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Research on the Board Structure and the Timeliness of Accounting Information Disclosure-- Empirical Research Based on the Data of GEM Listing Corporations

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Abstract: As an important part of market information, accounting information reveals the timeliness, which plays an extremely important role to the market supervisors and investors. This research took 852 annual financial reports, published by Chinese Growth Enterprise Market(GEM) listing corporations from 2012-2014, as the samples to do empirical research on the board structure's influences on the accounting information disclosure. The results showed that the board structure had influences on the timeliness of accounting information disclosure in a certain extent, CEO duality in listing corporation had negative correlation with the timeliness of accounting information disclosure, and the proportion of independent directors had positive correlation with it.

Key words: Accounting information disclosure, Timeliness, The board structure

1. INTRUDUCTION

1.1 Research background and meanings

The timeliness of accounting information disclosure is defined that users can get the accounting information in specified or demanded time limit, which is an important property of accounting information quality. So far, both Chinese and foreign scholars have examined the factors which have influences on the timeliness of accounting information disclosure, such as company's scale, industry, audit opinions, business complexity, all of which are often seemed as tested variables , but with seldom research on the influences of the internal structure of corporation governance on the timeliness of accounting information disclosure. The board is the important part of corporation governance structure, for example, Fama thought the board is a significant internal control mechanism[1]. The board has influences on the efficiency of internal control and then affects the efficiency of accounting information disclosure. Therefore, particularly for stock regulators, shareholders(especially medium and small shareholders) and creditors, the timeliness of accounting information disclosure under the control of the board is gradually becoming the focus. By means of the timeliness of accounting information disclosure associated with the board, it proposes and verifies some conclusions that the board structure may affect the timeliness of accounting information disclosure, which provides methods to improve the resource allocation efficiency of capital market and the board structure of listing corporation, it also provides some useful ideas for the supervision department to improve the timeliness of accounting information disclosure.

The GEM listing corporations service for independent innovation enterprises and other growth oriented enterprises with low threshold, weak internal control etc. One of the requirements of accounting information quality is the timeliness of accounting information. The corporate governance structure and mechanism are very important, among many factors that have affected accounting information quality of GEM listing corporations. But it is the board of directors that play a fundamental role in corporate governance. Therefore, investing the relationship of the GEM board and its timeliness of accounting information disclosure have theoretical value and practical siginificance.

1.2 Literature reviews

The domestic and foreign scholars have fully studied the influence factors of the timeliness of accounting information disclosure, company's scale[2] [3],types of message [4] [5],audit opinions [6] [7] and so on. This paper focus on the relationship between the board structure and the timeliness of accounting information disclosure.

In the scale of the board, some scholars thought it had negative correlations with the timeliness of accounting information disclosure. As Fama and Jensen(1983) pointed out, the fewer number of the board, the higher effectiveness of supervision[8]. And then Lipton and Lorsch (1992) showed that the communication will drive down the efficiency of the board, if the number were more than 10[9]. But others, like Guan Baogang(2013) ,figured out that the scale of the board didn't have obvious correlations with information disclosure quality[10]. Of course, opinions about it varies and meanwhile other parts of the board structure were widely discussed, like the proportion of independent directors and CEO duality. Such as Forker (1992) found that CEO duality had negative correlations with the information disclosure of listing Corporation[11], because supervision of managers would be decreased and then would affect the timeliness of accounting information disclosure. Qi Weishan and Ouyang Lingnan(2005) thought that the proportion of independent directors had negative correlations with listing companies' annual reports delay[12]. Gao Yanping and Wang Pingxin(2007) had also reached an agreement: the larger proportion of independent directors of listing corporations[13], the better function independent directors system in the timeliness of annual reports' disclosure would make.

Generally speaking, domestic and foreign scholars have done systematic analysis on the timeliness of accounting information disclosure, but mostly from aspects of earnings and audit opinions, seldom from the perspective of the board structure, and some scholars have different opinions about relevant researches. In addition, domestic scholars have done the research based on the data of Shanghai and Shenzhen A shares, which includes a certain number of state-owned enterprises. The research thinks that the entrepreneurial enterprises gradually become the main power of economic transformation taking the economic background of China into account, because the state-owned enterprises' background and management ways differ from the general listing corporation. So this paper chose the GEM Listing Corporation as the research object to make a preliminary discussion on the problem of the board structure of the timeliness of accounting information disclosure. It is very important to explore the impact of the board affecting the timeliness of accounting disclosure.

