Research on Financial Fraud Based on Changyuan Group's Acquisition of Changyuan and Eagle

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Abstract. In recent years, with the development of the China's economy, in order to seek business growth points, the number of mergers and acquisitions of enterprises has increased rapidly. In the process of mergers and acquisitions, there are often some financial fraud behaviors, such as fictitious income and false statements, to push up the merger and acquisition premium, which will greatly damage the stability of the financial market and the legitimate rights and interests of investors. This paper adopts the financial fraud case of Changyuan Group's acquisition of Shanghai Heying Electromechanical Technology Co., LTD. in 2016 as an example, and combines the fraud triangle theory to analyze the motivation of financial fraud. According to the punishment announcement and other information, this paper analyzes the identification of financial fraud information with a three-dimensional model, analyzes and presents the consequences of financial fraud, and proposes the suggestions and enlightenment for subsequent M&A cases.

Keywords: Financial fraud, Merger and acquisition, Fraud triangle theory, Abnormal information identification, Consequences of fraud.

1. Introduction

With the rapid development of market economy and the endogenous growth demand of all enterprises, all listed companies do not meet their own business development, and it has become the choice of all enterprises to enter the capital market for business reorganization and expansion through mergers and acquisitions. By December 31, 2023, 62 major asset reorganization orders of listed companies have been completed in the merger and reorganization market of listed companies in 2023. The transaction value was 288.017 billion yuan, and 66.816 billion yuan was raised in supporting funds for mergers and acquisitions.

In the capital market, financial fraud has always affected the stability of the market. According to the case report of China Securities Regulatory Commission in 2022, 203 illegal cases of information disclosure were handled throughout the year, among which 94 cases involved financial fraud, accounting for 46%, which greatly affected the stability of the investment market and the interests of investors, and also caused a lack of confidence in the capital market.

In order to understand and analyze the financial fraud in the M&A process of listed companies in detail, and also to provide sample research for maintaining the stability of the capital market, this paper takes Changyuan Group's M&A of Changyuan Heying as an example to analyze the motivation, process and consequences of financial fraud in the M&A process, and reveal the severity of financial fraud. Through financial statements, corporate governance and other perspectives, this M&A case is deeply analyzed, and suggestions are provided for similar cases in the capital market.

According to the official definition of the Chinese Association of Certified Public Accountants, financial fraud mainly focuses on intentional misstatement related to the audit of financial statements, including misstatement caused by the preparation of false financial reports and misstatement caused by the appropriation of assets. Other scholars have conducted a lot of research on this, and formed a series of theories on the motivation of financial fraud, including the fraud triangle theory and the fraud risk factor theory. Zhang iscussed the motivation of fraud and provided corresponding suggestions based on the theory of fraud risk factors. Liang, Wang revealed financial indicators such as sales expenses by building a big data model, which played an important role in effectively identifying financial fraud signals of Internet listed companies [1-3].

2. M&A Event Description

Founded by the Chinese Academy of Sciences in 1986 and listed on A-shares of Shanghai Stock Exchange in December 2002, Changyuan Group is A large enterprise group with 16 holding industrial subsidiaries and other goodwill assets, mainly engaged in the research and development, production and sales of radiation functional materials and power grid equipment.

The company was formerly known as Shanghai Heying Electromechanical Technology Co., LTD., established in 2006. In 2016, it was mainly engaged in automation equipment for the clothing industry, and its business scope was mainly to provide customers with cutting bed and other equipment. After the merger and acquisition, it was renamed as "Changyuan Heying" (referred to as "Changyuan Heying" hereafter)

On June 7, 2016, Changyuan Group issued a notice announcing the acquisition of 80% equity of Shanghai He Ying Technology Co., Ltd. with 1.88 billion yuan in cash. Changyuan Heying promised to Changyuan Group to achieve net profit of no less than 150 million yuan and 200 million yuan respectively in 2016 and 2017 after the acquisition, and will compensate for performance if they fail to meet the standard. During the merger and acquisition period, Changyuan Heying Company inflated their performance through fictitious business income, signing dual contract, violating accounting standards and other operations, resulting in major errors in the financial data of Changyuan Group's annual reports in 2016 and 2017. The inflated operating income in the consolidated income statement in 2016 was nearly 150 million yuan. In 2017, the consolidated income statement inflated the operating income by nearly 210 million yuan. In 2019, Shenzhen Securities Regulatory Commission filed an investigation against him, and issued an administrative penalty notice in 2020 to officially disclose the handling of the case to the outside world.

