

Study on Influence on Internal Control Quality by Corporate Governance Structure of Listed Companies in China

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Abstract: This article studies the influence on the internal control quality exerted by the governance structure of listed companies through the theory and empirical research method. The research object is from Shanghai 200 listed companies in 2010. The empirical results show that equity structure, ownership concentration, the proportion of the independent directors, the meetings of the board of supervisors times and annual salary and general manager of executives shares has a significant effect on internal control quality. While the two level-one and the size of the board of supervisors have insignificant effect on the internal control quality.

Keywords: Listed companies; Internal control quality; Corporate governance structure; The empirical analysis

1 Introduction

Corporate governance and internal control are the core of modern corporate governance, protecting the owners, shareholders and other stakeholders. Over the past 10 years, corporate governance and internal control have become a hot issue of global concern. From the Zheng Baiwen Case, Yin Guangxia, Lan Tian a few years ago to Zhong Hangyou Case, Chang Hong Case in Si Chuan Province in recent years, it shows internal control of prominent problem is due to company management structure defects in the internal control failure. Therefore, it is of great significance to study its impact on the internal control quality from the perspective of corporate governance structure.

2 Literature Review

In the aspect of the theories on internal control and governance structure, Foreign studies have been a great achievement long before. There are Card Burleigh report, Hamm Pell report, Turnbull report, "Internal Control - Integrated Framework", "Sarbanes-Oxley Act," and "Enterprise Risk Management - Integrated Framework." In China internal control research had focused on accounting and audit areas for a long time. Later, inspired by Western research, it turned to corporate governance as the starting point of the internal control research. Empirical study abroad is also very deep. Eng and Mak (2003) have made 158 listed companies in Singapore for the study sample and found that different people hold different relationship with the quality of internal control through empirical studies. Deumes and Knechel (2008) have taken the data of the listed companies in Dutch securities market from 1997 to 1999, and have found that the proportion of managerial ownership was negatively correlated with the quality of internal control. Recently, there are many people committed to empirical research in China. Li Yuxiang used 117 listed companies of 2002 as a sample to study the relationship between owners and internal control. Linzhong Jiang et al (2009) starting from the executive compensation hypothesis, showed that the proportion of senior management ownership is associated with the internal control quality.

3 Research Design

3.1 Research hypotheses

(1) Owner characteristics

Owner is the supreme organ of authority of the corporate governance structure, having significant impact on internal control quality. Most of China's listed companies are reformed from state-owned enterprises and have a larger proportion of state-owned share. The state-owned itself has the property right defect-the owner absence and worsens the insider control, leading to the controlling shareholders of the manipulation of the problem. There are still two of post-one situation in China, which makes the right of general manager expansion and managers replace the core of the board of directors, reducing the board's oversight function. This article puts forward the assumptions:

Hypothesis1: *State and internal control quality are negatively correlated.*

Hypothesis2: *Share ratio of the largest shareholder and internal control quality are negatively correlated.*

Hypothesis3: Two of post-one situation and internal control quality are negatively correlated.

(2) The board of directors characteristics

The board of directors is in the leading position in company management structure, and is the key factor effecting internal control. "Basic Standards" Article XII shows "the board is responsible for the establishment and effective implementation of internal control." Board of directors plays a dominant role in the internal control system, Therefore, the size of the board of directors, independent directors and board meetings will have an impact on internal controls. This article puts forward the assumptions:

Hypothesis4: The size of the board and internal control quality are positively correlated.

Hypothesis5: Meetings The board of directors and the internal control effect are positively correlated.

Hypothesis6: That the proportion of independent directors and internal control quality are positively correlated.

(3) The board of supervisors characteristics

The board of supervisors characteristics is equal to the board of directors characteristics, and it is responsible for the owner. "Corporate Governance Guidelines" Article 54 clearly stipulates that it is the core to supervise the finance, and at the same time it is responsible for overseeing the directors, managers and other senior management personnel. To ensure effective supervision, supervisors must have a certain scale and positive level of activity, so that it can create a good internal control environment for the establishment and implementation of internal control. This article puts forward the assumptions:

Hypothesis7: The scale of board of supervisors and internal control quality are positively correlated.