2. THEORETICAL BASIS AND HYPOTHESIS

The reason why accounting information disclosure was born is that information asymmetry and agency conflicts between managers and outside investors came into being because of the problems of information and agency[14]. In the company law and governance practices, the board had absolute power in the supervision of managers as the spokesman of shareholders, including leading external information disclosure of firms.

The board of directors, which should be elected by shareholders' meeting, is regarded as the representative of the shareholders to executive supervision and management. If the top ten shareholders are related in the fact of higher ownership concentration, it will harm the medium and small shareholders' benefits because it is easy for shareholders with high proportion to delay information disclosure. Therefore, the following hypothesis was put forward.

Hypothesis 1: With other conditions limited, the relationship between the top ten shareholders and the timeliness of accounting information is negatively related. It is timelier to disclose accounting information if the top ten shareholders are not related.

The scale of the board is a significant factor to influence the degree of information disclosure. As the key of the companies' governance mechanism, the appropriate scale of the board can improve the timeliness of accounting information disclosure in the suitable range. If it is too large, it will have a strong influence on the working efficiency of the board. On the contrary, the justice of the board work will be questioned. So the effectiveness of corporation governance will be improved in suitable range with the appropriate raising in the scale of the board. Therefore, the following hypothesis was put forward.

Hypothesis 2: With other conditions limited, the scale of the board is positively related to the timeliness of accounting information disclosure.

Forker believes that CEO duality will reduce the quality of supervision and information disclosure. Although China’s "listing Corporation governance standard" requires that the CEO and general manager can’t be the same person, but there still are a few companies having the phenomenon of CEO duality. It will lead to the loss of independence of the board, and cut down the effective supervision of managers. The company with CEO duality tends to refuse to disclose unfavorable information. Therefore, the following hypothesis was put forward.

Hypothesis 3:With other conditions limited, separation of CEO and general manager has positive correlations with the timeliness of accounting information. Companies that separate CEO from the general manager are good at accounting information disclosure in time.

Forker thinks that independent directors can make the board more responsible for investors and urge companies to observe the disclosure requirements, then the quality and comprehensiveness of financial information will be improved. Jaggi finds that companies with higher proportion of independent directors are more comprehensive on the information disclosure. The greater proportion of independent directors, the more inclined to disclose the high quality of accounting information. Independent directors make independent judgments about businesses and have no important relations with the company or managers in businesses or professions, and they are independent against the shareholders and take no position in office. Independent directors can make the board more responsible for investors, and urge the company to comply with the requirements of information disclosure to improve the quality and comprehensiveness of financial information disclosure. It can be predicted that the high proportion of independent directors in the board will lead to more comprehensive and timeliness of information disclosure. Therefore, the following hypothesis was put forward.

Hypothesis 4: With other conditions limited, the larger numbers of independent directors of the board increase the reliability of accounting information, meanwhile improve the timeliness of accounting information disclosure.

3. RESEARCH DESIGN

3.1 Sample selection and data sources

This research is based on GEM listing corporations and carries out the following screening procedures:(1) in principle, selected the listing companies before 2012 as the experimental object ; (2) culled out ST and PT; (3) culled out financial listing Corporations; (4)culled out the listing corporations whose data were incomplete in the test interval(2012-2014). Finally 852 effective observation figures from 284 sample Firms were gotten. Relevant business information came from Huge Tide Net, and data processing were finished by SPSS13.0 and Excel2003.

3.2 Selection of variables and measurement

3.2.1 Explained variable

Explained variable is the timeliness of accounting information disclosure(TIME). There are two ways in the literature on measuring the timeliness of accounting information disclosure. One is predicted value, adopted by Huguoliu and Hanconghui(2009) [15], the other one is delay of annual reports by Xunyong(2009). This article used Xueyong's method, taking the delay of annual reports to measure the timeliness of accounting information disclosure[16], i.e. to use calendar days that between the end of annual reports and actual date of report disclosure as proxy variable. The relationship is that the smaller time delay is and the better timeliness would be. China Securities Regulatory Commission requires that the deadline of disclosure of the annual report of the listing Corporation should be April 30th, so the change of the time delay variable range is from 0 to 120.

3.2.2 Explaining variables

The board of directors is the core component of the corporate governance structure, which supervises the operator's decisions. Fama considers that the board structure of the board will influence the efficiency of accounting information disclosure. The board structure is composed of the following factors:

(1)Whether the top ten shareholders are related or not (H10).The board elected by the shareholders' meeting is regarded as the representative of the shareholders to executive supervision and management responsibilities. If the top ten shareholders are related, the value 1 will be assigned, otherwise 0.