3. Motivation analysis based on fraud triangle

According to the triangle theory of fraud proposed by the industry, the causes of corporate fraud mainly include three parts: pressure, Opportunity and self-rationalization, and without one of the three, corporate fraud cannot be established, as shown in Fig. 1 [4].

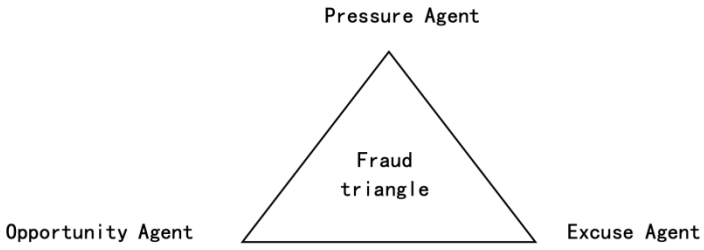


Figure 1. Fraud Triangle schematic diagram

3.1. Pressure Motivation

Stress motivation refers to the behavioral motivation of business operators. In the merger and acquisition agreement, Changyuan and Eagle reached an agreement with Changyuan Group, promising that the net profit realized in 2016 and 2017 after the acquisition will be no less than 150 million yuan and 200 million yuan respectively, and the performance compensation will be made if the standard is not reached. This causes performance pressure for Changyuan and eagle operators and becomes the motivation for fraud incidents.

3.2. Opportunity Motivation

Opportunity motivation refers to the opportunity for corporate fraud to be concealed from detection or to evade punishment [5].

In this incident, the operators of Changyuan and Eagle were not obliged to disclose the financial status of the company, so that the operators believed that they could take advantage of the opportunity to fabricate profits by signing dual contractand fabricating business income.

3.3. Excuse Motivation

The excuse motivation is called self-rationalization factor, that is, the fraudster has reasons to make the corporate fraud consistent with his moral concept and code of conduct, no matter whether the explanation itself is really reasonable. According to the CSRC disclosure announcement, Yin Zhiyong was the chairman and president of Changyuan Heying at the time, but he argued in his defense that he did not lead and participate in the fraud, and did not directly connect with the audit work due to hospitalization, which was rejected later. It can be seen that in this incident, the operators rationalized the non-leading fraud behavior as an excuse [5].

4. Problem Analysis

4.1. Method of Fraud

From 2015 to 2017, Nagayen and Eagle successively cooperated with JD&TOYOSHIMA CO., LTD. More than 10 companies signed sales contracts, fabricated overseas business, and then repeatedly and in advance recognized income. At the end of 2016 and 2017 statements, the operating income was falsely increased by 89.6015 million yuan, and the profit was falsely increased by 64.228,500 yuan.

Shanghai Heying Financial Leasing Co., LTD., a subsidiary of Changyuan Heying, is responsible for providing corresponding financial leasing business for customers, and signs dual contract with customers with high and low prices. The income is confirmed according to the high price version, but the actual settlement is made according to the low price version, which falsely increases the operating income of RMB 52.591,700 yuan in 2017. The total profit of 2017 was inflated by 30.5917 million yuan [6].

Changyuan Heying confirmed the income of different contracts through false accounting methods such as false invoicing, additional invoicing and accounting by the percentage of completion method, so as to achieve the purpose of falsely increasing the operating income of 217.1073 million yuan and the profit of 208.0819 million yuan. The specific data are shown in Table 1.