Hypothesis8: The meetings of the board of supervisors and internal control quality are positively correlated.

(4) Managers characteristics

Managers is the the executive branch of governance structure and the entrusted party, having important influence on internal control. In the principal-agent theory, the core issue of the agency problem is how to stimulate the willingness of trustees to achieve the client's maximum benefit. Shareholders and managers goals are inconsistent. Shareholders want to maximize the value of their equity holdings, while the manager wants to maximize their own utility. This article puts forward the assumptions:

Hypothesis9: The highest amount that the three senior executives total remuneration and internal control quality are positively correlated.

Hypothesis10: General manager shareholding and internal control quality are positively correlated.

3.2 Sample selection and data sources

In this paper, the Shanghai A-share listed companies are as samples. It represents good, bad and category of company Shanghai, which is SSE Corporate Governance Sector, ST-share companies and normal A-share companies. I select 200 of 2010 Shanghai A-share listed companies as sample according to the proportion. All date is from Shanghai Stock Exchange (www.sse.com.cn) and Genius Financial Services Platform.

3.3 Variable selection

(1) Explained variables

This paper selects the internal quality control (E) to be explained variables, E = 1 says good, E = 0 said the poor quality. In recent years, many scholars said, internal control evaluation goal is to evaluate the internal control quality. It is good or bad depending on whether the goal of internal control comes true. Thus it establishes indicators to measure the internal control quality according to the internal control objective in China's "basic specifications". The goal is to ensure legal compliance management, real financial report and efficient business. When all three goals are achieved, internal control will be defined as well.

(2) Explanatory variables

In this paper, I set ten explanatory variables (Table 1) from the owner, board of directors, board of supervisors and managers in four areas.

Table 1 Description of Explanatory Variables

Name		Symbols	Expected Signs	Variable Definition
Owner	State-owned shares	X1	-	The largest shareholders for state-owned=0, non-state-owned=1
	Ownership concentration	X2	-	The proportion of the largest shareholder:
	Two level-one	X3	-	Two level-one=0, two jobs separate=1:
Board of Directors	Board size	X4	+	The total number of the board of directors:
	Board Meetings	X5	+	The number of board meetings held this year:
	Proportion of independent directors	X6	+	The number of independent directors / board size
Board of Supervisors	Board of Supervisors scale	X7	+	The total number of Board of Supervisors:
	Board of Supervisors meetings	X8	+	Board of supervisors meetings held this year;
Managers	The top three executives total wage	X9	+	An annual salary of measurement
	General Manager holding	X10	+	General Manager stake.

(3) Control variables

I select the size of the company in this paper as a control variable to avoid multicollinearity, which is measured by asset size (L).

3.4 Modelling

In this paper, I select the following multivariate linear regression model based on the relationship between variables:

$$E=b_0+b_1*X_1+b_2*X_2+b_3*X_3+b_4*X_4+b_5*X_5+b_6*X_6+b_7*X_7+b_8*X_8+b_9*X_9+b_{10}*X_{10}+b_{11}*L+e \quad (1)$$

4 The Process and Results of Empirical Analysis

4.1 Descriptive statistics

Descriptive statistics (Table 2) shows that State-owned shares holding is more common among listed companies in China and there is less two jobs-one. The times of some listed company's board and the supervisory board are less. They need to strengthen the information sharing and supervision. Salary gap between executives is significant and most companies do not enforce the share incentive system for the general manager.

Table 2 Descriptive Statistics

Variables	N	Min	Max	Mean	Standard Deviation
X ₁	200	0	1	0.37	0.484
X ₂	200	0.0785	0.862	0.377	0.1682
X ₃	200	0	1	0.87	0.332
X ₄	200	5	17	9.63	2.048
X ₅	200	3	38	8.76	4.438
X ₆	200	0.25	0.67	0.3631	0.0595
X ₇	200	3	9	4.25	1.441
X ₈	200	2	10	4.81	1.417
X ₉	200	54300	8948600	1484036.44	1224126.203
X ₁₀	200	0	0.2302	0.00255	0.01856
L	200	17.76	28.14	22.0732	1.62199

4.2 Correlation analysis

Correlation analysis (Table 3) shows that the correlation coefficients between the explanatory variables are less than 0.4, indicating a small degree of correlation.

