pointed out that fraud would cause the company's share price to fall and damage the interests of shareholders by analyzing the enterprises that were found and punished by the CSRC in 2007. When profit-seeking short-selling institutions anticipate that the financial risks of enterprises will have negative economic consequences, they may jointly short enterprises with other stakeholders. Qingquan Xin et al. [10](2018) selected 294 cases in which companies were punished from 2004 to 2012 as research samples, and found that the sales revenue and gross profit margin of companies that experienced financial fraud decreased in the following three years. In addition, financial fraud will also affect the company's growth ability. Zhang Lijun et al. (2021)[11], taking Kangmei Pharmaceutical as an example, through sorting out its growth indicators from 2012 to 2019, found that financial fraud has greatly reduced the company's growth ability indicators, reflecting its negative development trend in the future. Wang Yajing and Chen Yirong (2021)[12], taking the companies of Shanghai and Shenzhen A-share margin financing and securities lending from 2012 to 2019 as the research object, pointed out that there is a positive correlation between the financial risk of enterprises and the short-selling risk.

It can be seen that most of the previous literature analyzed financial fraud from a single perspective, such as motivation, identification, prevention, auditing and senior executive (Tao Siqi et al., 2023; Hu Yidan, 2023; Xu Wenning, 2023; Zhou Jiliang, 2023; Zhang Ting and Zhang Dunli, 2023; Sun Xu, 2023)[13,14][15,16][17][18], there are few studies on the relationship between financial fraud and risk from the internal and external perspectives, and the existing studies are more concerned with the impact of financial fraud on corporate governance (Liu Liyan et al., 2021; Wang Jiamin, He Ding, 2022)[7,19]. There is no research on the complete and systematic analysis of the causal logic of fraud, risk and short-selling. Therefore, from the perspective of corporate stakeholders, it is of great practical significance to analyze the driving factors and behaviors of financial fraud, and then find out the relevant risk points and short-selling institutions to take advantage of corporate defects to implement short-selling measures to help enterprises comprehensively examine their own problems and improve the operational efficiency of business models and the level of corporate governance.

3 Case Study

3.1 The Basic Situation of Luckin Coffee and the Process of Being Shorted

In November 2017, Luckin Coffee was founded in Xiamen by Qian Zhiya, former chief operating officer of UCAR (Lu Zhengyao Holdings). In July and December, 2018, Luckin Coffee completed $200 million in Series A and Series B financing respectively. In April 2019, Luckin Coffee completed a $150 million B+ round of financing and submitted an IPO application, which was listed on NASDAQ on May 17.

At the end of January, 2020, Muddy Waters Research issued an 89-page short-selling report to identify Luckin Coffee's financial fraud. On February 3, Luckin Coffee issued an announcement denying this. On February 4, Luckin Coffee's underwriters Haitong Company and CICC responded that the allegations lacked evidence, while another short-selling institution, Citron Research, was also skeptical about the report. However, on April 2, Luckin Coffee said that in 2019, it made false sales of about 2.2 billion RMB, which led to its pre-market plunge of 85%. On June 29, Luckin Coffee officially suspended trading on Nasdaq.

3.2 Analysis of the Causes of Financial Fraud

3.2.1. Cash Demand Based on Shareholders' Profit-Seeking Motives.

Luckin Coffee comes from the "Shenzhou Department", which is good at opening the market quickly with the business model of price war, and then "be picked like leeks" to cash out after gaining popularity and occupying a certain market share. Luckin Coffee's shareholders hope to copy it into the next "CAR Inc.", complete the listing after many times of financing and rapid expansion, and realize high cash-out profit. Therefore, it has become one of the potential driving factors to promote Luckin Coffee's financial fraud by inflating its performance, creating false financial performance and realizing the rapid growth of its stock price.

