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RESEARCH ARTICLE

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Audit committee, board characteristics and quality of financial reporting: An empirical research on Chinese securities market

Abstract Board independence and the board's expertise characteristics are key factors influencing the quality of financial reporting. Companies, having a higher percentage of independent directors, having independent financial directors, or having an audit committee on board are more likely to generate quality accounting earnings information. Variables representing board behavior characteristics, namely, ratio of shares owned by the board, board meeting frequency within a year, and the number of independent directors holding posts concurrently in the controlling shareholder's company, are not significantly related to the quality of financial reporting. Board meeting frequency is even abnormally negatively related to the quality of financial reporting.

Keywords independent director institution, imposed changes, board characteristics, quality of financial reporting

摘要 董事会的独立性、专业性特征是影响我国上市公司财务呈报质量的重要因素，公司拥有更高比例的独立董事、拥有财务独立董事、或者设有审计专门委员会，均能更好地抑制公司的盈余管理动机或程度，从而呈报更高质量的会计盈余信息。然而作为表征董事会行为特征的变量，如董事会的持股水平、董事会年度会议频率和兼任控股股东职务等，却与公司盈余质量之间没有显著关系，甚至会议频率与盈余质量之间出现了反常的负相关关系。

关键词 独立董事制度，强制性变迁，董事会特征，盈余质量

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1 Introduction

Quality accounting information and particularly, quality earnings information are important to market efficiency. The generation of quality earnings information depends on a whole set of guarantee mechanisms, for instance, a governance mechanism capable of efficiently supervising the process of accounting information reporting. The board of directors, as the core of corporate governance, will undoubtedly play a key role in supervising listed companies' financial reporting process and the quality of financial reporting. Strengthening the board of directors, such as enhancing the board's independence, improving its capabilities of detecting problems in financial statements, and clarifying explicitly directors' responsibilities, is regarded as an efficient way to ameliorate the corporate governance practices and the quality of financial reporting. This idea has been increasingly adopted in various regulations and rules made by concerning professional associations and regulatory bodies. At preset, listed companies in China are undergoing a special and sensitive moment for corporate governance reform and board composition restructure. The establishment of independent director institution becomes compulsory. Resulted from this new change in board composition, a series of significant consequences has occurred. Therefore, to answer the following questions has become usually necessary and urgent: (1) Will new changes in board composition significantly reduce the level of earnings management in Chinese listed companies? (2) Will new changes in board composition restrain the occurrence of law or regulation violation in financial reporting? (3) Which changes in board composition are useful? Which are useless? (4) How do board composition characteristics affect the quality of financial reporting?

This paper was designed to answer these questions. Based on statistics of listed companies in China, we systematically examined the interrelation between board composition and the quality of financial reporting, and explored the micro-governance role the board plays in supervising the process of financial reporting.

2 Literature review and hypotheses

Drawn on existing literature on correlation between board composition and the quality of financial reporting, together with the practical institutional situation in China, we categorized board composition into three quantifiable groups: composition characteristics (including board independence and board size), expertise characteristics, and behavior characteristics. We then adopted the general model of prevailing board studies as a theoretical basis and set up three regression equations to explore the correlation between board composition and the quality of financial reporting.

2.1 Board composition characteristics and the quality of financial reporting

Classical governance theory assumes that since outside directors (independent directors) have inner motives to perform their supervision duties so as to maintain and develop their own reputations in market, the introduction of independent directors to board will improve the board's supervision efficiency over managerial personnel (Fama and Jensen, 1983). As a corollary, researchers studying the board's supervision efficiency always focus on the percentage of independent directors on board (or board independence). As one of the pioneers probing into whether board composition influences its supervision efficiency against the background of financial fraud, Beasley (1996) sampled 75 financial fraud companies and 75 "clean" ones. He confirmed that a higher percentage of independent directors on board can significantly reduce the possibility of financial fraud. Most researches that followed supported a significant negative relation between board independence and the quality of financial reporting, revealing an active supervision role independent directors have played in board (Dechow et al., 1996; Chtourou et al., 2001; Klein, 2002; Kao and Chen, 2004).

