Chapter 41
Research in Financial Governance Effect of Equity Structure of Listed Companies in China

Xiaoyan Hao, Dongfeng Song and Ye Wu

Abstract The outbreak of the financial crisis exposures many defects of financial governance that are caused by the defects of the ownership structure of the listed companies of in China. Ownership structure is the foundation of financial governance; its rationality has a decisive impact on the efficiency of financial governance of the company. This paper analyses the financial governance efficiency in the ownership structure in theory and demonstration. It analyzes the status of financial governance effect in ownership structure of China's listed companies, and finally putting forward suggestions and countermeasures which directly optimize the ownership structure and the financial governance efficiency in China's listed companies.

Keywords Ownership structure · Financial governance · Efficiency of financial governance · Value of the company

41.1 Introduction

Equity is the ownership of listed companies, stock ownership structure refers to the ownership structure of listed companies, including both what the owner, namely equity constitute, also include the proportion of each owner of shares, ownership concentration. In terms of composition of equity, listed companies' equity can be separate to state-owned shares, corporate shares, and outstanding shares. From the aspect of ownership concentration, the equity of the listed companies in China can be divided into highly concentrate (The company is the absolute shareholder), relative concentration (The controlling shareholder was shared by company and other substantial shareholders), and highly fragmented (Shareholders are small shareholders). Financial governance refers to institutional arrangements of financial power

X. Hao (✉) · D. Song · Y. Wu
Shanxi University of Finance & Economics, Taiyuan 030006, P. R. China
e-mail: hxy0351@163.com

J. Xu et al. (eds.), *Proceedings of the Seventh International Conference on Management Science and Engineering Management (Volume 1)*,
Lecture Notes in Electrical Engineering 241, DOI: 10.1007/978-3-642-40078-0_41,

among various shareholders, via incentive and constraint mechanism, contingent governance, performance evaluation mechanism, and etc. achieving balanced financial power among all shareholders [1].

41.2 Analysis of Financial Governance Effect in Ownership Structure

Although ownership structure is the fundamental for financial governance, posing substantial effects on governance performance and reflecting from company value, the company value is not depended on ownership structure. In fact, the ownership structure affects the financial governance performance through its influence of incentive and constraint mechanism, which formed by financial power allocation [2].

41.2.1 Financial Governance Effect of Equity Constitution

Shareholders will set themselves assets to the company to operate, from the aspect of making the benefits maximize, shareholders of different characters should have different incentive and restriction mechanism to company's operators, shareholders of different shareholding ratio should have different driving power to encourage and restrain managers to have hard work to improve the value of the company.

There is a fact that the company involving highly proportion of state-owned shares fail to execute incentive with great dynamics. The reason to this point is that the majority of these listed companies are transformed from state-owned enterprises. Therefore, the major shareholders of the company are state-owned stocks. However, benefit conflicts among state-owned subjects along with the special character of the government give rise to the government's "super control" on the administrative aspect and the "super weak control" on the property subject. As a result, the government pays for the consequence of managers' high interests behaviors. In such occasion, companies with high state-owned proportion do not form effective incentive and constraint mechanism to managers. In contrast, they indulge corrupt practices, reducing the company value.

Major shareholders include corporate shares and largest individual shareholder. They believe that the effort of operators directly associate with their own vital interests, hence paying attention to companies' condition with great enthusiasm and dynamics. On the one hand, they use the method of voting-by-hand, transferring managers, exert pressures on operators; on the other hand, they instigate managers to work hard for the privilege of companies' interests, thus promoting the company value.

With limited range of professional knowledge, the majority of external investments of minority shareholders have blindness, leading to asymmetric costs and benefits of participation in corporate governance. So they do not have the capacity nor the will to concern over actual governance. What their main criteria to select the investment orientation is to follow the trend, therefore, to some extent, consolidating the influence of large shareholders. And finally incur the leverage effect of large shareholders investment on the operator's incentive and restraint.

Shares in the operator holding will increase the company's value within certain limits. If a manager holds company's stock, then the operator is the shareholder. Thence, the share proportion of internal shareholders poses positive effects on company value. However, the high ratio of manager's share may cause the procrastination, hence degrading the corporate governance mechanism. When the share proportion is too high to have pressure of being taken place, facing the balance of working consumption and company value, managers tend to abandon long-term interests of the company in favor of the personal enjoyment, reducing the company value [3].