Table 3 Correlation Analysis

Variables		Variables											
		E	X ₁	X ₂	X ₃	X ₄	X ₅	X ₆	X ₇	X ₈	X ₉	X ₁₀	L
E	Pearson	1	-.168*	.182**	.196**	0.012	0.069	0.079	-0.06	0.077	.233**	0.056	.333**
	Sig (Bilateral)		0.017	0.01	0.005	0.871	0.333	0.267	0.398	0.279	0.001	0.435	0
	N	200	200	200	200	200	200	200	200	200	200	200	200
X ₁	Pearson	-.168*	1	-.268**	-.180*	-0.074	0.117	0.032	-0.126	0.076	-0.088	.178*	-.260**
	Sig (Bilateral)	0.017		0	0.011	0.297	0.098	0.651	0.075	0.282	0.217	0.012	0
	N	200	200	200	200	200	200	200	200	200	200	200	200
X ₂	Pearson	.182**	-.268**	1	.187**	-0.002	0.017	-0.015	-0.042	0.025	0.054	-.153*	.340**
	Sig (Bilateral)	0.01	0		0.008	0.982	0.811	0.83	0.559	0.728	0.449	0.031	0
	N	200	200	200	200	200	200	200	200	200	200	200	200
X ₃	Pearson	.196**	-.180*	.187**	1	0.028	0.126	-0.024	-0.029	0.066	-0.013	-.227**	.221**
	Sig (Bilateral)	0.005	0.011	0.008		0.696	0.076	0.737	0.684	0.357	0.858	0.001	0.002
	N	200	200	200	200	200	200	200	200	200	200	200	200
X ₄	Pearson	0.012	-0.074	-0.002	0.028	1	0.073	-0.104	.409**	.185**	.193**	0.105	.217**
	Sig (Bilateral)	0.871	0.297	0.982	0.696		0.305	0.144	0	0.009	0.006	0.14	0.002
	N	200	200	200	200	200	200	200	200	200	200	200	200
X ₅	Pearson	0.069	0.117	0.017	0.126	0.073	1	0.072	-0.034	.484**	.300**	-0.036	.207**
	Sig (Bilateral)	0.333	0.098	0.811	0.076	0.305		0.309	0.637	0	0	0.61	0.003
	N	200	200	200	200	200	200	200	200	200	200	200	200
X ₆	Pearson	0.079	0.032	-0.015	-0.024	-0.104	0.072	1	-0.05	0.076	0.06	0.118	-0.099
	Sig (Bilateral)	0.267	0.651	0.83	0.737	0.144	0.309		0.478	0.284	0.401	0.097	0.162
	N	200	200	200	200	200	200	200	200	200	200	200	200
X ₇	Pearson	-0.06	-0.126	-0.042	-0.029	.409**	-0.034	-0.05	1	0.061	0.121	0.013	.151*
	Sig (Bilateral)	0.398	0.075	0.559	0.684	0	0.637	0.478		0.392	0.089	0.851	0.033
	N	200	200	200	200	200	200	200	200	200	200	200	200
X ₈	Pearson	0.077	0.076	0.025	0.066	.185**	.484**	0.076	0.061	1	0.103	-0.022	0.128
	Sig (Bilateral)	0.279	0.282	0.728	0.357	0.009	0	0.284	0.392		0.148	0.76	0.071
	N	200	200	200	200	200	200	200	200	200	200	200	200
X ₉	Pearson	.233**	-0.088	0.054	-0.013	.193**	.300**	0.06	0.121	0.103	1	-0.038	.402**
	Sig (Bilateral)	0.001	0.217	0.449	0.858	0.006	0	0.401	0.089	0.148		0.597	0
	N	200	200	200	200	200	200	200	200	200	200	200	200
X ₁₀	Pearson	0.056	.178*	-.153*	-.227**	0.105	-0.036	0.118	0.013	-0.022	-0.038	1	-0.048
	Sig (Bilateral)	0.435	0.012	0.031	0.001	0.14	0.61	0.097	0.851	0.76	0.597		0.503
	N	200	200	200	200	200	200	200	200	200	200	200	200
L	Pearson	.333**	-.260**	.340**	.221**	.217**	.207**	-0.099	.151*	0.128	.402**	-0.048	1
	Sig (Bilateral)	0	0	0	0.002	0.002	0.003	0.162	0.033	0.071	0	0.503	
	N	200	200	200	200	200	200	200	200	200	200	200	200

*. At the 0.05 level (on both sides) is significant correlation.

