Research on the Agency Problem, Corporate Governance and Firm Value

Gengli Hao[1, *]

[1]*Renmin Business School, Renmin University of China, Beijing 100000, China*
[*]*Corresponding author. Email: hgl@ruc.edu.cn*

ABSTRACT
Based on the financial data of 373 private listed companies in Shanghai and Shenzhen Stock Exchanges in 2019, this paper makes a theoretical analysis and empirical test on corporate governance and enterprise value by using agency theory. This paper finds that China's private listed companies have agency conflicts in four directions: ownership concentration, debt financing proportion, the deviation of control right and ownership, the deviation of the stock prices of tradable shares and non-tradable shares. This paper points out that the primary reason for the agency conflict of private listed companies is the price separation of tradable shares and non-tradable shares. The split share structure system is the product of the joint-stock reform of state-owned enterprises. After the reform of the split share structure, the non-tradable shares of private listed enterprises in China are mainly corporate shares and management shares. Although management shares can play a positive role in corporate governance, the excessive shareholding of the management will also lead to the decline of its constraints and endanger the interests of the company. Therefore, private listed companies should establish a restraint mechanism matching with the equity incentive mechanism.

Keywords: *agency problem, privately listed companies, tradable shares, non-tradable shares*

1. INTRODUCTION

1.1Background

Enterprises are the most important part of the development of China's market economy. Their development and growth play a very important role in the overall economic operation, and the level of corporate governance is very important to the growth of enterprises. According to the comprehensive social contract theory, the process of enterprise growth is essentially the process of value creation by enterprise stakeholders. When the level of corporate governance is high, it can coordinate all stakeholders, protect the interests of stakeholders to the greatest extent, and encourage stakeholders to better contribute resources, promote the long-term growth of enterprises and enhance their enterprise value.

However, there have been several incidents in Chinese enterprises in recent years, such as controlling shareholders illegally occupying company funds and damaging the interests of minority shareholders. Despite the rapid growth of China's market economic data and the rapid expansion of enterprises, the operating performance of many enterprises, especially listed enterprises, has been sluggish for a long time.

1.2Related Research: Agency conflict hypothesis of private listed companies

There is little literature on the application of agency theory to the study of corporate governance in China. Zhou and Wang based on Holmstrom Milgrom principal-agent model to analyze the agency problem of state-owned enterprises in China, which found that the absence of principal and the abuse of agent power are the main agency conflicts of state-owned enterprises [1]. As for the application of agency theory to systematically study the corporate governance of private enterprises, the theoretical paper is almost blank, although there are practical agency conflicts in private enterprises.

1.2.1Ownership concentration

At present, the research on corporate governance focuses on the ownership structure. Its research method is mainly empirical research. Xu and Wang found that there is a positive correlation between the profit margin of listed companies and equity concentration, especially between the profit margin of companies and the equity of legal persons The proportion of (more than 30%) has a significant positive correlation. The reason is that when

the controlling shareholder holds a small number of shares, its main goal is to increase its short-term income by influencing the enterprise's decision-making or cooperating with the manager, but the long-term improvement of the enterprise's value may not be beneficial. When the controlling shareholder's equity proportion increases to more than 30%, the controlling shareholder's goal is different from the external The objectives of shareholders tend to be consistent (maximizing enterprise value) [2].

The above research does not theoretically explain why a certain proportion of equity concentration of China's private listed companies is an effective choice to enhance enterprise value. A large number of international studies show that the degree of exploitation of minority shareholders by controlling shareholders is inversely proportional to the degree of protection of shareholders' rights in this country or region, La porta et al gave a more reasonable explanation for the above view: first, equity concentration is conducive to the supervision of controlling shareholders over managers, which helps to improve enterprise value. In countries with poor protection of shareholders' rights, the effect of enterprise value promotion caused by equity concentration and the effect of the legal protection of shareholders' rights are replaceable; second, in countries with poor legal protection of shareholders' rights, external Minority shareholders are only willing to buy when the stock price is low enough, which accelerates the concentration of equity [3].

1.2.2Debt Financing Ratio

Capital structure is a combination of permanent long-term financing methods represented by debt, preferred shares and common equity. Jensen and Meckling first applied the agency theory to explain the capital structure, and pointed out that there are agency costs in both debt financing and equity financing. Debt financing increases with the decline of the proportion of equity financing, which leads to the increase of the proportion of managers' equity, resulting in the decrease of the proportion of managers' agency costs (on-the-job consumption) [4].

Fama et al. explained the survival of organizations in which important decision agents do not bear a substantial share of the wealth effects of their decisions. Debt financing (loans and bonds) reduces the total contract cost of debt-equity contract structure by transferring the monitoring constraints to experts (such as financial intermediaries) so that other agents can specialize in the delivery of goods and services and the signing of contracts they are familiar with [5].

Myers built models to show why firms go public and why agency costs necessarily arise when the act of investment is not immediately verifiable. Myer believed that the manager's firm-specific human capital makes it have low production efficiency when re-serving other organizations. Therefore, creditors can strengthen their control over the company and reduce the manager's agency cost [6]. Anderson et al. investigated the impact of founding family ownership structure on the agency cost of debt. Using a sample of industrial firms, the research found that family ownership is associated with a lower agency cost of debt. The result suggested that bondholders view founding family ownership as an organizational structure that better protects their interests [7].

1.2.3The deviation between Control Right and Ownership

Baek et al. used empirical analysis to show that the relationship between the deviation coefficient of cash flow rights and the corporate value is negative. The greater the coefficient of deviation, the less cash flow the controlling individual or family uses to obtain the same control right. This allows controlling individuals or families to force listed companies to favor connected transactions for controlling shareholders by arranging directors or controlling managers, which leads to a surgent increase in the moral hazard of controlling shareholders [8].