Since the introduction of independent director institution into China, Chinese scholars have carried out numerous researches to test whether this new change in board composition can improves companies' comprehensive performance. Most of these researches reached more or less similar conclusions: independent director institution (or board independence) is not significantly positively related to companies' comprehensive performance. These researches, however, mainly focused on the purpose of ameliorating focused companies' performance. Actually, activities of shareholders' interest protection, such as enhancing the quality of financial reporting, are also embodiments of corporate governance effect, as well as the foundation of company's comprehensive performance. Thus, we proposed the following hypothesis to further testify whether independent director institution can effectively improve the quality of financial reporting.

Hypothesis 1a. The higher percentage of independent directors on board, the more reliable the company's financial reporting.

The Guidelines for Introducing Independent Directors to the Board of Directors of Listed Companies (2001) (hereinafter "the Guidelines") require that "at least one third of the board shall be independent directors by June 30th, 2003." It provided for us a good chance to test the policy significance of board independence. As descriptive statistics below shown, as many as 28% listed companies had exactly one third independent directors on board. We thus presumed that many listed companies introduced independent directors to their boards merely to cater to the requirement of government regulations. In other words, independent directors in these companies are more like a political decoration, rather than potential supervisors, let alone actively perform their duties. Therefore, it was reasonable to hypothesize that only those companies having a percentage of independent directors higher than one third, rather than exactly one third, are more likely to generate quality financial reporting.

Hypothesis 1b. Companies with a percentage of independent directors higher than one third, rather than exactly one third, are more likely to generate more reliable financial reporting than that of companies with a percentage lower than one-third.

Leadership structure in a company, i.e. the degree of separation between the posts of board chairman and president, reflects independence of the board and innovation space the management gets in the company. Neither Xie et al., (2003) nor Kao and Chen (2004) found that CEO holds concurrently the post of board chairman (or vise verse) has any positive or negative influence upon the quality of the company's financial reporting. In other words, either the two positions holds by one person concurrently or a separation of the said two positions is acceptable from the company's stance. In China, however, a two-in-one situation is regarded as a main obstacle to company governance reform. China Security Regulatory Committee (CSRC) officially requires a separation of the posts of board chairman and CEO as a key step towards perfection of corporate governance structure. With these analyses, we developed the following hypothesis:

Hypothesis 1c. The more separated a company's leadership structure is, the more beneficial it is to the quality of the company's financial reporting.

Board size exerts an effect upon managerial personnel from two aspects: first, the overall professional qualifications of the board and its service-providing capabilities; second, the efficiency of communication and decision-making. So far, studies on relation between board size and the quality of financial reporting have reached three different conclusions, namely, positive relation (Beasley, 1996; Kao and Chen, 2004), negative relation (Xie et al., 2003; Anderson et al., 2004) and no relation (Bardard et al., 2004; Abbott et al., 2004), contingent upon practical situations. As an expansion in personnel increases both the board's overall professional capabilities, and inefficiency in communication and decision-making, we need to contrast the gains in professional capabilities to increases marginal cost in inefficiency when making decisions to introduce more directors into board. Thus, it seemed reasonable to hypothesize that:

Hypothesis 1d. The relationship between board size and the quality of financial reporting is contingent upon practical situations.

2.2 Board expertise characteristics and the quality of financial reporting

Will an enhancement of independence improve the board's supervisory naturally? Park and Shin's (2004) view is thought-provoking. They argued that though all outside directors may have motives to supervise companies' earnings management activities, only those who have expertise in finance or accountings are capable of actually doing so. Park and Skin found that, even in developed capital markets like Canada, more independent directors (a symbol of board independence enhancement) do not necessarily lead to a decrease of overall earnings management activities. It is those financially qualified independent directors (or active organization investors) that actually enhance the board's supervision efficiency over financial fraud. Financial sophistication, therefore, is what really matters here. This argument was further supported by a number of relevant researches (Booth and Deli, 1999; Xie et al., 2003). Moreover, considering that the basic function of an audit committee is to press companies to generate quality financial statements, as well as being the final judge of the quality of the financial reporting process, most scholars agree that the establishment of an audit committee, or an improvement in the committee's independence, will put a curb on earnings management activities (McMullen, 1996; Abbott et al., 2000; Chtourou et al., 2001; Abbott et al., 2004; Bedard et al., 2004).

The guidelines stipulate that at least one of the indepedent directors should be an financial or accounting professional. CSRC hopes that by introducing financial experts into board, the board of directors can perform its duties of supervision better. Meanwhile, the Code of Corporate Goverance for Listed Companies in China stipulates that listed companies "may set up an audit committee on board in accordance with the resolutions of the shareholders' meeting", so as to boost the board's decision-making and supervision capabilities. Drawing on the above rationale, we proposed hypotheses 2a and 2b as below:

Hypothesis 2a. The financial reporting of listed companies with at least one independet financial director on board is more reliable than that of those companies without.