41.2.2 Financial Governance Effect of Ownership Concentration

The research has shown that relative concentration of ownership structure can strengthen financial governance effect, in the view of the existence of large shareholder. In such condition, the large shareholder has the ability as well as dynamics to incentive, constraint, and monitor operators by the way of voting by hand. On the contrary, when equity dispersed, each minority shareholder has no access to incentive and constraint managers, making operators become enterprise's control. What's more, considering the interest conflicts between operators and shareholders, operators will sacrifice benefits of shareholders for the privilege of personal consumption and benefits, eventually reducing the company value [4].

41.3 Empirical Analysis in Financial Governance Effect of Equity Structure of Listed Companies in China

41.3.1 Sample Selection

This study samples come from all 2010 financial data in A-share listed companies in Shenzhen and Shanghai Stock Market in China. Considering variations among general business, we exclude observational value of corporations in financial, securities, and insurance realms. We also remove observational value of ST unit, S*ST unit, and PT unit. What's more, we reject some observational values in unavailable sample, extreme values and exception values, which are not suitable for calculations. After above filter processing, we get 1135 samples as final observational values. All transactions in the relevant financial data and market data come from CSMAR system (CSMAR21211).

41.3.2 Variable Selection

Basing on references study, considering present situation of listed companies in China along with the features of selected data, we chose the following variables as study on indicator. As shown in Table 41.1.

Table 41.1 Empirical analysis of financial governance effect of ownership structure indicators selected

Type		Symbol	Name	Variable definition
Dependent variable	Company value	ROE	Rate of Return on Common Stockholders' Equity	NOPAT/N.A.$*$100%
Independent variables	Equity constitutes	GYG	The proportion of state-owned shares	State-owned shares/Total equity
		FRG	Proportion of corporate shares	Corporate shares/Total equity
		LTG	Proportion of outstanding shares	Outstanding shares/Total equity
	Ownership concentration	A1	Largest shareholder ratio	Number of largest shareholder/Total equity
		A10	The proportion of Top 10 shareholders	Total of top 10 shareholders/Total equity
	Capital structure	DAR	Debt Asset ratio	Total liabilities/Total assets

The explanatory variables are the company's marketing value, and we chose ROE as indicator to measure the value of the company. ROE, regarded as one of the most representative indicators, with high capacity, can reflect shareholder capital efficiency comprehensively (exclude the influence of bonus share) and be a vehicle for financial governance efficiency.

There are five explanatory variables: GYG, FRG, LTG, Al, and A10.

The control variable is the capital structure. According to relative researches, capital structure is one of the indicators that shareholders concern, because under the established framework structure, the capital structure is a basis for corporate financial governance structure. Thus, the corporate financial governance structure is a manifestation of the capital structure, which, by and large, determines the level of corporate financial governance efficiency.

41.3.3 Research Hypothesis

It is the state-owned shares in equity constituted investment that lead to the absence of investment subjects. In such condition, instead of considering the company's long-term benefits and company value, operators make decision in view of their own advantages, deteriorating the corporate governance performance. Institutional shareholders have strong supervisory capacity, posing great positive effects on company value. However, it by no means the larger the proportion the better the condition. In view of state-owned corporate shares belonging to the government, high proportion institutional shareholders may impact the stock liquidity, thereby reducing the company value. It is the fact that outstanding shares are public units. Thus, stimulating by maximizing profits, operators could be encouraged by outstanding shares. However, with the expansion of corporate scale, increasing number of shareholders, and decentralization of ownership structure, shareholders is insufficient to govern companies by virtue of personal ability. Taking this problem into consideration, individual shareholders may "thumb a ride" or "vote by feet", reducing the manager's risk of taking place. Consequently, outstanding shareholders monitor and incentive corporate operation and management with little effectiveness. After all, managers holding shares in certain range, shareholders are able to increase incentives for operators, thereby promoting the company value.

Research shows that ownership concentration has great effects on company value, influenced by the cost of risk and treatment costs. The higher these two costs are, the lower the ownership concentration, and vice versa. That is to say: these two costs have minimum value, under which the ownership concentration is the best equity ratio. According to the western research, there is a best value for ownership concentration which gives rise to the most efficient corporate financial governance. It is proved by "U" type theory that the benefit condition for raising company value lies in the existence of the controlling shareholder and other large shareholders [5].

