

Research on the Effectiveness of The System of Independent Directors of Listed Companies in China

Shi Yu, Si'an Liang, Xincong Wang

(Foshan Institute of Science and Technology, Foshan, Guangdong 528000, China)

Abstract: This paper selects the financial data of Chinese A-share listed companies from 2010 to 2020 as the research sample, and empirically tests the negative impact of the number of independent directors and their ratio on financial fraud behavior from the perspective of corporate financial fraud. The research results find that the number of independent directors and the ratio of independent directors are significantly and positively correlated with corporate financial fraud behavior, which indicates that independent directors have a significant impact on The results found that the number of independent directors and the proportion of independent directors are significantly and positively correlated with the financial fraud behavior of enterprises, indicating that the independent directors did not effectively promote the current corporate management reform.

Keywords: Independent director, Effectiveness, Financial fraud.

1. Introduction

In the early twenty-first century, the collapse of Enron, WorldCom, and other business giants in the United States due to financial fraud revealed serious problems in corporate management, which led to a high level of attention to corporate management issues by government regulators and their stakeholders. The serious problems of Head of Corporate Management to the lack of reasonable restrictions on the words and actions of managers, which leads to the violation of the rights and interests of investors and other stakeholders by managers for personal gain, thus leading to the high risk of the company. In order to protect the rights of investors, the U.S. government enacted the Sarbanes-Oxley Act in 2002 and began to impose more stringent oversight on the corporate governance and financial statements of U.S. listed companies. Section 404 of the Act requires listed companies to submit an annual financial report signed by independent directors on behalf of the directors, and begins to emphasize the key role of independent directors in the corporate governance structure. The reason for the restriction of the independent directorship required by the Sarbanes-Oxley Act is that the independent directors must have a monitoring and questioning function. The supervisory function of independent directors is mainly to avoid the infringement of minority shareholders' rights and interests by major shareholders and managers, and to have a certain degree of independence because independent directors cannot work directly in the enterprise and cannot have a great business connection with shareholders and managers. Therefore, by increasing the proportion of outside independent directors, Internal Director Structure can be optimized, thus separating the executive and supervisory powers. The advisory role of independent directors is based in fact that they are usually professors of accounting, law and other disciplines and are able to provide professional and creative perspectives to shareholders and management and to influence strategic decisions of the company. This affects the risk-taking and operational performance of the company.

China also attaches great importance to the issue of corporate governance. China introduced Sole Director System in 2001 with the expectation that by introducing

independent controlling shareholders and sole directors in the management among shareholders, it would monitor and control the rights of internal major shareholders conspiring with managers or violating the rights of minority shareholders, and thus safeguard the rights and interests of external minority shareholders. In August of the same year, the China Securities Regulatory Commission issued the Guiding Opinions on the Establishment of Independent Director System in Listed Companies (hereinafter referred to as "Guiding Opinions"). The Guiding Opinions also pointed out that in order to continue to improve the governance structure of listed companies and effectively promote the standardized operation of domestic listed companies, domestic listed companies should also introduce the mechanism of independent directors and set corresponding standards for the proportion of independent directors, while companies should also create a reasonable environment for independent directors to play an active role and require independent directors to provide unique advice on important matters of the company. The national regulatory level has issued regulations to establish a sound management system for independent directors and to continuously optimize the corporate governance and supervision system in China.

Based on the introduction of the independent director system in China, this paper selects 1,052 companies with financial fraud activities from 2010 to 2020 as research subjects to empirically examine the impact of the independent director system on the financial fraud activities of companies in China from the background of unique company system in China, and to make reference suggestions for the management reform of listed companies in China.