Hypothesis 2b. The financial reporting of listed companies having an audit committee on board is more reliable than that of those companies without.

2.3 Board behavior characteristics and the quality of financial reporting

Variables concerning board behavior characteristics mainly include board meeting frequency within a year, explicit responsibilities of financial reporting supervision, and share ratio of the board, etc. First of all, as a comprehensive variable of board behavior characteristics, the relation between board meeting frequency and the quality of financial reporting is clear: meeting frequency (representing degree of hard-working) is negatively related to possibilities of financial frauds (Hermalin and Weisbach, 1991; McMullen, 1996; Abbott et al., 2004).

Hypothesis 3a. Board meeting frequency is significantly positively related to the quality of financial reporting.

Jesen (1983) argued that, unless providing proper incentives, independent directors hardly have any motives to supervise managerial personnel. Beasley (1996) suggested the share ratios of outside directors (independent directors) are significantly negatively related to financial fraud (earning management activities). Yet recent researches found that stock option incentives are useless, even harmful to board supervisory efficiency (Kao and Chen, 2004; Bardard et al., 2004). One possible explanation may come from the overuse of stock option as an incentive. That is to say, stock option offering exceeds a certain limit would worsen the "insider control" problem and tempt independent directors to exploit (instead of protecting) the interests of minority shareholders. Considering few Chinese listed companies use stock option incentives, the problem of stock-option overuse may not be widespread in China. More attention should be paid to problems of how to properly motivate Chinese directors. Given these assumptions, the following was hypothesized:

Hypothesis 3b. The board's share ratio is significantly positively related to the quality of financial reporting.

The difference between capital market in China and developed capital markets in western countries stems from the unique property rights structure and ownership structure in China. When we examine board characteristics, we can not afford to ignore the interaction mechanism between the board and the owner of the company. To illustrate, one may need to look at the complicated relationship between Chinese listed companies and their controlling shareholders. The senior managerial personnel, directors sent to a listed company by controlling shareholder may give rise to agent cost. As for directors concurrently holding posts in controlling shareholder's company, the impact is twofold: first, it may influence the director's job involvement; second, the director may be manipulated by controlling shareholders to usurp upon the listed company's interest.

Hypothesis 3c. There is a significant negative relation between the percentage of directors concurrently holding posts in controlling shareholder's company and the quality of financial reporting.

3 Research design

3.1 Samples and data

In accordance with the progress of the establishment of independent director institution, we selected a sample of 1192 companies, from the total 1262 listed companies in both Shenzhen and Shanghai stock markets, (we excluded 10 financial companies owing to their special industry background. In addition, out of consideration for financial reporting quality measurement, we needed to analyze the financial data in 2002. We thus eliminated another 60 companies which became listed only in 2003). All data used in this article were disclosed in the above companies' annual reports and we collected them secondarily from the website at http://www.cninfo.com.cn, as well as several databases co-developed by the Center for China Financial Research (Hong Kong University) and GTA Information Technology Co., Ltd, including GSMARR China Stock Market Financial Database—Annual Report, GSMARR China Stock Market Trading Database, and China Listed Firm's Corporate Governance Research Database.

3.2 Variable definitions and calculation

3.2.1 Appraisal of the quality of financial reporting

In this paper, we used items of earnings management to appraise the quality of accounting earnings information. In empirical studies, a common practice is to divide accounting earnings (i.e. total accrued profit) into discretionary accruals and non-discretionary accruals and use the latter as a sign of existence or level of earnings management. In view of the non-time series characteristics of our data, we adopted and expanded the cross-section modified Jones Model[1] to appraise the earnings management level in Chinese listed companies.