According to the theories and illustration above, we can come up with following assumptions:

- The proportion of State-owned shares is in inversely proportional to the company value, which means negative correlation, namely, that decreasing the proportion of state-owned shares exerts positive influence on expanding the company value.
- In certain range, the proportion of corporate shares and the value of the company is relevant.
- Other conditions being equal, proportion of shares and corporate value have no significant relationship.
- Equity relative concentration is directly proportional to company value, which means positive correlation, namely, that the concentration of equity could bolster the efficiency of financial governance, but by no means highly concentrated equity can be always better.

41.3.4 The Reasonableness of the Data and Variable Detection

(1) The detection in the rationality of data

Using the filtered data to make statistical analysis and detecting the data rationality, we get more universal empirical results, making great difference. As shown in Table 41.2.

Table 41.2 Descriptive statistics of variables

Variable	Average	Medium	Standard deviation	Minimum	Maximum	Number of samples
GYG	0.179	0.051	0.219	0	0.802	1135
FRG	0.093	0	0.162	0	0.782	1135
LTG	0.674	0.692	0.229	0.041	0.999	1135
A1	0.363	0.342	0.150	0.051	0.849	1135
A10	0.534	0.531	0.151	0.151	0.932	1135
ROE	0.105	0.090	0.075	0.001	1.167	1135
DAR	0.515	0.531	0.192	0.010	0.944	1135

According to the Table 41.2, the average of ROE equals to 10.5%, greater than 0 and having higher proportion, which indicates that the company provides better safeguards so as to reimburse the debt and pay for the interest. The average of GYG is 17.9%; the average of FRG equals to 9.3% and the average of LTG is 67.4%, suggesting the effectiveness of restricted shares lifted in our country. The average of A10 is 54%, indicating that the Chinese listed company ownership concentration is high.

(2) The detection in the rationality of variables

To examine the rationality of the variables selected, we have to check every effect of variables on ROE, thereby analyzing regression analysis of each variable and ROE in the following table. As shown in Table 41.3.

Table 41.3 Correlation analysis of variables and ROE

Statistics variables	C	Coefficient	T-statistic	Prob	R
GYG	0.1066	−0.485	−0.6476	0.0175	0.6235
FRG	0.1002	0.535	3.0565	0.0023	0.7153
LTG	0.1285	−0.347	−2.7936	0.0544	0.6113
A1	0.0834	−0.362	−3.1523	0.0017	0.9144
A10	0.0307	0.714	7.6488	0.0000	0.9705
DAR	0.0901	0.292	1.9642	0.0499	0.8562

According to the Table 41.3, the selected variables and explained variables, the ROE, have certain correlation, especially under the level 5 percent (except for outstanding shares). In that correlation, the GYG is in inversely proportional to the

ROE, and the A1 is directly proportional to the DAR. However, the FRG, A10, and DAR are inversely proportional to the ROE. Outstanding shares are significant test.

41.3.5 Model Establishment

According to above analysis and basing on the suitability, we need to study the comprehensive impact of these variables on the company value. The regression model (β is the constant term, ε is the random perturbation, i stands for company) is:

$$\mathrm{ROE} = \beta_0 + \beta_1 \mathrm{GYG}_i + \beta_2 \mathrm{FRG}_i + \beta_3 \mathrm{LTG}_i + \beta \mathrm{A1}_i + \beta_5 \mathrm{A10}_i + \beta_6 \mathrm{DAR}_i + \varepsilon_i, \\ i = 1,2,3,\cdots,1135.$$

41.3.6 Empirical Analysis

Taking the influence of multicollinearity into account, we select listed company information in 2010 and put the model in statistical software (Eviews 6.0) so as to make regression analysis on indicators of ownership concentration and equity construction. The results shown in the table below: As shown in Table 41.4.