2. Literature Review and Research Hypothesis

2.1. Independent Director System

Independent directorship is a major system design in corporate board reform, and the general view of corporate governance is that independent directors can, safeguard the rights and interests of small and medium shareholders, and are the most appropriate candidates for the way companies assume regulatory responsibility (Fang Xiaoyi and Zhang

Nan, 2013). Ding (2016) screened the main financial data of Chinese A-share listed companies from 2004-2014, analyzed the feasibility of independent director management from the perspective of corporate autonomy management, and concluded that director independence and positive autonomy of listed joint stock companies can significantly improve the financial performance of listed companies and their market value.

2.2. Financial Fraud

According to Jingjing Ma (2012), the emergence of financial fraud activities seriously affects the normal economic order of the investment securities market, makes investors lack trust and motivation, thus distorting the prices of investment companies and seriously inhibiting the normal development of the investment financial market. Liu Liguo (2003) investigated the association among the characteristics of corporate directors and financial statement fraud by using a sample of 14 listed companies that was investigated by the CSRC from 1994 to June 2006 because fraud was found when the first disclosure of corporate financial statements was made, and found that the higher the proportion of corporate internal directors among shareholders, the higher the chance of financial fraud: companies with financial fraud, firms that commit financial fraud usually have a large board of directors.

2.3. The influence of independent directors on financial malpractice

The introduction of the sole director mechanism to avoid financial fraud has also become a corresponding protection initiative, i.e., the sole director can enter the supervisory board in the role of power controller to fill the loopholes in the firm's inherent governance structure. Fang and Zhang (2013) empirically examined the negative impact of the number of sole directors on the financial fraud behavior of firms, and the results showed that the number of sole directors is positively correlated with the financial fraud behavior of firms. The unique characteristics of minority shareholders and the dysfunctional market for independent directors have created an "innate barrier" in social development for fraudulent activities by large shareholders and managers, thus limiting the full extent of the expected responsibilities of independent directors. Since the formation of independent directors is mostly recommended by the major shareholders or the top management of the company, their independence is doubtful. Mao, Zhihong, and Li, He (2005) conducted a study

on the association between the quality of independent directors and financial reporting fraud in a sample of a-share companies that disclosed their financial statements on the Shanghai Stock Exchange from 2001 to 2004 and were disciplined by the China Securities Regulatory Commission (CSRC) using a logistic regression analysis. The study shows that the quality of independent directors is negatively associated with corporate financial reporting fraud. Zhao, Chang-Wen, Tang, Ying-Kai, and Zhou, Jing,etal.(2008)analyzed the role of independent director mechanism in family firms, and considered the number of independent directors as an important dimension of independent director mechanism, and considered them as different dependent variables, and the market capitalization of the firm as a dependent variable, and analyzed the interaction between the two, and concluded that the number of independent directors has an important positive effect on the market capitalization of the firm after empirical analysis.

Based on this background, the paper thus proposes the research hypothesis that

Hypothesis 1: Under certain conditions, the proportion of independent directors is negatively related to the probability of financial fraud.

Hypothesis 2: Under certain conditions, the proportion of independent directors is positively related to the probability of financial fraud.

3. Model Design

3.1. Data sources

This paper will take the development of China's independent director system as the background, by collecting the a-share listed companies that was publicly condemned, publicly criticized or publicly punished by CSRC, Shanghai Stock Exchange and Shenzhen Stock Exchange for failure to disclose material corporate matters, false or seriously misleading statements in the information disclosure, and accounting information disclosure violations during 2010-2020 as the research objects, and excluding financial the study also excludes financial companies and companies with missing financial data, and finally, 1052 companies with financial fraud were identified to further verify the effectiveness of the independent director system in China. The data were obtained from CSMAR database, and STATA16 was used for the regression.