3.2.2 Board characteristics variables

A. Board composition characteristics variables. First, we designed four kinds of variables to represent the independence characteristics of the board: **(a)** percentage of independent directors on board. Independent directors refer to those directors who have been explicitly and clearly announced as independent directors in a listed company's annual report. We used *ROIDD* to stand for the percentage of independent directors on board, i.e. the ratio of independent directors to total number of directors on board. **(b)** Dummy variable of leadership structure—*DLDQ*. When CEO (or general manager, or president) holds concurrently the post of board chairman, $DLDQ = 1$; holds concurrently the post of vice chairman of the board or director, $DLDQ = 0.5$; does not hold any post on board, $DIDQ = 0$. **(c).** Dummy variable $DROIDD_1$. When the percentage of independent directors on board equals or is higher than one third, $DROIDD_1 = 1$, otherwise $DROIDD_1 = 0$. **(d)**. Dummy variable $DROIDD_2$. When the percentage of independent directors on board is higher than one third, $DROIDD_2 = 1$, otherwise $DROIDD_2 = 0$. The purpose of setting dummy variables $DROIDD_1$ and $DROIDD_2$

[1] The reason why we adopted cross-section expanded Jones Model instead of the original model as the basis of appraising the level of listed company's earnings management is that the expanded model has a better overall goodness-of-fit (Adj-R^2 are 0.304 and 0.0066 respectively). Also, we did not demonstrate how to use the model to appraise earnings management due to limited space. Relevant data are available upon request.

simultaneously was to test whether listed companies introduce independent directors to board merely to cater to regulatory requirement. We then used the natural logarithm of number of directors on board (ln*BOARDNUM*) to represent the board size in the same year.

B. Board expertise characteristics variables. This group of variables include **(a)**. *IDDFIN* dummy variable stands for whether there is/are financial professional(s) as independent directors. If yes, $IDDFIN = 1$, otherwise $IDDFIN = 0$. **(b).** *AUDITCOM* dummy variable, stands for whether there is an audit committee on board to supervise the process of financial reporting and provide professional audit services. If yes, $AUDITCOM = 1$, otherwise $AUDITCOM = 0$.

C. Board behavior characteristics. This group of variables include **(a).** Board meeting frequency within a year (BOARDMEET), is as disclosed in the company's annual report. **(b)** The board's share ratio (BOARDSTO) represents the ratio of total share hold by directors to the total share issued by the company at the end of a fiscal year. **(c).** Directors hold concurrently posts in the controlling shareholder's company (ROCONSTO), represents the ratio of number of directors hold concurrently posts in the controlling shareholder's to total number of directors on board.

3.2.3 Control variables

There might be a lot of factors influencing earning management. Drawing on prevailing practice and the special institutional background in China, we selected seven items that might affect earning management as control variables (as shown in Table 1).

3.3 Research models

Below, we designed three multi-regression models to test the correlation between board composition and the quality of financial reporting.

$$\begin{aligned}ABS(DA_t/A_{t-1}) = {} & \alpha_0 + \alpha_1 ROIDD + \alpha_2 DLDQ + \alpha_3 ln(BOARDNUM) \\ & + \alpha_4 IDDFIN + \alpha_5 AUDITCOM + \alpha_6 BOARDMEET \\ & + \alpha_7 BOARDSTO + \alpha_8 ROCONSTO + \alpha_9 ln(ASSET) \\ & + \alpha_{10} LEVERGE + \alpha_{11} MANSTOCK + \alpha_{12} DLOSS \\ & + \alpha_{13} GROSALES + \alpha_{14} DROE + \alpha_{15} FIRSTOCK + \xi_1 \qquad (1)\end{aligned}$$

$$\begin{aligned}ABS(DA_t/A_{t-1}) = {} & \beta_0 + \beta_1 DROIDD_1 + \beta_2 DLDQ + \beta_3 ln(BOARDNUM) \\ & + \beta_4 IDDFIN + \beta_5 AUDITCOM + \beta_6 BOARDMEET \\ & + \beta_7 BOARDSTO + \beta_8 ROCONSTO + \beta_9 ln(ASSET) \\ & + \beta_{10} LEVERGE + \beta_{11} MANSTOCK + \beta_{12} DLOSS \\ & + \beta_{13} GROSALES + \beta_{14} DROE + \beta_{15} FIRSTOCK + \xi_2 \qquad (2)\end{aligned}$$