3.2.2. Endogenous Demands Based on the Governance Requirements of Listed Companies.

Due to the numerous listing procedures and long time in China, Luckin Coffee chose variable interest entities (VIEs) model and was listed overseas. This listing arrangement can transfer the interests of domestic operating entities to overseas listed entities through control agreements, so that the shareholders of overseas listed entities (that is, overseas investors) can actually enjoy the benefits generated by the operation of domestic operating entities. However, in this model, overseas listed entities are separated from domestic operating entities, and there are often a series of agreement documents behind the "agreement control" between legal entities and actual entities, so it is difficult to predict the hidden risks and the possibility of risks. Therefore, in order to win financing and avoid risks, listed companies in this mode need good financial performance to win loyal customer groups and attract more investors to enter the market. Under the circumstances, for Luckin Coffee, whose own operation was not excellent at that time, financial fraud was a feasible choice.

3.2.3. Operating Pressure Based on Business Model Defects.

In order to attract and retain customers, Luckin Coffee uses a large number of discount coupons to carry out marketing activities to show high sales volume and popularity, hoping to impress potential investors. However, excessive discount has developed customers' tricky consumption habits, and this business model needs a lot of financial support. As a result, Luckin Coffee had to send a positive signal to the market while madly expanding its stores, and at the same time, it took various ways to make financial fraud to improve the profitability of the stores. As can be seen from the annual report of Q4 in 2019, Luckin Coffee has been in a state of operating loss from the end of 2018 to the end of 2019, and its debt burden has increased. However, paradoxically, both the number of accrued stores and the number of unmanned retail stores have increased significantly.

3.3 Risk Analysis of Luckin Coffee's Potential Short-Selling

3.3.1. Overseas Listing has Relatively Loose Requirements for Enterprises, and Domestic Information Disclosure Requirements are Low.

The threshold for domestic enterprises to register and go public in China is high, and the time cost is high. Therefore, many enterprises find another way out and choose the American securities market with mature market, convenient listing conditions and high availability of resources after listing. These enterprises have not experienced strict supervision, and their risks are underestimated, and their defects in qualifications have also been covered up. At the same time, Chinese stock companies listed in the United States are also facing the differences in the securities market system between the two countries. The American securities market pays more attention to the information disclosure of enterprises, and the relevant laws regulate the criminal and civil liability of violating litigation in detail. However, in China's securities market, the information disclosure system needs to be improved, the cost of violating regulations of enterprises is low, and the supervision effect of regulatory authorities is insufficient. Overseas listed companies may not be familiar with the overseas disclosure system or fail to disclose their own operating conditions in time and effectively to reduce the cost of information disclosure. In addition, the resources and information of China and the United States cannot be shared, and there is a big regulatory gap, which provides space for enterprises to falsify and cheat, and also gives short-selling institutions an opportunity.

3.3.2. The Overseas Listing Model of VIE is Flawed.

Like many Chinese stocks, Luckin Coffee adopts VIE model to go public, and there is great controversy about the risk of VIE in academic circles. Some scholars believe that VIE model belongs to the situation of "legal form covering up illegal purpose" in Contract Law (Liu Yan, 2012; Wang Jun, 2015)[20,21]. In addition, enterprises listed in VIE model have higher business risks than those listed in non-VIE model (Han Jinhong and Chen Rui, 2021)[22], and their structures are easy to induce double moral hazard (Wang Zhe and Lin Weiran, 2018)[23]. At present, the VIE structure is still in a "gray" zone under the legal norms of China, and the attitude of relevant departments towards the VIE structure is still unclear. The opinions of retaining, restricting and banning the VIE structure coexist, especially the majority of the existing control protocols are flawed in implementation according to the laws of China, so this listing model is easy to attract the attention of short-selling institutions.