Table 41.4 Please write your table caption here

	GYG	FRG	LTG	A1	A10
GYG	−0.2030				
FRG		0.0937			
LTG			−0.1042		
A1				−0.5047	
A10					0.3084
DAR	−2.3193	2.1507	1.7583	−0.4072	14.1138
β_0	227.2554	−201.5345	−361.2835	4.2797	−14.1714
Amended R2	0.9987	0.9547	0.7940	0.5324	0.9682
F	132.9586	6.2615	18.9388	74.6270	37.9627
T statistical value	−3.6403	5.4273	−2.7812	−1.8971	8.0736

Data above are all significant under the level of 5 percent (except for outstanding shares). By analyzing the data in this table, we find that equation is tested by F and random disturbance term does not exist between autocorrelation, indicating that model designed reasonably. The results show that state-owned shares are in inversely proportional to ROE, namely, that the higher GYG is, the less increasing company value, testifying assumption 1. Corporate shares positively correlated with value of the company, justifying assumption 2. Outstanding shares of value of the company fail to pass the test of significance, suggesting that outstanding shares and the company performance have no significant relations, consistent with previous described, testifying assumption 3. A1 is inversely proportional to the company value, illustrating that reducing the stake in largest shareholder can increase the value of the company. However, considering that A10 positively correlated with value of the company, in terms of A10, high concentration of ownership contributes to enhancing the value of the company. Comprehensive analysis shows that relative concentration of equity benefits to the improvement of ROE, testifying assumption 4. DAR and ROE are related, that is liabilities operators, to some extent, pose positive effects on company value, but not DAR as high as possible. This indicator's level and reasonable degree are impacted by various factors, hoping to continue research.

41.4 Status of Financial Governance Effect of Listed Companies in China

The special ownership structure and the poor-developed external market bring about the ineffectiveness and weakness of the financial governance. Along with the theoretical and empirical analysis, we summarize the status of financial governance effect of listed companies in China as following:

(1) Unreasonable ownership structure leads to the improper arrangement of the shareholders' remaining financial power

Due to the concentration of shareholding, the company's financial decision-making power is concentrated in the hands of a few large shareholders. The state-owned shares accounting for a larger proportion of equity structure in our nation. Thus, the dislocation of investment subject of state-owned shares results in the inconsistence in rest financial power involving "residual financial claims" and "the remaining financial control", which controlled by state-owned assets management departments and business managers, hence causing the imbalance among responsibilities, rights and interests. What's worse, incentives for managers dwarf the executive financial power; small shareholders and internal staff have inadequate power to exercise supervisory powers, leading to less strong financial supervisory powers.

(2) Unreasonable internal financial power allocation results in nominal board of directors

As the company's strategic leader and the core of the financial governance, the board of directors could represent the interests of all shareholders only by maintaining the high level of independence. Nevertheless, in China's listed companies, the board, by and large, is controlled by a few major shareholders or government officials, without substantive effect. Moreover, the majority of listed companies are CEO Duality, which suggests that most people in the board of directors are management personnel, forming the situation of inside dominant directors.

(3) Lacking effective incentive, restraint, and supervisory mechanisms

China's listed companies are prone to make equity financing, which unfortunately have less power of supervisory and restraint than bond financing. Yet, over equity financing will weaken the company's restraints. China's listed companies executive monologues incentives to operators, which primarily include short-term incentives and cash incentives, lacking enough incentive intensity and having less correlation degree with corporate performance. Even worse, the lose-making company makes huge contrast with their high salaries of executives. External managers slowly developing, operators have less pressure. Ineffective incentives and less restriction instigate the managers' behavior of consumption and seeking personal benefits. Even existing board of supervisors, most China's listed companies select members of the board of supervisors within internal companies, less independent and prestige, thereby wanting the real supervisory role. On the other hand, members of the board of supervisors have less professional knowledge and abilities than members of the board, thence failing to find out and deal with some indispensable faults and subjective morality mistakes of managers [6].

(4) Lacking efforts to protect the government's public financial supervision rules

Lacking efforts to protect the Government's public financial supervision rules give rise to limited development of external markets, affecting the establishment and perfection of the governance mechanisms of listed companies in China. Too much government intervention suppresses free game behavior of market subjects artificially along with the powerful control in companies' financial, forming the vicious circle, where the government manipulates whole process of "Market - company - market" artificially. What's worse, the manager market does not act the effect of initiative and manager selection mechanism is not perfect. Entitled by the government or government officials directly, a great number of managers cannot voted by multilevel administrative system, lacking constraints and restrictions. They are selected by leaders of company, without normal and fair electoral process.