Table 1. Changyuan and Eagle financial fraud number (unit: ten thousand yuan)

Method	Inflated operating income	Inflated profit
Fictitious duplicate overseas income	8960.15	6422.85
Sign twin-contracts	5,259.17	3,059.17
Use incorrect accounting methods	21710.73	20808.19
Data source	China Securities Regulatory Commission	

Table 2. Proportion of inflated profits of Changyuan Heying (unit: Ten thousand yuan)

Time	Inflated operating income	Proportion before adjustment	Inflated profits	Proportion before adjustment
2016	14,971.27	2.56%	12,300.38	15.21%
2017	20,958.78	2.82%	17,989.83	14.85%
Data source		China Securities Regulatory Commission		

As shown in Table 2, through the above means, Changyuan Heying inflated their operating income by RMB 149,712,700 yuan and RMB 209,587,800 yuan in 2016 and 2017 respectively, accounting for 2.56% and 2.82% in the same period; The inflated profit was 123,003,800 yuan and 179,898,300 yuan respectively, accounting for 15.21% and 14.85% in the same period.

4.2. Problem Identification

According to the punishment announcement issued by Shenzhen Securities Regulatory Commission on October 27, 2020, the financial fraud case of Changyuan Group's merger and acquisition of Changyuan Heying ended with the relevant personnel and subjects being punished.

4.2.1 Financial dimension

The abnormal data in consolidated statements of Changyuan Group According to the consolidated balance sheet of Changyuan Group, it can be found that the receivables of Changyuan Group at the beginning of 2016 were 2,367,456,068.52, and at the end of 2017 were 4,195,492,632.26, with a growth rate of 77.22% in two years, and the growth rate of long-term receivables was also 156.60%. Specific data are shown in Table [1].

Table 3. Abnormal data in the Financial Statements of Changyuan Group (Excerpt) (Unit: Yuan)

Time	Long-term receivables	Accounts receivable
Beginning of 2016	0	2,367,456,068.52
End of 2016	84,665,803.01	3,178,608,459.44
Beginning of 2017	217,251,308.89	4,195,492,632.26
Growth rate of 2016	-	34.26%
Growth rate of 2017	156.60%	77.22%
Data Source	Annual report of Changyuan Group	

It can be seen from the table that during 2016-2017, after Changyuan Group acquired Changyuan Heying, its accounts receivable and long-term receivables increased rapidly, which was attributed to sales growth and merger and acquisition needs in the annual report of Changyuan Group. However, some accounts receivable with long-term and high growth often need to pay attention to factors such as the rationality of their balance and credit cycle, and the data is often linked to the performance of imaginary increase. Therefore, some financial indicators need to be paid special attention to.

4.2.2 Corporate governance dimension: "high valuation, high premium, high commitment" are questionable

On June 7, 2016, Changyuan Group disclosed that it planned to acquire 80% equity of Shanghai Heying Technology Co., Ltd. with cash of 1.88 billion yuan and enjoy control. According to the asset appraisal report, the total shareholder equity value of Changyuan Heying is 2.63 billion yuan, and the appraisal value-added is 2.049 billion yuan, with the value-added rate of 652.02%. According to the financial report of that year, the operating profit of Changyuan Heying was only 220 million yuan in that year, but it had a premium of 6.5 times [7-8].

4.2.3 Industrial management dimension: Non-industrial chain M&A logic is difficult to be consistent

As shown in Fig. 2, mergers and acquisitions can be divided into horizontal mergers and acquisitions, vertical mergersand acquisitions, and mixed mergers and acquisitions.