3.2. Variable selection and model design

Table 1. Basic information of variables

Variable Type	Variable Symbols	Variable definition and measurement
Explained variables	fraud	Whether the listed company has committed financial fraud
Explanatory variables	ind1	Percentage of independent directors
	ind2	Number of Independent Directors
Control variables	roa	Return on total assets (net profit/total average assets)
	lev	Gearing ratio (total liabilities/total assets)
	board	Board size (number of board members)
	Size	Company size (natural logarithm of total assets)
	trouble	Whether there are financial difficulties (at least one loss in the first three years = 1, otherwise = 0)
	audit	Type of audit opinion (standard unqualified opinion = 0, otherwise = 1)

The explanatory variables studied in this paper have two forms of occurrence (taking the value of 1) and non-

occurrence (taking the value of 0), which is typical 0-1 variables and meet the requirements for the applicability of nonlinear binary choice models. Based on this, this paper selects the binary logistic model to test the relationship between independent directors and financial fraud, and establishes the following model, if $\beta_1 < 0$, then hypothesis 1

holds, otherwise hypothesis 2 holds.

$$\text{Logit}(\text{fraud}) = \alpha + \beta_1 * \text{ind} + \beta_2 * \text{roa} + \beta_3 * \text{lev} + \beta_4 * \text{board} + \beta_5 * \text{size} + \beta_6 * \text{trouble} + \beta_7 * \text{audit}$$

3.3. Descriptive statistics and analysis

Table 2. Descriptive statistics of variables

Variable Name	Minimum value	Maximum value	Average value
Fraud	0	1	0.05
Ind1	0	8	3.24
Ind2	0.000000	0.800000	0.372216
Roa	-0.901284	2.939488	0.053522
Lev	0.007079	0.998544	0.452844
Board	4	18	8.81
Size	477331.0500	2.73319E+12	1.94015E+10
Trouble	0	1	0.23
audit	0	1	0.04

Table 2 shows the results of descriptive statistics of variables, from which it can be seen that: the mean value of the proportion of independent directors is only 37.22%, and the minimum value is 0. This indicates that some listed companies in China are not very active in setting up the system of independent directors, and some listed companies do not set up independent directors according to the requirements of the Securities and Futures Commission, or even do not meet the minimum requirements.

4. Empirical Results and Analysis

The model regression results are shown in Table 3. For the test of the model, the Hosmer and Lemeshow goodness-of-fit test was used in this paper. In the Hosmer and Lemeshow test, the chi-square value of the model is 12.796 and the significance is 0.119 (greater than 0.05), which indicates that the goodness of fit is good, therefore, the binary logistic model chosen in this paper can better reflect the influence of independent directors on financial fraud behavior.

Table 3. Analysis of binary logistic regression results

Variable Name	Coefficient	Standard error	Significance	Confidence interval
Percentage of independent directors (ind1)	1.2919254	2.3547	0.049	-9.91347
Number of independent directors (ind2)	1.951355	0.993206	0.024	0.0047074
Return on total assets (roa)	-1.741582	0.3625534	0.000	-2.452173
Gearing ratio (lev)	0.33338	0.1736913	0.045	-0.0070487
Board size (board)	-0.3219857	0.1163953	0.006	-0.5501163
Company size (size)	-0.0668302	0.028795	0.020	-0.1232673
Whether there is financial distress (double)	0.9497838	0.0768199	0.000	0.7992197
Audit opinion (audit)	1.037277	0.1066461	0.000	0.8282546
Constant term	-0.6070613	0.9519261	0.524	-1.25868

The regression results show that the ratio of independent directors and the number of independent directors are positively correlated with financial fraud at the 5% level, indicating that the higher the number and share of independent directors in the company's shareholders, the higher the risk of fraud in the company, and that the current independent director mechanism is not particularly effective. From the regression results of the control variables, companies in financial difficulties and companies with high gearing and standard unqualified audit opinions are more likely to commit fraud; meanwhile, if the return on total assets, board size, and company size are significantly negatively correlated, it indicates that the more profitable the company is, the larger the board and the stronger the assets, the less likely it is to commit financial fraud.