3.3.3. The Business Model is not Complete Enough.

Compared with the environment, style and brand value provided by Starbucks for customers to enjoy coffee, Luckin Coffee advocates solving the demand of Chinese people's core functional coffee, but China is a traditional tea society, and the demand for functional coffee is not strong. Under the single goal of functional coffee, Luckin Coffee only attracts customers with a large number of coupons and large discounts. Luckin Coffee's customer groups are very sensitive to the price, and when there are no discounts and concessions, they will choose to give up the transaction. Therefore, Luckin Coffee's attempt to increase the store's income by reducing discounts is difficult to succeed. In September 2019, Luckin Coffee launched the non-coffee business Xiaolu Tea. However, other competitors in the same industry had launched similar products several years ago, and Xiaolu Tea lacked core competitiveness. In addition, Luckin Coffee called the third-party operator a new retail partner, but this business should be recognized as a franchise model because it essentially increases the price of products and collects profits. According to the regulations: "Franchisors should have at least two direct stores engaged in franchise activities and have been operating for more than one year". Xiaolu Tea business does not meet the requirements and has high compliance risk, but Luckin Coffee management seems to turn a blind eye to it. In particular, after rapid expansion in the initial stage and occupying a certain market share, Luckin Coffee did not make timely adjustments to its business model. Luckin Coffee could only ensure that its customer base would not be lost with a large number of continuous coupons and discounts, which required constant "losing money" and had to persuade investment institutions to enter the market to obtain financial support. As a result, although the sales volume of Luckin Coffee's financial report has been increasing, it has always been in a state of loss, and it was finally questioned and attacked by short-selling institutions.

3.3.4. Excessive Concentration of Ownership Structure.

The actual controller of Luckin Coffee is Lu Zhengyao's family trust fund, holding 26.06%; The second largest shareholder is CEO Qian Zhiya's family trust fund, holding 16.80%; Then came the investment fund controlled by Lu Zhengyao's sister Sunying Wong, holding 10.58% of the shares. However, Luckin Coffee did not disclose the relationship between Lu Zhengyao and Sunying Wong in the prospectus. The fourth and fifth largest shareholders are Centurium Capital and Joy Capital respectively, and their other identities are investors of UCAR. The actual shareholding ratio of "Lu Zhengyao group" shareholders is higher than 50%. The top five shareholders of Luckin Coffee are from the same interest group and have absolute right to decide. This ownership structure is easy to infringe on the rights and interests of small and medium shareholders. It can be proved that the management and shareholders of Luckin Coffee have cashed 49% of the shares through stock pledge, which makes investors face the risk of stock price decline. It is inevitable that people will suspect that the real short sellers are other interested parties who know the internal situation of Luckin Coffee and their own interests are damaged.

3.3.5. There are Many Problems in the Internal Governance Structure.

In enterprises, diversified leadership can form effective constraints, but most of Luckin Coffee executives come from Lu Zhengyao's "Shenzhou" enterprises, and they had close ties before Luckin Coffee was established, with similar interests and strong power (Lu Rui et al., 2022)[24]. Luckin Coffee's board of directors consists of four independent directors, four executive directors and two non-executive directors, and the proportion of executive directors is too high. CEO Qian Zhiya is also a director and COO Liu Jian is also an executive director. The members of the board of directors overlap with the members of the management, so it is impossible to effectively supervise the management. Moreover, the management of Luckin Coffee failed to give full play to its professional ability and judgment ability. After several rounds of large-scale financing expansion in the early stage, it failed to make timely adjustments to Luckin Coffee's extreme business model and prevent potential risks. In the end, after being questioned by short-selling institutions, Luckin Coffee blew up COO Liu Jian's brush list and jumped orders, acknowledging the existence of fabricated false transactions and inflated income and expenses. In addition, the amount of false sales by Luckin Coffee is huge, spanning nearly one year, but the audit committee did not notice it. It was not until Muddy Waters Research released the short-selling report that Luckin Coffee set up an investigation team, which shows that its audit committee is ineffective, lacking independence and supervision, and failing to fulfill its due diligence.

3.4 Analysis on Muddy Waters Research's Short-Selling Behavior

In view of the potential risks and inherent risks of Luckin Coffee, Muddy Water Research questioned and attacked one by one in the short report, and listed various evidences to prove it. Firstly, Luckin Coffee's financial fraud was exposed through on-the-spot monitoring of store traffic, collection of customer receipts, and tracking of advertising expenses by third-party media. Secondly, by consulting relevant materials and combining with charts, it is expounded that more than two-thirds of Luckin Coffee's customers are inactive in the life cycle, revealing that Luckin Coffee's customer groups are price-sensitive and its business model is fundamentally flawed. Thirdly, by exposing the irrationality of its shareholding structure, Luckin Coffee executives and shareholders pledged high-value stocks to cash out. Fourthly, through multi-channel investigation, Shao Xiaoheng, a suspicious independent director of Luckin Coffee, and Wang Baiyin and Yang Feilai, undisclosed related parties, questioned the ineffectiveness of its internal governance. In the end, Luckin Coffee could not resist the pressure and openly cheated the truth, facing the end of delisting and extremely high fines.