Table 1 Definitions of control variables and explanation

Variable	Symbol	Definition	Explanation
Company scale	Ln(*ASSENT*)	The natural logarithm of the company's total assets	A company's scale may be an important factor directly restrains the degree of its earnings management.
Financial leverage	*LEVERGE*	The ratio of total liabilities to total assets	The Liability Contract Hypothesis of earnings management.
Management stock holding	*MANSTOCK*	The sum of management share ratio at the end of the year	The Dividend Plan Hypothesis of earnings management.
Losses in previous fiscal years	*DLOSS*	$DLOSS = 1$, if the company suffered losses(i.e. net profit was negative) in previous year, otherwise, $DLOSS = 0$	Whether the company suffered losses in previous year may influence the earnings management of this year.
Abnormal fluctuation of the company's performance	*GROSALES*	The absolute value of the ratio of main business revenue of this year minus main business revenue in previous year to total assets in previous year	An abnormal fluctuation of a company's performance may be a sign of possible financial fraud.
Motive for right offering	*DROE*	$DROE = 1$, if the company's ratio of net earnings to total assets is 6%–7%, otherwise, $DROE = 0$	There maybe a wide spread earnings management activities aiming at more right offerings among Chinese listed companies.
Centralization of stock rights	*FIRSTOCK*	The stock ratio of the company's largest stockholder	The special largest shareholder in China may affect the level of earnings management

$$\begin{aligned} ABS(DA_t/A_{t-1}) = {} & \gamma_0 + \gamma_1 DROIDD_1 + \gamma_2 DLDQ + \gamma_3 ln(BOARDNUM) \\ & + \gamma_4 IDDFIN + \gamma_5 AUDITCOM + \gamma_6 BOARDMEET \\ & + \gamma_7 BOARDSTO + \gamma_8 ROCONSTO + \gamma_9 ln(ASSET) \\ & + \gamma_{10} LEVERGE + \gamma_{11} MANSTOCK + \gamma_{12} DLOSS \\ & + \gamma_{13} GROSALES + \gamma_{14} DROE + \gamma_{15} FIRSTOCK + \xi_3 \end{aligned} \tag{3}$$

The only difference among the above equations lies in the variables standing for board independence. Other variables of board characteristics and control variables are completely the same. In doing so, we wanted to discover what kind of board independence might have a significant relation to the quality of financial reporting. Besides the mentioned models, we also used descriptive statistics analysis and linear regression method to analyze our results.

The software packages we used in this study are SPSS 12.0 and Review 3.1.

4 Results and analysis

4.1 Descriptive statistic results

Table 2 depicts the descriptive statistics results of the relation between board characteristics variables and the quality of financial reporting. With the help of frequency analysis method, we drew preliminary conclusions as follows: (1). A company's discretionary accruals exhibit an overall tendency of reducing earnings (the mean of DA_t/A_{t-1} is negative). Also, the maximum value and minimum value of DA_t/A_{t-1} are 1.45 and −1.07 respectively (i.e. 1.45 and 1.27 times of companies' total assets), indicating there is a big space of earnings management for listed companies. Meanwhile, the mean of absolute value of discretionary accruals is 7.55%, implying earnings management activities may be widespread among Chinese listed companies. (2) To meet the requirement of the Guidelines, 64% listed companies have reached a percentage of one third independent directors on their boards by the end of 2003. Among them, 36% companies have a percentage higher than one third, and 28% exactly one third. (3) Though as many as 78% listed companies have financial professionals as their independent directors, there are still 22% companies failed to meet the Guidelines requirement. (4) The positions of president and board chairman tend to be separated on the whole (mean = 0.45). Yet the frequency analysis of leadership structure shows that, in most listed companies (69.2%. The above two positions are only partially separated while the cases of completely separated and two-in-one, account for 18.3% and 12.5% respectively.

(5) The mean of Chinese listed companies' board size is approximately 10, reflecting typical characteristics of Chinese board size: most boards in China consist of 7, 9, or 11 directors (accounting for 10.7%, 34.6%, and 19.6% respectively). (6) The data of board meeting frequency shows that there is a huge difference among companies: the least frequent board holds only one meeting within a whole year, whereas the most diligent board holds as many as 32 meetings. Frequency analysis shows that most (78.7%) boards meet 4 to 9 times a year. (7) Low director share ratio. The mean of total share ratio held by all directors is only 0.0016% (the highest director share ratio is a mere 0.19%). (8) 32% listed companies have an audit committee on board. As disclosed in