**At the 0.01 level (on both sides) is significant correlation.

4.3 Regression analysis

Regression results (Table 4) show:

(1) On the side of characteristics of the owner, ownership structure is significantly negatively correlated to internal control quality, which tests the hypothesis 1. So the ownership structure has a reverse effect on the internal control quality, and the owner is state-owned legal person or country which makes "the owner of absence" phenomenon more significant, reducing the effectiveness of internal control. Ownership concentration and quality of internal controls are significantly negatively correlated, which tests the hypothesis 2. This indicates that there exist controlling shareholders in China's listed companies, and it may be against the interests of other shareholders to achieve their personal interests, thereby the quality of internal controls is poor. Two level-one and quality of internal controls are non-significantly negative correlated, so that hypothesis 3 can not be fully verified. This may be because the two jobs-one is a process, so the significant role is delayed.

(2) On the side of characteristics of the board of directors, the board size and internal control quality are non-significant negative correlated, which can't test hypotheses 4. This may be because the majority of the directors are served as the company's internal persons and external independent directors

not only are less but also lack of independence or they do not play a role. The times of board meeting and internal control quality are non-significant negative correlated, which can not verify the hypothesis 5. Generally, people have a meeting because of problem, so the increasing meeting shows there are much internal control problems or the impact on internal control quality has latency. That proportion of independent directors and the quality of internal controls are significant positive correlated tests hypotheses 6. This shows that our system of independent directors of listed companies has a good effect on the internal control quality.

(3) On the side of characteristics of the board of supervisors, the size of the board of supervisors and internal control quality are non-significant positive correlated which can not verify the hypothesis 7. This may be because the board of supervisors is affected by the controlling shareholders, which makes its oversight function not fully develop. Times of board of Supervisors meetings and the quality of internal controls are significant positive correlated, which tests the hypothesis 8. This shows that the board of supervisors is actively exercise oversight functions, which protects the internal controls quality in large part.

(4) On the side of characteristics of managers, the total annual remuneration of the top three executives and internal control quality are significantly positively correlated which tests the hypothesis 9. This shows annual salary system of China's listed companies has a big impact on internal control quality, and can effectively solve the problem between owner and managers. General manager shareholding and internal control quality are significantly positive correlation, and verifies the hypothesis 10. This shows that equity incentives can avoid operator's short behavior, so as to improve internal control quality.

Table 4 Test of the Regression Results

Variable	B	S.E.	Wals	Sig.
X ₁	-.551	.523	1.107	.0293
X ₂	-1.935	1.758	1.212	.0271
X ₃	-1.420	.707	4.032	.145
X ₄	-.019	.150	.016	.899
X ₅	-.100	.084	1.422	.233
X ₆	6.598	4.809	1.882	.0170
X ₇	.211	.192	1.215	.270
X ₈	.261	.229	1.296	.0955
X ₉	.0003	.0003	6.306	.012
X ₁₀	5787.877	5855.153	.977	.0323
L	.494	.223	4.903	.027
Constant	-13.438	5.523	5.919	.015

5 Conclusion

The results of empirical are consistent with the basic hypothesis, but there are some indicators showing insignificant correlation, which shows corporate governance structure in China is still not perfect. It can't effectively play monitoring function, making internal control quality is poor. For empirical results, listed companies in China should actively promote the diversification of ownership structure, strengthen board of directors, improve board of supervisors and incentive and restraint mechanisms, which will improve the governance structure of listed companies in China, improving the internal control quality.

Based on the theory research and empirical studies, regarding China's Shanghai 2010 200 listed companies as the research object, it discusses the influence of governance structure of listed companies on internal control quality comprehensively. However, there are still many deficiencies in this paper, such as the sample size is not big enough, not taking into account regional and industry factors, variables is not comprehensive enough and so on.

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