(2)The scale of board(BZ). It is an important factor to influence the degree of information disclosure. Jensen and Murphy believe that, as the core of the company's internal governance mechanism, raising the scale of the board in the appropriate range will improve the efficiency of the board, meanwhile effective supervision and management can be done more professionally.

(3)Whether CEO and general manager is the same or not(STH). CEO and general manager of the same person will lead to the loss of independence of the board, reduce the effective supervision and control of the manager. If CEO and general manager is the same, the value 1 will be assigned, otherwise 0.

(4) The proportion of independent directors (PID). The number, the proportion of the independent directors and whether they work in the company. Independent directors is regarded as the way to resist the opportunism behavior of the operators, which is beneficial to strengthen the company's internal governance (Rosenste &Wyatt,1990). The greater proportion of independent directors, the more inclined to disclose the high quality of accounting information. Related variables defined as table 3-1:

Table 3-1 variables and their definitions.

Variable properties	Variable names	Variable definitions
Explained variables	the timeliness of accounting information disclosure(TIME)	calendar days that between the end of annual reports and actual date of report disclosure.
Explaining variables	The scale of board(BS)	The natural logarithm of the number of the board
	The proportion of independent directors (PID)	Independent directors proportion of the board
	Whether the top ten shareholders are related or not (H10).	If the top ten shareholders are related, the value 1 will be assigned, or 0.
	Whether CEO and general manager are the same or not(STH)	If CEO and general manager are the same, the value 1 will be assigned, or 0.
Control variables	Asset liability ratio(ALR)	ALR= total liability /total asset

3.3 Model design

The basic measurement model was constructed to test the hypothesis proposed in this paper:

$$TIME_{it}=\beta_0+\beta_1 BZ_{it}+\beta_2 PID_{it}+\beta_3 H10_{it}+\beta_4 STHit+\beta_5 ALR_{it}+\varepsilon$$

β is the parameter to be estimated, ε is a random perturbation.

4. EMPIRICAL ANALYSIS

4.1 Descriptive statistical analysis

The result of the descriptive statistical analysis of the whole samples is shown as Table4-1.

Table 4-1 Descriptive statistical analysis.

	Maximum	Minimum	Average value	Variance	Median
Delay of annual reports	120	12	92	349	91
the scale of board	15	3	8	2.3	8
The proportion of independent directors	63%	17%	37.56%	31.18%	38%
Asset liability ratio	90.44%	0.87%	29.12%	283	27.13%
Relations of the top ten shareholders	1	0	0.28	0.2	0
Whether CEO and general manager are the same or not	1	0	0.4	0.24	0

As from the table, the delay of annual reports is 120, the minimum is 12, the variance is 349, and the average value is 92 that is greater than the median 91, which shows that there is a big difference in the annual report of the enterprises in China and most of them have a long time delay. The average value of the scale of the board is 8, which means that the board of the sample firms is generally maintained at eight people from 2012 to 2014. It matches with the existing research. The proportion of independent directors which is smaller than the variance and the variance is 31.18. It shows that the proportion of the independent directors of the listing Corporations do not have much differences and the majority of them are maintained at thirty percent to forty. The minimum of the asset liability ratio is 0.87, the maximum is 90.44, the variance is 283, the average value is 29.12, the median is 27.13 , which shows that the asset liability ratio of the listing Corporation had large differences, and most of the companies' net interest rates are above average. The result that average value is bigger than the median in the top ten shareholders' relationship of the descriptive statistical analysis explained that the top ten shareholders of GEM listing corporations is mostly related. In the same way, the average value is greater than the median in the descriptive statistical analysis of the CEO duality, which indicates that more than half of the CEOs are also the general manager in the listing corporations.

4.2 Correlation analysis

The results of correlation analysis between the variables are shown in Table 4-2.

Table 4-2 correlation analysis.

	H10	STH	Delay of annual reports	BS	ALR	PID
H10	1					
STH	-0.001	1				
Delay of annual reports	-0.007	0.18***	1			
BS	-0.32	-0.89	-0.008	1		
ALR	-0.41	0.2	-0.6	-0.017	1	
PID	4.41	0.8	-0.46***	-0.503	0.031	1

*p＜0. 10；**p＜ 0. 05；***p＜0. 01

As from the table, relationship of the top ten shareholders has not significantly negative correlation with delay of annual reports (β= -0.007, p>0.1), whether CEO and general manager is the same or not has significantly positive correlation with it(β=0.018,p<0.01),CEO duality has significantly positive correlation with it by preliminary judgment. The scale of board has not significantly negative correlation with delay of annual reports (β= -0.008, p>0.1) and asset liability ratio has not significantly negative correlation with it(β= -0.600,p>0.1). The proportion of independent directors has significantly negative correlation with it(β=-0.46,p<0.01). The higher the proportion of independent directors is, the better the board will observe the requirements of information disclosure, which improves the quality and comprehensiveness of financial information disclosure by preliminary judgment.