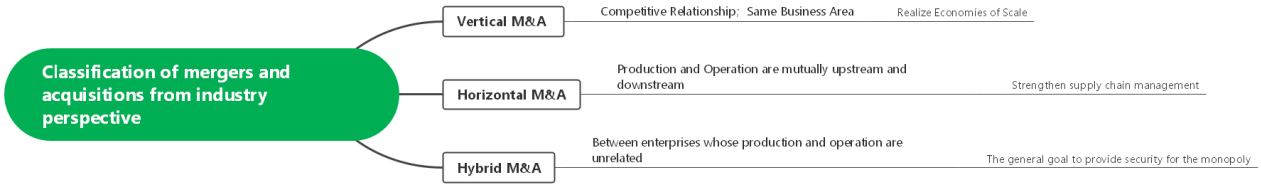


Figure 2. Classification of mergers and acquisitions from an industry perspective

The business scope of Changyuan Group is mainly research and development, manufacturing and service of intelligent digital industrial and power system, while Changyuan Heying are mainly responsible for providing customers with cutting bed and other equipment. There is no complementary between collaborative chain and supply chain. Changyuan Group deviates from its main business and blindly follows the merger and acquisition boom in 2016, while non-industrial

chain merger and acquisition will also affect the actual controller, requiring the original shareholders of the company to hold. To a certain extent, it leads to negligence of control, and then leads to the financial fraud event [8].

4.3. Consequences

On October 27, 2020, Shenzhen Securities Regulatory Bureau issued the Administrative Penalty Decision of Shenzhen Regulatory Bureau of China Securities Regulatory Commission No. 7 (2020), imposing fines on Changyuan Group, Changyuan Heying and audit institutions and other subjects or persons in charge respectively. After the announcement was issued, it also caused a series of negative effects.

4.3.1 Decline in financial performance

According to the written decision on administrative penalty, a fine of 300,000 yuan was imposed on Changyuan Group, and the heads of Changyuan Group, Changyuan and Eagle were warned and fined, which had a certain impact on the group's financial data. At the same time, this incident also had a certain impact on the company's subsequent development and profitability data. According to the revised data announcement issued by Changyuan Group in 2020, The net profit data after deducting profit and loss in 2016 and 2017 are revised to 4.4995 million yuan and 33.5911 million yuan respectively, with the adjustment amount reaching 150 million yuan and 140 million yuan, as shown in Table 4. The data performance of Changyuan Group in these two years is not satisfactory [9].

Table 4. Revised data of Changyuan Group in 2020 (unit: Ten thousand yuan)

Items	For the year 2016		
	Before Adjustment	Adjustment Amount	After Adjustment
Net profit	16,293.82	-15,562.77	731.05
Net profit after deducting non-recurring gains and losses	15,628.51	-15,178.54	449.9
Items	For the year 2017		
	Before Adjustment	Adjustment Amount	After Adjustment
Net profit	19,242.28	-14,213.00	5,029.28
Net profit after deducting non-recurring gains and losses	17,572.11	-14,213.00	3,359.11
Data Source	Changyuan Group announcement		

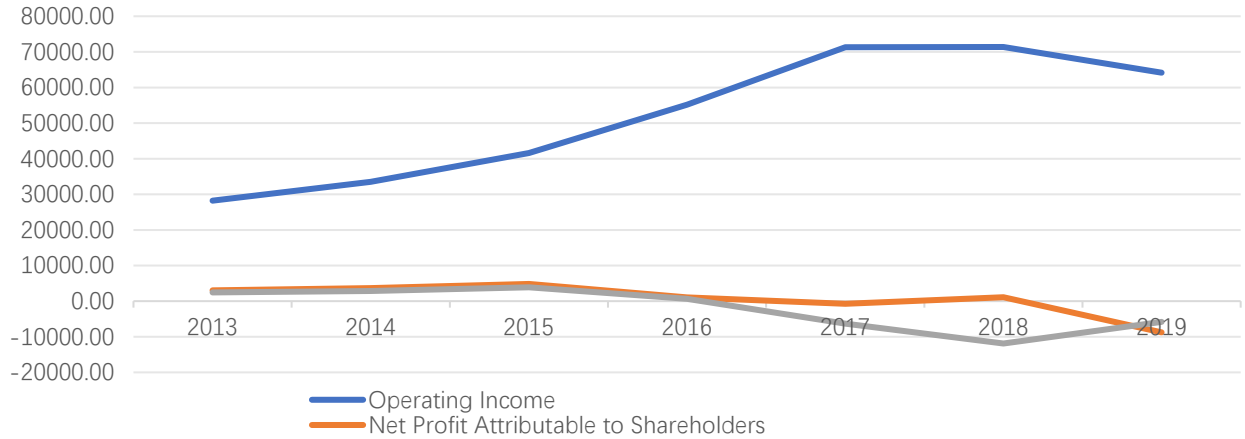


Figure 3. Changes in major financial indicators before and after the fraud incident of Changyuan Group (Unit: ten thousandyuan)