41.5 Countermeasures of Financial Governance Effect to Strengthen the Shareholding Structure of China's Listed Companies

41.5.1 Optimize the Ownership Structure and Rationalize the Allocation of Financial Management Right

The reduction of state-owned shares is essentially to the adjustment of property rights, in which companies give part of the original state-owned financial authority to other investment subjects. This paper argues that by limiting the highest stake of state-owned shares in sub-industry and by changing state-owned share subjects and introducing other investment subjects to achieve the reduction of state-owned shares. Optimizing the securities market information disclosure mechanism, increasing the liquidity of the securities markets, improving investor protection legislation, and strengthening judicial execution efficiency, we can strengthen the protection of small investors, therefore decreasing the stake of the largest shareholders. According to earlier conclusions, we make adjustment in the shareholding structure of listed companies in China. Albeit the adjustment, there is a foothold. China's stock market is not very developed, and thus over dispersed shareholding structure is not suitable for our country. The equity structure of listed companies should be moderately concentrated, namely, that relative controlling shareholder exists and other large shareholders develop in a balance direction.

Promoting the shareholding structure of the financial strategy cause decision-making power concentrated in the hands of the shareholders meeting and the Board. The financial tactical decision-making power and the company's daily operation and management rights are concentrated in the hands of managers. In addition, the financial supervisory authority is dispersed in the company's internal and external. Hence, clearing the rights, responsibilities and interests in shareholders, board of directors and managers can establish pleasant checks and balances among them. Making cumulative voting rights system and small shareholder litigation system, the system protecting small and medium investors, we can strengthen the role of small and medium investors in the listed companies' financial governance structure. When the interests of the company are infringed by stakeholders, minority shareholders will no longer rely on the law to prosecute board of directors. Instead, they will sue the relevant personnel on behalf of the company actively, therefore protecting their own benefits [7].

41.5.2 Improve Financial Governance Mechanism

The separation of ownership leads to a conflict of interest. Only improving the performance evaluation mechanism, can investors understand the effort degree of operators objectively, thence taking appropriate incentive and restrictive measures and developing "creditors-satisfied" performance appraisal systems. Because of the imperfect external market, when making financial stimulated constraints system, we should note the selection of the incentives and source of operators. In China's listed companies, especially state-owned listed companies, most operators, not our incentive target, are entitled administratively. According to the incentives, long-term incentives than the short-term incentive enjoy more advantages to the improvement the company value. In view of present in our country, stock options are not ideal rewards for operators. However, with the elevation of various systems and market, stock options will be good long-term incentives. Moreover, we can introduce indicators such as EVA and MVA, allocating residual claim properly, operating appropriately, and taking measures like establishing long-term contractual relationships with professional managers, finally enhancing the company's incentive and restraint mechanisms and performance evaluation mechanism. Eventually, we should perfect the financial contingent governance mechanism. When the debtor fails to debt service punctually, creditors have rights to have control of the company, and external stakeholders have the right to safeguard their legitimate rights and interests via adopting the appropriate measures [8].

41.5.3 Standardize Financial Governance

Construct a hierarchical financial decision-making mechanism, so that Layers of financial subjects exercise their own financial decision-making authority, coordination, fully devoting, and without overriding. Give operators the limited borrowing power, within certain range of DAR. Managers' decisions on financing projects should be reviewed and registered. More importantly, give operators limited inward investment decision-making power, and parts exceeding the limits of investment project must approved by the shareholders. At last, give operators appropriate income distribution rights and avoid adverse selection. Using accountant designation, comprehensive budget management, contingent governance, and reporting system on significant events, we can eventually standardize financial oversight.

References

1. Varouj A, Alva Z, Ying G et al (2005) The impact of leverage on firm investment: Canadian evidence. Journal of Corporate Finance 11:277–291
2. Hart O (1995) Corporate governance: Some theory and implications. The Economic Journal 105(430):678–689
3. Nooteboom B (1999) Nooteboom voice and exit based forms of corporate governance: Anglo-American, European, and Japanese. Journal of Economic Issues 33(4):845–860
4. Zhang D (2009) Comparative analysis of finance governance structure. Shenyang University of Technology 35–40
5. Lu Y, Yang H (2010) Effects of financial governance of enterprise group's internal capital market financing contract. Finance and Accounting Monthly 35:81–83
6. Zhang Z (2008) Financial governance: A contract governance. Finance and Accounting Monthly 35:9–10
7. Zhang Z (2009) The governance of financial effects analysis based on financing contract. Finance and Accounting Monthly 35:58–60
8. Yang M (2009) Agency costs and ownership structure research of Chinese listed companies. Modern Business Trade Industry 21:155–156