4 Conclusion

Before choosing domestic or overseas listing according to their own situation, enterprises should have a deep understanding of the corresponding market system and information disclosure norms, choose the appropriate listing method, and work together internally and externally to eliminate the motivation of financial fraud, reduce the risk of shorting, and curb the use of risk by short sellers to achieve healthy development. By analyzing the financial fraud case of Luckin Coffee, this paper gives the following suggestions.

4.1 Adaptation of Business Models in Due Course

Luckin Coffee in the early stage of development with discounts and subsidies to open the market, to enhance awareness, but this business model is too dependent on funding, the long-term development of the momentum is not enough. Burning money in the early stage of the Internet industry is a very common business model, and the key is which part of the company's value chain the money is specifically burned in (Zhang Xinmin and Chen Deqiu, 2020)[25]. Business model dominates the enterprise marketing strategy and the direction of development, enterprises in different stages of development should be based on the external market environment timely adjustments to the business strategy, increase investment in research and development, focusing on the iteration of the business model. This is not only for Luckin Coffee, but also for other enterprises, after the initial occupation of market share, seek product and service innovation, and strive for the extension of the value chain in order to achieve sustainable development.

4.2 Improving Internal Governance Mechanisms

Luckin Coffee financial fraud after the incident broke out, also recognized the defects of its internal governance mechanism, began to carry out substantial personnel changes in the internal management, Lu Zhengyao system of management is no longer trusted, Lu Zhengyao himself was forced to go out, showing determination to improve the internal governance mechanism. In the enterprise, the various leading bodies should both cooperate with each other and check and balance each other in order to form a perfect internal governance system (Han Hongling et al., 2020)[26]. An effective internal governance mechanism allows the management to give full play to its professional ability and professional judgment, avoids the management from harming the company's interests by seeking private interests, regulates the agency conflict between investors and the management, and promotes the benign development of the company.

4.3 Improving the Level of Information Disclosure

There are significant problems in the financial information disclosed to the public by Luckin Coffee, and the non-financial information that should be disclosed is hidden from the public, reflecting the ineffectiveness of Luckin Coffee's disclosure. Only by breaking down the corporate information disclosure barriers, maintaining a high level of information disclosure, and ensuring that the information disclosed to the public is true, reliable, complete and accurate, can listed companies effectively reduce the degree of information asymmetry between the management and the shareholders, so that the short sellers have no way to start, and can also release positive signals to the market, so that the potential investors realize the company's potential for development, and to attract more high-quality funds to enter the market.