According to Fig. 3, the changing trend of profitability indicators of Changyuan Group before and after the fraud event, it can be seen that the operating income of Changyuan Group reached its peak in 2017 and then declined, which was due to the time problem of signing the contract and the slow transmission speed of operating income. However, its net profit declined or even turned negative in 2016, which was due to the revised profit after the financial event. After removing the inflated profit, the profit data becomes negative, which can reflect the surprising degree of inflated profit from the side.

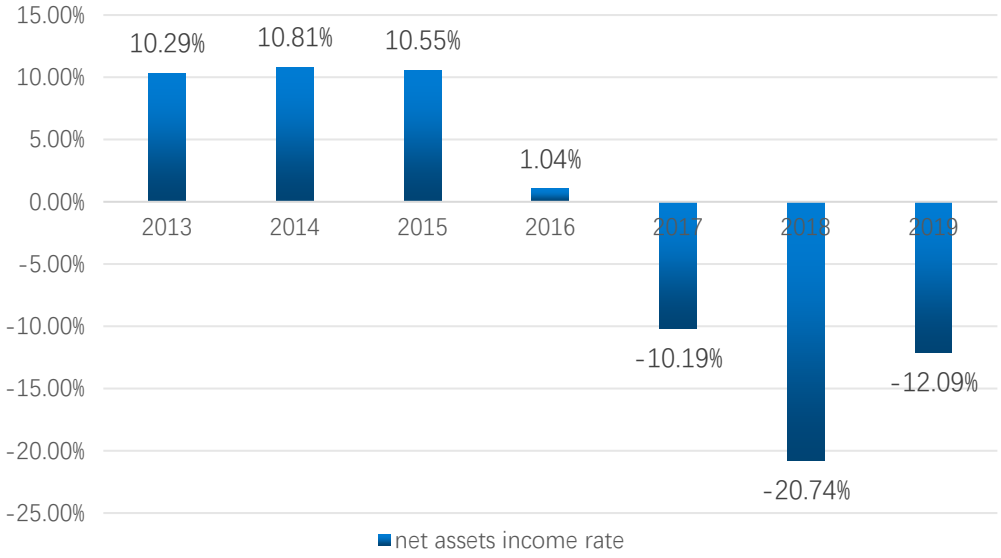


Figure 4. Weighted average return on equity after deducting non-recurring gains and losses before and after the fraud incident of Changyuan Group

As shown in Fig. 4, the weighted average return on equity of Changyuan Group increased from 10.29% in 2013 to 1.04% in 2016 and then to -20.74% in 2018, which shows the great impact of the financial fraud incident of Changyuan Group on the profitability of the group.

4.3.2 The share price fell

After the announcement of the financial fraud event, due to the illegal operation of Changyuan Group, its stock price fell in response, and subsequently fell by the daily limit for many times. This paper analyzes the stock price data of Changyuan Group from 2016 to 2020 to reveal the specific impact of the fraud event of Changyuan Group.