Table 2 Results of Descriptive Statistics of the Main Variables

Variables	*N*	*Minimum*	*Maximum*	*Mean*	25%	*Median*	75%	*Std. Dev*
DA_t/A_{t-1}	1 192	−1.072 3	1.452 9	−0.032 6	−0.045 0	−0.016 2	0.040 1	0.138 9
$ABS(DA_t/A_{t-1})$	1 192	0.001 0	1.452 9	0.075 5	0.021 0	0.044 1	0.086 5	0.089 4
$DROIDD_1$	1 192	0	1	0.64	0	1.00	1	0.48
$DROIDD_2$	1 192	0	1	0.36	0	0	1	0.48
IDDFIN	1 192	0	1	0.78	1	1	1	0.42
BOARDNUM	1 192	5	19	9.92	9	9	11	2.30
Ln (*BOARDNUM*)	1 192	1.61	2.94	2.29	2.19	2.19	2.40	0.24
BOARDMEET	1 192	1	32	7.60	5	7	8	3.11
BOARDSTO	1 192	0	0.001 90	0.000 16	0.000 03	0.000 03	0.000 18	0.000 33
DLDQ	1 192	0	1	0.45	0.5	0.5	0.5	0.28
ROCONSTO	1 192	0	0.73	0.36	0.22	0.36	0.5	0.19
AUDITCOM	1 192	0	1	0.32	0	0	1	0.47

annual reports, most audit committeemen are well qualified and there are professional accountants acted as conveners. We thus place great expectations on these audit committees to be effective supervisors. (9). There are a high percentage of directors hold concurrently posts at the controlling shareholder's company. More than one third (mean was 36%) directors are employees of controlling shareholders, implying an intimate and complex relation between listed companies and their controlling shareholders.

4.2 Regression results analysis

As shown in Table 3, except the variables of board size and board meeting frequency, the relations of all other explanation variables (including control variables) with $ABS(DA_t/A_{t-1})$ are as expected. First, as the definition of board independence designated, there shall be a significant positive relation between the percentages of independent directors and the quality of financial reporting, indicating a higher percentage of independent directors on board are more likely to restrain and decrease the degree of earning management in the company. Meanwhile, the other two variables of board independence, $DROIDD_1$ and $DROIDD_2$, respectively exhibit significant and non-significant relations with the quality of financial reporting, suggesting that if introduction of independent directors to boards merely catering to regulatory demand could hardly guarantee an effective supervision over the process of financial reporting generation. Specifically, only those companies with a percentage of independent directors higher than one third, rather than the exact number of one third, demonstrate higher supervision efficiency over earnings management. As for the goodness of fit of the above mentioned models, they decrease in the order of $DROIDD_2$

ROIDD, and *DROIDD*$_1$ (surely the significant levels of regression coefficients of these three variables also decrease in the same order), indicating that the correlation between board independence and the quality of financial reporting varied with different definitions of board independence. Therefore, to find an optimal definition for board independence is the key to correct understanding of the interaction mechanism between board independence and the quality of financial reporting. Also, results show that the negative relation between leadership structure and the quality of financial reporting is not significant.

Table 3 Results of Multi-Regression Analysis on the Relation between Board Characteristics and the Quality of Financial Reporting

Variable	Expected symbol	Model (4)		Model (5)		Model (6)	
		Coefficient	*T*-value	Coefficient	*T*-value	Coefficient	*T*-value
(Constant)		–0.368	–1.349	–0.136	–0.51	–0.204	–0.808
ROIDD	–	–0.322	–2.473**	—	—	—	—
DROIDD$_1$	–	—	—	–0.013	–0.507	—	—
DROIDD$_2$	–	—	—	—	—	–0.023	–2.638***
DLDQ	+	0.039	0.983	0.023	0.574	0.039	0.816
ln (*BOARDNUM*)	?	0.009	0.216	0.037	0.825	0.028	0.755
IDDFIN	–	–0.046	–1.710*	–0.047	–1.721*	–0.048	–2.145**
AUDITCOM	–	–0.045	–2.087**	–0.040	–1.856*	–0.035	–1.835*
BOARDMEET	–	0.003	1.191	0.003	1.101	0.003	0.979
BOARDSTO	–	–22.386	–0.381	–32.769	–0.556	–21.478	–0.369
ROCONSTO	+	0.003	0.057	0.001	0.027	–0.004	–0.083
ln(*ASSET*)	–	–0.017	–1.726*	–0.019	–1.931*	–0.016	–1.714*
LEVERGE	+	0.020	2.588**	0.017	2.068**	0.023	3.001***
MANSTO	+	8.230	0.137	1.391	0.023	1.081	0.018
DLOSS	+	0.065	1.907*	0.108	2.555**	0.041	3.122***
GROSALES	+	0.087	2.381**	0.164	3.638***	0.043	3.603***
DROE	+	0.055	1.868**	0.063	2.096**	0.029	1.693*
FIRSTO	+	0.029	0.503	0.0242	0.400	0.001	0.496
Adj-R^2		0.291		0.244		0.297	
F		3.814		3.211		3.900	
N		1 192		1 192		1 192	

