

## IMPACT OF CORPORATE GOVERNANCE ON VOLUNTARY DISCLOSURE IN CHINESE LISTED COMPANIES

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### Abstract

This study examines the impact of corporate governance on voluntary disclosure in 100 non-financial Chinese listed firms for the period 2003-2005. There are two main findings. (1) Firms with high Managerial ownership have high level of voluntary disclosure. If a firm has a high managerial ownership, managers are much more concerned about the benefit of shareholders and stock options will have incentives to contribute the firm. Thus, a capital structure with high managerial ownership decreases agency costs and increases the voluntary disclosure. (2) the significant correlation is identified ownership concentration with the voluntary disclosure. This is because the largest shareholders have a strong interest in firm performance and therefore a high ability to increase voluntary disclosure. Our empirical results further illustrate that big firms have inclination of voluntary disclosure through stock market and the exogenous mechanism between them is exposed.

**Keywords:** Entropy theory, Corporate governance, Voluntary disclosure, managerial ownership

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### 1 Introduction

The crisis in honesty exists in the Chinese security companies in some extent recently. Effective information disclosure system of listed companies is an important factor in preventing the deceit behavior in security companies. There are two related theories: voluntary disclosure and compulsive disclosure theory. The recent situation in China is, compulsive disclosure didn't carry out successfully and voluntary disclosure didn't involve either. The important factor is that whether the administration and controlling stockholder having information advantage can disclose the inner information according the principle of true, abundance and comprehension in their own. The newspaper of bond and orient bond investigate the foreign organization aiming for the recent system of QFII. The investigation shows that the important reason for absorbing foreign organization to coming into domestic capital market is the rapid growth of Chinese economics, and the main problem for preventing this is the disapproval to the information disclosure system and the worrying about information disadvantage, not the highly market benefit that many investors take for.

To impulse listed companies to improve corporate governance and precept management between investors of listed companies, and promote healthy development of security companies, Shenzhen Stock Exchange draw up "management guide between investors of listed companies" in 2003. The guide expounds the conception of voluntary disclosure first. Voluntary disclosure replenishes and

deepens compulsive disclosure, and it has an important impact on improving the quality of disclosed information and demonstrate the prospective and truthful value of company. The practice of domestic and foreign listed companies shows that, when investor disapproval to the quality of disclosed information of listed companies, and honesty crisis exists in the security companies, a company with good intelligence, good performance has impetus to bulge its competitive advantage via voluntary disclosure to improve the quality of disclosed information and increase the confidence of investors in the future. Voluntary disclosure has become an effective way to demonstrate the competitiveness, communicate with related organizations and persons and describe the future of company.

The corporate governance guarantees the quality of disclosed accounting information through a set of institutional arrangement. Perfect corporate governance can strengthen intra-company control, and can reduce opportunistic behaviors and lower the asymmetry of information, so it has a positive impact on the high quality of disclosed information. It has a negative impact on the veracity and comprehension of accounting information and it probably has a negative impact on the healthy development of security companies if we ignore the influence of corporate governance to the quality of disclosed information; in the mean time, unfeigned and all-round information disclosure can promote the continual improvement of the corporate governance.

In the background of taking voluntary disclosure of listed companies into account in the security

companies, the paper studies the relationship between the elements of corporate governance and voluntary disclosure through the data of Chinese listed companies. It has an important significance on improving the corporate governance, enhancing the image and confidence of listed companies, and pushing forward the healthy development of the security companies.

## 2 Literature review

From 1970s, voluntary disclosure and its confirmation had been taken for an important research domain in the field of finance. The research on the confirmation of voluntary disclosure has been studied in the America and other developed countries. Morck (1988) expounded that administration sacrificed the benefit of small stockholder to go after their benefit, because the administration has enough power to appoint CEO, director and board chair, so it made voluntary disclosure decreased. El-Gazzar (1998) expounded that organization investors possessed stocks in some extent can make voluntary disclosure increased. In 1990s, researchers began to investigate that corporate governance could help to achieve voluntary disclosure. Mckinnon and Dalimunthe (1993) check up economical incentive of voluntary disclosure of segment information among Australian diversified companies, and found that the extent of ownership concentration was a factor affecting voluntary disclosure. Raffoumier (1995) found that the extent of ownership decentralization has a negative relation with voluntary disclosure through the research of the determinants of voluntary financial disclosure by Swiss listed companies. Simon and Kar Shun (2001) investigated the relationship between corporate governance and voluntary disclosure in Hong Kong listed companies, and found that ameliorating the supervision to board of directors could help to disclose more voluntary information in the premise of information theory and agency theory. Chau and Gray (2002) investigated the relationship between corporate governance and voluntary disclosure in Hong Kong and Singapore listed companies.