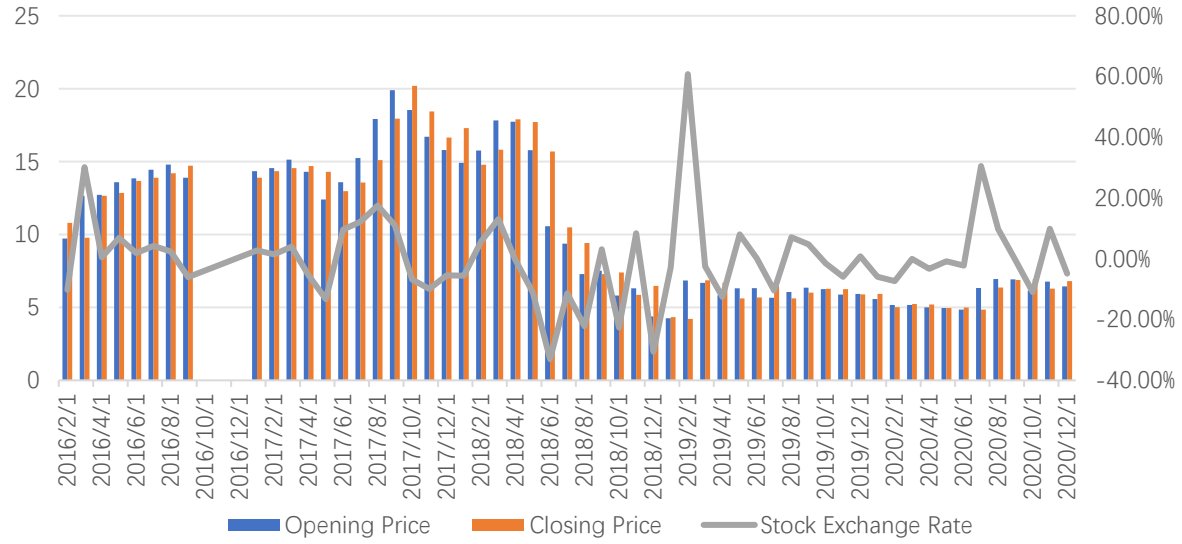


Figure 5. Stock price changes of Changyuan Group

It can be seen from Fig. 5 that in the month of acquisition on June 1, 2016, the stock price of Changyuan Group closed at 13.85, with a rise or fall of 1.90%. With the fraud incident, the amount of false profits reported by Changyuan and Eagle continued to rise, which also drove the stock price of Changyuan Group to rise. On March 1, 2018, the stock price of Changyuan Group reached 17.82 yuan, up or down 13.07%. However, at the end of 2018, as the fraud incident gradually broke out, and no other incident broke out during this period, the stock price of Changyuan Group fell to 4.38 on December 1, 2018, and the rise and fall reached -33.02%, -22.61% and -30.59% on June 1, August 1 and December 1 respectively. With the issuance of the 2019 penalty announcement, the stock price of Changyuan Group fell accordingly to 5.66 on July 1, 2019, with a rise or fall of -10.44%.

4.3.3 Damage to the Group's reputation

With the fermentation of the fraud incident, Changyuan Group is not only facing the decline of stock price and other financial data, but also facing many investor lawsuits. After the punishment announcement issued by the China Securities Regulatory Commission, Changyuan Group has the criminal facts of financial fraud. According to the judgment, investors who bought Changyuan Group's shares from March 14, 2017 to December 25, 2018, On December 10, 2021, Shenzhen Municipal People's Court made a judgment on 417 investors' claims, and Changyuan Group should compensate them 53.17001 million yuan in accordance with the law, which had a significant impact on the reputation of Changyuan Group, make some concern to similar companies, and greatly affected investor confidence.

5. Enlightenment and Suggestions

5.1. Strengthen Performance Commitment Risk Assessment Before M&A

Before the merger and acquisition, Changyuan Heying set up a commitment of net profit of no less than 150 million yuan and 200 million yuan in 2016 and 2017, which became the pressure agent of financial fraud. If the risk assessment of performance commitment is strengthened before the merger and acquisition, when the two parties formulate the contract, the merger and acquisition can check the performance data of the acquired party in the past ten years and visit professional marketing personnel. Comprehensive formulation of performance targets suitable for the acquired party can effectively reduce the risk of financial fraud during M&A [1, 10].