5. Research Conclusions and Implications

This paper examines the association between independent directorship and financial fraud in China through an empirical study of Chinese listed firms that have committed financial fraud from 2010 to 2020. The results show that the number of independent directors and the percentage of independent directors are significantly and positively correlated with financial fraud, indicating that the independent directorship system does not have an effective impact on corporate management in China, which directly leads to financial fraud. The results of this paper also suggest that the independent directorship in China does not have a control effect on corporate financial fraud. This may be related to the unique environment of Chinese companies on the one hand, and on the other hand, it may be due to the fact that many listed

companies in China have introduced the system of independent directors mostly to meet the requirements of the government's regulatory policies or to demonstrate the legitimacy of their companies to the public, rather than out of personal volition. As the election and decision-making power of independent directors are highly concentrated in the hands of major shareholders, and based on their own consideration, major shareholders often use their own authority to select people related to their own interests as independent directors, thus giving rise to "vase directors". Therefore, the relevant regulatory authorities should improve the current management system of independent directors, so that it can play an active management role and enhance the usefulness of the relevant policy information. The independent director system should be further improved so that it can play an active governance function to improve the usefulness of information for decision-making.

However, the discussion of independent directors on financial fraud in this paper has some shortcomings and needs to be expanded and deepened in the future. The theoretical limitation of this paper is that it only considers the influence of the number of independent directors and the proportion of independent directors on financial fraud.

References

- [1] Fang Xiaoyi, Zhang Nan. Analysis of the effectiveness of independent director system[J]. *Business Times*,2013,(19):84-85.
- [2] Ding Wenbo. Research on the effectiveness of independent director system--an empirical test based on A-share listed companies[J]. *Finance and Accounting Monthly*,2016,(35):32-36.
- [3] Niu Yiheng. Research on the motivation and governance of financial fraud in listed companies: a joint perspective of fraud risk factor theory and game theory[J]. *Journal of Finance and Accounting*, 2020,(12):99-103.
- [4] Ma Jingjing. Analysis and governance of financial reporting fraud in listed companies[J]. *Friends of Accounting*, 2012, (23): 95-97.
- [5] Liu LG, Du Y. An empirical study on the relationship between corporate governance and accounting information quality[J]. *Accounting Research*,2003,(02):28-36+65.
- [6] Mao Zhihong, Li He, Zhang Xingming. An empirical study on the relevance of independent directorship to financial reporting fraud [J]. *Friends of Accounting (Midterm Journal)*, 2006 (04): 20-22.
- [7] Zhao Changwen, Tang Yingkai, Zhou Jing, Zou Hui. Independent directors and corporate value in family firms: A test of the rationality of independent directorship in Chinese listed companies[J]. *Management World*, 2008 (08): 119-126+167.
- [8] Li Teng, Zhong Ming. Research on the effectiveness of the independent directorship system of China's insurance companies from the perspective of stakeholders[J]. *Insurance Research*,2019,(09):60-73.
- [9] Xu YB, Wan Yuanxing. Technically independent directors and technological innovation behavior of family firms-an examination of the effectiveness of the independent directorship [J]. *Macroeconomic Research*, 2019,(03):110-120.
- [10] Huang Jun, Pan Meixia. Effectiveness of independent directorship and connected transactions of controlling shareholders: empirical data from manufacturing companies listed on the Shenzhen Stock Exchange[J]. *Financial Theory and Practice*, 2010, 31(01):47-51.
- [11] Zheng Chunmei, Li Wenyao. An empirical study on the effectiveness of China's independent directorship based on accounting regulation[J]. *Management World*,2011(03):184-185.
- [12] Deng Xiaoyang, Li Qin. Research on the effectiveness of independent directors based on the perspective of surplus management[J]. *Financial Theory and Practice*, 2011, 32(01): 65-68.
- [13] Zhang Yuke, Shen Fuping. A review of the effectiveness of China's independent director system and its operation mechanism[J]. *Journal of Hebei University (Philosophy and Social Science Edition)*, 2007(06):62-67.