Voluntary disclosure in listed companies can improve the transparency of market transaction and the function of price mechanism in arranging resource. Researching on voluntary disclosure has more significance for Chinese listed companies in

converting the economic system. Qiao Xudong (2003) checked up the relationship between independent director and the extent of voluntary disclosure, and found that there was a close relationship between them. Zhang Zongxin and Guo Laisheng (2003) investigated the availability of voluntary disclosure in Chinese listed companies, and found that the ratio of circulated stocks, ownership concentration and other factors of corporate governance affected the index of voluntary disclosure at a lower level. Li Xiangyu and Fu Xiuming (2004) investigated the relationship among ownership structure, constitution of the board of directors and the extent of voluntary disclosure, and the result showed that the ratio of the first stockholder had U pattern relationship with the index of voluntary disclosure, and the ratio of independent directors had no obvious relationship with the index of voluntary disclosure.

Many literatures shows that corporate governance affects voluntary disclosure in a high extent, but how the factors of corporate governance affects voluntary disclosure, which factor highly affects voluntary disclosure, literatures in those aspects are still difficult to find in the Chinese environment. From this angle, the paper chooses typical index of corporate governance to investigate how the corporate governance affects voluntary disclosure in Chinese listed companies.

## 3 Data and Methodology

### Data

In this paper, the sample takes Chinese listed companies of Shenzhen stock market and Shanghai stock market. According to the systematic sampling method, extracts 100 companies, separately to analyze the annual report of 2003, 2004 and 2005, the financial insurance companies are excluded from the study because of the fact that the accounting system is different from that of the general profession. The annual report material originates from the Chinese Securities and Exchange Commission website, the Shenzhen stock market website and the Shanghai stock market website, the variable data manually is collected and reorganized according to the annual report material, Table 1 shows the index of affecting voluntary disclosure.

**Tab.1** The index of affecting voluntary disclosure

The index of A level	The index of B level
the factors of corporate governance structure	the nature of the first major stockholder (Hypothesized variable, if the first major stockholder is the state-owned stock, then ID=1; Otherwise, ID=0) Current stock proportion

	The first major stockholder holds the stock proportion
	The first ten major stockholders hold the stock proportion
	Independent directors proportion
	Chairman of the board and general manager two duties whether do gather one (Hypothesized variable, if two duties gather one, then CM=1; Otherwise, CM=0)
	Managerial ownership proportion
	.The three biggest managers compensation
Company size	Total assets
Debt degree	Debt to asset ratio
Profit level	Ratio of return-on-equity
The growing degree of the company	The main revenues increasing ratio

**Methodology**

In the information theory, the information is a measure of the foreword degree of system, but the entropy is a measure of the disorder degree of system, the absolute value is equal and the mark is opposite. Constitutes a target system by a target of  $n$  number to compare to the appraisal object of  $m$  number, the entropy of appraisal object  $i$  of appraisal target  $j$  is defined as

$$E_j = -k \sum_{i=1}^m P_{ij} \ln P_{ij}, \quad j \in [1, n] \quad (1)$$

Type in 1 
$$P_{ij} = \frac{z_{ij}}{\sum_{i=1}^m z_{ij}} \quad (2)$$

$$k = \frac{1}{\ln m} \quad (3)$$

And hypothesis, when  $f_{ij} = 0$ ,  $f_{ij} \ln f_{ij} = 0$

The entropy of appraisal target  $j$  defines as

$$\omega_j = \frac{D_j}{\sum_{j=1}^n D_j}, \quad j \in (1, n) \quad (4)$$

Type in 4 
$$D_j = 1 - E_j \quad (5)$$

We may obtain the following nature of entropy by the above definition and the entropy function nature: (1) When target  $j$  value of each appraisal object is quite same, the entropy value maximizing 1,

the entropy power is zero. It also means that this target has not provided any useful information to the decision-maker, this target may be cancelled. (2) When target  $j$  value of each appraisal object is quite different, the entropy value is smaller, the entropy power is bigger, and it explains that this target has provided the useful information to the decision-maker. At the same time, it also explained that in this question various objects has the obvious difference in this target, it should be the key inspection. (3)When target entropy is bigger and its entropy power is smaller, this target is more unimportant, moreover it

satisfies with  $0 < \omega_j \leq 1$  and  $\sum_{j=1}^n \omega_j = 1$ . (4) As the

weight of the entropy power, it has its special significance. It is certainly not the significance important coefficient in the decision-making or the appraisal question in some target practical, but is the relatively intense degree coefficient of various targets in competition significance in the situation that assigns and appraised the object collection each kind of appraisal to refer the list price determination. (5) It considered from the information angle that it represents how much useful information does this target provide in this question. (6)The entropy power size has the direct relations with the appraisal object.