5.2. Improve the Degree of Internal Audit and Establish an Internal Audit System

In this event, the opportunity motivation is mainly reflected in the information asymmetry between the two sides of the merger and acquisition, which reduces the opportunity cost of fraud. The M&A company needs to establish a pre-M&A internal audit system. First, it can introduce a third-party special audit team to audit the financial data and check it by special personnel; Second, in view of the problem of financial separation from business of some companies, the information difference between the two parties of M&A can be reduced and the risk of financial fraud during M&A can be reduced by means of cross-department verification within the enterprise, cross-audit by third-party quotation outside the enterprise and inviting business leaders to participate in financial audit [5].

5.3. Improve the Punishment Mechanism

According to the triangle theory of fraud, the excuse motive is also one of the motives of fraud. Combined with this case and data, the supervisory agencies can resist the self-rationalization factor with law by increasing the punishment intensity. For example, the Securities and Exchange Commission (SEC) of the United States will provide high bonuses to the financial fraud report personnel, the maximum in recent years is nearly 50 million dollars, which is as high as 350 million yuan. In addition to setting up a reward mechanism for reporting, supervision agencies can also enhance the punishment of financial fraud, improve relevant laws, impose high fines or bear criminal

responsibility for fraud, which can effectively increase the cost of financial fraud, and then make people who are willing to be discouraged, reduce the risk of excuse motivation.

6. Conclusion

With the increasing number of M&A cases, the frequency of financial fraud incidents is also rising, and their motivations are complex and diverse, result in severe consequences, greatly affect the stability of the financial market and damage the legitimate rights and interests of investors. The financial fraud incidents of Changyuan Group's M&A of Changyuan Heying also give a warning for the market.

This paper suggests regulators should pay more attention to M&A behavior and data in market. On the one hand, they urge enterprises to conduct quantitative analysis of various data is helpful for ordinary investors to collect enterprise information, which is helpful for ordinary investors to collect non-financial information. On the other hand, it is also necessary to improve the punishment mechanism, increase the cost of financial fraud, reduce the risk of financial fraud. Investors also need to calmly evaluate risks and then invest steadily to jointly construct a stable securities market environment in China.

References

[1] Ye Qinhua, Ye Fan, Huang Shizhong. Identification and response of performance commitment fraud -- based on the case analysis of space communication [J]. Finance and Accounting, 2021 (23): 35-40.

[2] Zhang Qian. Case study on financial fraud in M&A Based on fraud risk factor Theory: Taking Company A M&A Company B as an example [J]. Certified Public Accountants, 2022 (19): 48-50.

[3] Liang Lijun, Wang Kexin, Lai Jianing. Research on the construction of financial fraud identification model of Internet listed companies [J]. Business Accounting, 2023 (24): 50-54.

[4] Hu Mingxia, Ma Qianqun, Qiao Qian. Analysis of Kang Dexin's fraud case based on the Triangle Theory of fraud [J]. Finance and Accounting, 2020 (06): 58-61.

[5] Li Dongyuan. Analysis of fraud in financial statements of Listed companies based on Fraud Triangle Theory [J]. Modern business, 2023 (20): 173-176. The DOI: 10.14097/j.carol carroll nki. 5392/2023.20.026.

[6] Li Jun, Yang Shengnan. Current situation and countermeasures analysis of financial statement fraud of listed companies [J]. China Collective Economy, 2024 (02): 146-149.

[7] Ye Fan, Ye Qinhua, Huang Shizhong. The identification and response of Merger and Acquisition fraud: Based on the case analysis of Kangni Electromechanical Merger and Longxin Technology [J]. Finance and Accounting, 2022 (02): 38-42.

[8] Zhou Ying, Sina Finance, Beginning and End of Strategic Deranging of Changyuan Group: Financial Fraud caused by Three high Mergers and Acquisitions, 2020.06.24.

[9] Zhang Lijun, Feng Lili, Hu Haichuan. Research on the motivation and economic consequences of financial fraud -- A case study of Kangmei Pharmaceutical [J]. Business Accounting, 2021 (22): 73-80.

[10] Wang Dandan, Luo Shixia. Analysis and governance of Financial fraud in listed companies [J]. Accountant, 2023 (07): 28-30.