The fact that other board characteristics variables are significantly related to the quality of financial reporting shows that, having financial professionals as independent directors, or establishment of audit committees to exclusively supervise financial reporting process are helpful in diminishing the motives and degree of earnings management. In a similar vein, proper stock option incentives can encourage directors to better perform their duties. Most of listed companies in China, to our dismay, are not good at using stock options as an effective incentive. What's more, the two key items of board characteristics, namely board size and board meeting frequency, failed to exert positive impact upon the level of earnings management. Board meeting frequency is even abnormally negatively related to the quality of financial reporting, indicating that the more hardworking the directors, the poorer quality the earning information. Further investigation is needed on this counter-intuitive phenomenon.

As our results shown, items of earnings management are significantly positively related to control variables, such as company scale, ratio of liabilities to total assets, abnormal fluctuation in company performance, whether suffered losses in previous years, motive for right offering, etc. Meanwhile, though other two control variables (managers' share ratio and the largest shareholder) affected company's earning quality as we had expected, we did not find the relations significant. More specifically, factors influencing Chinese listed companies' earnings management had not only all the characteristics of developed capital markets (such as earnings management significantly and negatively related to company size, and positively related to variables like ratio of liabilities to total assets, abnormal fluctuation in company performance, and whether suffered losses in previous year, etc.), but also the typical characteristics of Chinese capital market under the background of imposed institutional changes (such as the widespread earnings management activities driven by right offering seeking)

5 Conclusions and limitations

This paper explored the interrelationship between board characteristics and the quality of financial reporting by means of theoretical analysis and empirical testing. We then proceeded to probe into the micro-governance effect of audit committees and board of directors upon the process of financial reporting. In contrast, previous work on this topic has mostly focused on the comprehensive governance effect. The findings from the current study suggest that:

(1). Board independence is a key factor influencing the quality of financial reporting. The higher percentage of independent directors on board, the more possibility the board can restrains earnings management activities in the company. Companies with an independent director percentage higher than one third tend to generate better quality financial reporting than those companies with a less percentage. And the higher the percentage is, the better the quality of financial reporting. This finding is contrary to some foreign researchers' claims that there is no significantly positive relation between Chinese independent director institution and company performance. In addition, we also found that the establishments of independent director institution merely to cater to government regulations can hardly guarantee an effective supervision over the process of financial reporting.

(2). We also found that financially qualified independent directors and audit committees, who are exclusively responsible for supervising the quality of financial reporting, can help Chinese listed companies to diminish both the motive and degree of earnings management. Therefore, the board's expertise characteristics are indispensable to the board's supervision effectiveness and quality financial reporting.

(3). We did not find the board behavior characteristics, namely the share ratio of directors, board meeting frequency, and directors hold concurrently posts at the controlling shareholder's company exert any significant affect upon the quality of financial reporting. In particular, our results showed that board meeting frequency is negatively related to the quality of financial reporting. This is quite again the common sense and contrary to some foreign researchers' findings.

Limitations of the current study are three items. First, in view of the institutional background influence upon Chinese board characteristics (such as the Guidelines requires that at least one third of board shall be independent directors by June 30th, 2003), we sampled only listed companies in 2003, this might affect the reliability of our conclusions to a certain degree. Second, though we entered several control variables into the regression models to reduce deviations resulted from calculating the items of earnings management, we were unable to consider all possible residual-related factors. Thus deviations in items of earnings quality measurement are unavoidable in our study. Third, an important limitation is that this study only tested the apparent association between board characteristics and the quality of financial reporting from a static perspective. This neglect of the deeper causality link might hinder us from completely understanding the relation connotations of the above two. Meanwhile, though we found some evidences revealing a certain kind of correlation between board characteristics and the quality of financial reporting, we were incapable of explaining how do the board characteristics influence and improve the quality of financial reporting, the mechanism of which still remains a black box waiting to be shed light upon.

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