After appraisal object is determined, we adjust, increase and decrease the appraisal target according to the entropy power in order to make more precise and more reliable appraise. At the same time, we can also adjust the precision of some appraisal target value

according to the entropy power, if necessary, we should determine the value and the precision again.

The basic thought of entropy power method and operation step:

1. Structure initial datum matrix: it constitutes a target system by a target of  $n$  number to compare to the appraisal object of  $m$ , the appraisal object  $i$  attribute value is  $r_{ij}$ . Then the primitive target data matrix is:

$$R = (r_{ij})_{m \times n} \quad (6)$$

2. Carries on standardized processing records for the attribute value: set  $z_{ij}$  to the attribute value of  $r_{ij}$ ,  $J_k (k=1,2)$  is respectively the subscript collection of benefit and cost. Then regarding the benefit and the cost attribute, has

$$z_{ij} = \frac{r_{ij} - \min_i r_{ij}}{\max_i r_{ij} - \min_i r_{ij}}, j \in J_1 \quad (7)$$

$$z_{ij} = \frac{\max_i r_{ij} - r_{ij}}{\max_i r_{ij} - \min_i r_{ij}}, j \in J_2 \quad (8)$$

3. Determine various targets weight: generally, in the decision-making the bigger the variation degree value of some target is, the smaller the information entropy is. And this target provides information content bigger, the target weight also should be bigger; otherwise the smaller the variation degree value of some target is, the target weight also should be smaller. The concrete step of calculating various targets weight using the entropy power law as follows: (1) calculates the proportion of target value of appraisal object  $i$  of appraisal target  $j$  according to the formula 2; (2) calculates the output entropy of the target  $j$  according to the formula 1; (3) calculates variation of the target  $j$  according to the formula 5; (4) calculates the weight of the target  $j$  according to the formula 4.

#### 4 Empirical results

Based on the primary data, we have obtained the appraisal targets output entropy, variation degree, weight, according to basic method and the operation of the entropy power, such as table 2, table 3, and table 4.

1. This target weight of managerial ownership is the first in order in the year of 2003, 2004 and 2005, which show that the variable carries the most information, and the influence on the voluntary information disclosing is the biggest. The salary can stimulate the directors of board and other top managers to take the action according to the shareholder's interest. The shareholder craves to the stock price maximization under certain risk level, which need reward managers who help them achieve

the goal. It is the most direct means that the top managers' team have the company common share stock or the company common share option. The stock option was called "the golden handcuff" of the occupation managers in the west, which is related company's stock value with the holder income closely, guiding managers to work hard to achieve shareholders' aim—the profit maximization. At present, the stock option is one of the most effective drive system in the western countries. Stock options gives management sense of ownership status and consciousness, it is closely linked the benefit of company with the management level itself, their own benefits drive the management level to stand out the competitive advantage of the company and build up the confidence of investor for the company in the future by the voluntary information disclosing. Moreover, this kind of influence is greater, which explained that the listed companies already gradually establish the true modern enterprise corporation government structure.

2. The target weight of the biggest stockholder's nature is the second in the row, which showed the influence on the voluntary information disclosure is big. In the very great degree, the biggest stockholder had decided the listed company's domination ownership. Currently Chinese listed company can be divided into two categories: state-owned and non-state-owned enterprise (including privately operated, collective enterprise, foreign capital enterprise and natural person). Because most of state-owned and non-state-owned listed company is transferred by the state-owned enterprise, the country and its delegation is the dominant position in the listed company stockholder's rights control, this condition is unique and inevitable phenomenon with the Chinese companies. Along with the capital market development and economic system reform, some non-state-owned capitals begin to grow in gradually, and become actual masters of listed company's. In the sample, final and actual master of the 74 percent company is country and its affiliated organizations. Contrast to non-state-owned holding company, the state-owned holding company disclosed information voluntarily is higher in quality.

3. The target weight of position is third in the total assets in the row, showed that the influence on the voluntary information disclosure is also very big. The choice of different size enterprise to the financing channel indicated that new financial way of the stock market as representative mainly satisfied the major and medium enterprise multi-channel financing needs. Although small companies also hope to use the investment system fully, the main financing channel still is the bank as the policy limit. At the same time, the big company also can undertake higher the disclosing cost. Therefore, this factor of company size becomes the important attribute to influence the listed company voluntary disclosing level.

4. The three biggest managers compensation is the fourth in the row in the year of 2003, 2004 and 2005 which show the influence is very big on the voluntary information disclosure. The salary level certainly is an essential factor of corporate governance so any superintendent is not nearly willing to take the risk to lose the work of high wages. The high-level managers compensation is one of the important forms of modern enterprise driving mechanism. In this kind of situation, for future development, the manager must maintain shareholder's benefit and voluntarily disclose more real and detailed information to favor the investor decision-making. From the table, we can see that there is a big gap between its weight and the three biggest targets. out that Director's basic salary is trending down slowly and continually, the company is replacing the basic salary with stock and stock option.