References

1. Sun Mengxue,Wang Xiaofang. Cracking the crisis of Chinese stocks: a study under the perspective of information disclosure of listed companies[J]. Southern Finance,2023,(02):76-87.
2. Dong Min. Re-examination of shorting and shorting risk[J]. China Management Informatization,2021,24(17):56-58.
3. Huang Shizhong, Ye Qinhua, Xu Shan, Ye Fan. Analysis of financial fraud in Chinese listed companies from 2010 to 2019[J]. Finance and Accounting Monthly,2020,(14):153-160.
4. Guo Tiezheng. Research on accounting fraud motivation[J]. Finance and accounting newsletter,2015(03):10-12.
5. Huang Shizheng. The eight causes and eight strategies of financial fraud in listed companies[J]. Finance and accounting,2019,(16):4-11.
6. Niu Yiheng. Research on financial fraud motivation and governance of listed companies--Based on the common perspective of fraud risk factor theory and game theory[J]. Finance and accounting newsletter,2020(12):99-103.
7. Liu Liyan, Zou Ying, Ye Zhou, Yang Bo. Research on the governance mechanism of shorting on financial fraud: The case of Muddy Waters shorting Rexchip Coffee[J]. Journal of Jianghan University (Social Science Edition),2021,38(06):81-88+125.
8. Sheng Yijie,Pan Xiaoxi. Motivation and prevention of financial fraud in Kangmei Pharmaceuticals[J]. Finance and Accounting,2022,(10):82.
9. Qian Yu, Xu Liwen. Research on the means and consequences of financial reporting fraud of Chinese listed companies--Based on the implementation of new standards[J]. Mall Modernization,2014,(26):179-182.
10. Qingquan Xin,Jing Zhou,Fang Hu.The Economic Consequences of Financial Fraud:Evidence from the Product Market in China[J].China Journal of Accounting Studies,2018,6(1):1-23.
11. Zhang Lijun,Feng Lili,Hu Haichuan. Research on the motives and economic consequences of financial fraud--Taking Kangmei Pharmaceutical as an example[J]. Business Accounting,2021,(22):73-80.
12. Wang Yajing,Chen Yirong. A study on the relationship between financial risk, internal control effectiveness and shorting in securities financing[J]. Investment and Entrepreneurship,2021,32(19):146-149.
13. Tao Siqi, Zhou Sha, Liu Huizhe, Wu Fengju. Empirical analysis of financial fraud inducing factors in listed companies based on Chinese context[J]. Management Modernization,2023,43(02):112-118.
14. Hu Yidan. Analysis of Financial Fraud Motivation of Jinzhengda Based on Fraud Triangle Theory[J]. Modern Marketing (Lower Decade),2023,(01):152-154.
15. Xu Wenning. Identification and Prevention of Financial Fraud in Listed Companies[J]. Investment and Entrepreneurship,2023,34(02):85-87.
16. Zhou Jiliang. How to Identify and Prevent Financial Fraud in Listed Companies[J]. China Business, 2023,(05):30-31.
17. Zhang Ting, Zhang Dunli. Does auditor's perception of fraud affect their disclosure of key audit matters? [J]. Auditing and Economic Research,2023,38(01):31-39.
18. Sun Xu. Research on the relationship between the characteristics of director and supervisor teams and financial fraud in A-share listed companies[J]. Financial Management Research,2023,(06):82-94.

19. Wang Jiamin,He Ding. Governance effects of financial fraud risk in aggressive shorting of Chinese stocks-A case study based on Benford's law compliance test[J]. China CPA,2022,(09):42-46.
20. Liu Yan. The Regulatory Dilemma of Overseas Indirect Listing of Enterprises and Its Breakthrough Path--Taking Agreement Control Mode as the Object of Analysis[J]. Law and Business Research,2012,29(05):13-21.
21. Wang Jun. Legal circumvention behavior and its adjudication method[J]. Chinese and foreign law,2015,27(03):628-648.
22. Han Jinhong,Chen Rui.VIE Overseas Listing Mode and Corporate Debt Financing--Based on the Empirical Evidence of Chinese Enterprises Listed in the U.S.A.[J]. Modern Finance and Economics(Journal of Tianjin University of Finance and Economics),2021,41(11):93-113.
23. Wang Zhe, Lin Weiran. Does VIE mode affect corporate valuation? --Will the VIE model affect the valuation of enterprises? Securities Market Herald,2018,(08):39-46.
24. Lu Rui,Tang Zizhen,Yang Lei. Self-help of Financial Fraud Enterprises from Ruixing Falsification Incident[J]. Accounting Friends,2022,(18):156-160.
25. Zhang Xinmin,Chen Deqiu. Enterprise business model, value co-creation and governance risk in the era of mobile Internet - A case study based on financial fraud of Ruixing Coffee[J]. Management World,2020,36(05):74-86+11.
26. Han Hongling, Liu Siyi, Lu Weichao, Chen Hanwen. Analysis of the shorting industry chain based on the Ruixing incident--The perspective of information disclosure[J]. Finance and Accounting Monthly,2020,(08):3-8.