4.3 Regression analysis

Before doing the regression analysis, we conducted the following model test: (1) the total linear test: Table 2 shows that the correlation coefficient between the variables is small, the variance inflation factor VIF value is less than 10 (not listed with limited to the length of the table), so there is no obvious linear. (2) the variance test: through the residual analysis chart(not listed with limited space), the point distribution is random, there is no trend, there is no difference between the residual and the residual sequence. So the regression model is effective. The results of regression analysis between variables are shown in Table 4-3.

Table 4-3 regression analysis.

	Delay of annual reports
Whether CEO and general manager are the same or not	0.134(0.000)***
Relationship of the top ten shareholders	-0.161(0.872)
The scale of board	-0.489(0.872)
The proportion of independent directors	-0.988(0.000)***
Asset liability ratio	-1.009(0.314)

*p＜0. 10；**p＜ 0. 05；***p＜0. 01

As from the table, relationship of the top ten shareholders have not significant negative correlation with annual reports' delay (T=-0.161, P> 0.1), but the significant level is not high, which illustrates the relevance of shareholders has little impact on the timeliness of accounting information, so hypothesis 1 is rejected. CEO duality is significantly positive correlated with it(T=0.134, P < 0.01).When CEO and the general manager are the same person, the company is more willing to improve the accounting information in time to eliminate the adverse effects of CEO duality, so that the hypothesis 3 is verified. The scale of board is not significantly negative correlated with delay of annual reports (T=-0.498, P >0.1), so that hypothesis 2 is rejected. The proportion of independent directors has obviously negative correlation with delay of annual reports (T=-0.988, P<0.01). The higher the proportion of independent directors is, the better the board will observe the requirements of information disclosure, which improves the quality and comprehensiveness of financial information disclosure, so that the hypothesis 4 has been supported.

5. ROBUSTNESS TEST

In order to verify the robustness of the research conclusion further, under the control of different scale of the board, this paper uses the method of independent sample T test to analyze the differences of the average about delay of the annual reports. Results of T test are shown in table 5-1.

Table 5-1: board structure and T test results for the publication of time delay.

	Sample	Average value	Standard deviation	T value
H10	No 101 Yes 183	79.26 90.6	30.58 23.39	-1.24
STH	No 188 Yes 96	89.23 96.34	27.52 26.14	0.07*
BS	Big 201 Small 83	90.13 94.49	21.08 24.67	-0.023
PID	Low 207 High 77	92.57 90.32	24.88 26.64	-1.886**
ALR	Low 155 High 129	36.84% 28.88%	262 56	-0.08

Note: * indicates significant at 0.1 level; * * indicates significant at 0.05 level; * * * indicates significant at 0.01.

6. RESEARCH CONCLUSION AND REVELATION

6.1 Research conclusion

Based on taking GEM listing corporations as the sample during 2012~2014, examined the relationship between the board structure and the timeliness of financial statement disclosure, the following conclusions have been obtained:(1)whether CEO and general manager are the same or not has significantly positive correlations with annual reports' delay, it shows CEO duality will greatly weaken the board's supervision and the timeliness of accounting information disclosure will be heavily affected;(2) the proportion of independent directors is significantly negatively related to annual reports delay, which is the same with the theoretical analysis. The higher the proportion of independent directors is, the better quality of accounting information will be guaranteed and the best function of the board will be performed. (3)Hypothesis1 and hypothesis 2 are not verified in the experiment. The probably reason is that the reform and supervision conducted by China Securities Regulatory Commission made a strong effect this year, which controlled interfering internal affairs by shareholders and the quality of accounting information were improved. What's more, the number of the board of the listing Corporation was kept among 7~9 this year, and working efficiency are also highly guaranteed, So just changing the scale of the board alone can't improve the quality of accounting information.

6.2 Research revelations

(1) From the view of corporate governance, the reasonable proportion of independent directors has an optimum range, which is helpful to balance the reliability and timeliness of accounting information disclosure. (2) In the case of the supervision department of the listing Corporation, taking into account the requirements of the securities market to the company's accounting information disclosure , not only information disclosure criteria but also relevant policies must be formulated to lead the establishment of more suitable internal governance structure of listing Corporation, so as to improve the enthusiasm of accounting information disclosure from the internal.

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