5. From table 2, table 3, in table 4 we may see that the weight of the current stock proportion is relatively smaller. At present, concentration degree of our country stock right is higher, the current stock proportion is very low, therefore the current stock

restraint strength is not certainly strong and is short of sufficient influence on corporate governance of listed company and management action and achievement which affected the voluntary disclosing information.

6. The weight of the biggest stockholder holds the stock proportion and the ten biggest stockholders holds the stock proportion is very small which influence on the voluntary information disclosure slightly. At present, our listed companies still place the biggest stockholder's ultra strong control condition, the biggest stockholder still had a stronger dominations. The major stockholder realizes personal gain increase by information dissymmetry with the younger shareholder which possibly comes from other shareholder nonessential losses.

7. The degree that two indexes of debt to asset ratio and ratio of return-on-equity related to company achievement influence the condition of the voluntary information disclosed is not very obvious. Therefore, to improve the condition of the voluntary information disclosed, it is more to observe from the aspect of corporation management.

**Table 2.** The output result of every index in 2003

Appraisal target	Output Entropy	Variation degree	Weight	Place
irst major stockholder	71.68%	28.32%	24.49%	2
Current stock proportion	97.62%	2.38%	2.88%	5
The first major stockholder holds the stock proportion	98.00%	2.00%	2.22%	8
The first ten major stockholders hold the stock proportion	99.08%	0.92%	1.95%	9
Independent director proportion	99.92%	0.08%	1.51%	11
Chairman of the board and general manager two duties whether do gather one	98.61%	1.39%	2.41%	7
Managerial ownership proportion	60.28%	39.72%	30.69%	1
The three biggest managers compensation	89.63%	10.36%	6.14%	4
Company total assets	70.55%	29.45%	23.07%	3
Debt to asset ratio	98.60%	1.40%	1.77%	10
Ratio of return-on-equity	99.79%	0.21%	0.27%	12
The main revenues increasing ratio	98.29%	1.71%	2.60%	6

**Table 3.** The output result of every index in 2004

Appraisal target	Output entropy	Variation degree	Weight	Place
The nature of first major stockholder	70.71%	29.29%	23.56%	2
Current stock proportion	96.60%	3.40%	2.73%	5
The first major stockholder holds the stock proportion	97.28%	2.72%	2.18%	8
The first ten major stockholders hold the stock proportion	97.69%	2.31%	1.86%	9
Independent director proportion	98.04%	1.96%	1.57%	11
Chairman of the board and general manager two duties whether do gather one	97.16%	2.84%	2.29%	7
Managerial ownership proportion	61.28%	38.72%	31.14%	1
The three biggest managers compensation	90.81%	9.19%	7.39%	4
Company total assets	71.28%	28.72%	23.1%	3
Debt to assets ratio	97.95%	2.05%	1.65%	10
Ratio of return-on-equity	99.71%	0.29%	0.23%	12
The main revenues increasing ratio	97.15%	2.85%	2.29%	6

**Table 4.** The output result of every index in 2005

Appraisal Target	Output entropy	Variation degree	Weight	Place
The nature of first major stockholder	70.25%	29.75%	23.24%	2
current stock proportion	95.83%	4.17%	2.67%	5
The biggest stockholder holds the stock proportion	97.57%	2.43%	2.21%	8
The first ten major stockholders hold the stock proportion	96.85%	3.15%	1.83%	9
Independent director	98.67%	1.33%	1.68%	11

proportion				
Chairman of the board and general manager two duties whether do gather one	98.59%	1.41%	2.35%	7
Managerial ownership proportion	65.33%	34.67%	33.50%	1
The three biggest managers compensation	89.70%	10.30%	7.15%	4
Company total assets	71.06%	28.94%	22.08%	3
Debt to asset ratio	98.54%	1.46%	1.71%	10
Ratio of return-on-equity	99.13%	0.87%	0.21%	12
The main revenues increasing ratio	98.27%	1.73%	2.37%	6

## 5. Conclusions

This study utilizes the entropy theory assessment method and we select 100 listed companies in Shanghai and Shenzhen Stock Exchanges. The study reorganizes separately the listed companies' governance information from 2003, 2004, 2005 annual report. We examined the influence of Chinese listed companies' governance structure on voluntary information disclosure. We find that firms with high Managerial ownership have high level of voluntary disclosure. The ownership concentration and by the state-owned stock control company, the big listed companies carry on the voluntary information disclosure positively. Finally, enhancing the repayment level of managers is also advantageous to enhance voluntary information disclosure for listed companies.

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