Myers predicted that corporate borrowing is inversely related to the proportion of market value accounted for by real options. The research also rationalized other aspects of corporate borrowing behavior, for example, the practice of matching maturities of assets and debt liabilities. The analysis added up to a partial theory of the corporate borrowing decision, which did not rely on imperfect or incomplete financial markets [9].

Williamson examined economic organization from a science of contract perspective, with special emphasis on the theory of the firm. The application of the lens of contract/private ordering/governance leads

naturally into the reconceptualization of the firm not as a production function in the science of choice tradition, but instead as a governance structure [10].

1.2.4Deviation of stock price between tradable shares and non-tradable shares

The biggest feature of China's securities market is the setting of tradable shares and non-tradable shares. Tradable shares are traded in the secondary market according to the market price, and non-tradable shares can only be traded based on a slightly higher net asset price. This kind of transaction is not publicly traded in the securities market but through agreement transfer and auction transfer.

The controlling shareholders usually hold non-tradable shares, which is difficult to obtain capital appreciation through the stock market like the tradable

shareholders, but the cost of control is far lower than that of the tradable shareholders. After the controlling shareholders obtain the control right at a low cost, there is an agency conflict: instead of trying to create value for all shareholders, they continue to plunder the rights and interests of the tradable shareholders at a high premium using refinancing, which makes listed companies become a tool for "encircling money". In other words, the controlling shareholders constantly sacrifice the stock price in exchange for the increase of the net asset price per share of the listed company, to obtain predatory value from the tradable shareholders. Therefore, the smaller the deviation between the stock prices of tradable shares and non-tradable shares The greater the value plundered by controlling shareholders, the greater the agency conflict, and the smaller the overall value of listed companies.

1.3Objective

China's securities market has the nature of emerging and transition. Similar to most emerging and transition market countries in the world, the agency problem of Listed Companies in China is also mainly manifested in the conflict of interests between controlling large shareholders and external small shareholders. Due to the reality of "one share dominates", the general meeting of shareholders, the board of directors and the management are controlled by the major shareholders, failing most internal governance mechanisms; Due to the slow development of China's factor market and the imperfect competition mechanism, external governance mechanisms such as manager market competition and control transfer mechanism cannot play their due role.

Based on the financial data of 373 private listed companies in Shanghai and Shenzhen Stock Exchanges in 2019, this paper makes a theoretical analysis and empirical test on corporate governance and enterprise value by using agency theory to find the primary reason for the agency conflict of private listed companies of China.

2. METHOD

2.1 Sample

This paper selects the micro-level data of the Chinese listed enterprise's database, which covers the enterprise data from 1990 to 2020. This paper selects the relevant data of 373 private enterprises listed on A-shares in Shanghai and Shenzhen Stock Exchange in 30 provinces of China (Hong Kong, Macao, Taiwan and Tibet Autonomous Region are not selected due to the serious lack of statistical data) in 2019. According to the traditional practice, financial companies and all PT, ST, *ST listed companies are excluded. To ensure the integrity and accuracy of the data, the samples with missing or less than 0 of the main variables are eliminated and companies that have been listed for less than one year are excluded.

2.2 Variables

2.2.1Dependent Variable

The dependent variable of this paper is the value of the enterprise. Referring to the general practice of the existing innovation literature, the value of the enterprise in this paper is measured by return on equity (ROE).

2.2.2Independent Variables

The independent variable of this paper is the conflict of the agency problem. Referring to the general practice of the existing innovation literature, there are 4 main methods for measuring the conflict of the agency problem: the concentration rate of equity, the debt financing ratio, the deviation coefficient between control right and ownership and the deviation between market price per share and net assets per share.

2.2.3Control variables

Combined with the existing literature, this paper controls other relevant enterprise characteristic variables, including the general manager from the controlling shareholder (MOC), the second-largest shareholder holding more than 10% (SEC10) and the scale of listed companies (LA). MOC and SEC10 are dummy variables. If it exists, take 1; if it does not exist, take 0. The scale of listed companies is the logarithm of the enterprise assets.

2.3 Model

To test the impact of enterprise agency problems on enterprise value, this paper establishes the following model:

$$ROE = \beta_0 + \beta_1 * CR5 + \beta_2 * DFR + \beta_3 * SQ + \beta_4 * LPA + \beta_5 * MOC + \beta_6 * SEC10 + \beta_7 * LA \quad (1)$$

Among them, ROE is the value of enterprise; CR is the concentration rate of equity; DFR is the debt financing ratio; N is the control chain level; SQ is the deviation coefficient between control right and cash flow; LPA is the logarithm of deviation between market price per share and net assets per share; ε is the random disturbance term.

3. RESULTS

3.1Descriptive statistics

Table 1 reported the descriptive statistics of the variables involved in the measurement model in this paper.

Table 1. Descriptive statistics of variables

Variables	Mean	St. dev.	Minimum	Maximum
ROE	0.104	0.076	-0.129	0.604
CR5	55.427	13.894	19.130	90.190
DFR	0.368	0.170	0.048	0.866
SQ	1.315	0.723	1	7.518
LPA	0.433	0.261	-0.151	1.456
MOC	0.898	0.303	0	1
SEC10	0.517	0.500	0	1
LA	9.540	0.479	8.182	11.665

3.2Multiple linear regression results

Table 2 showed the multiple linear regression results of the model. Column (1) of Table 2 showed the regression results with only control variables. Column (2) showed the regression results with explanatory variables such as equity concentration (CR5), debt financing ratio (DFR), deviation coefficient between control right and cash flow right (SQ), the logarithm of deviation between market price per share and net assets per share (LPA). The regression model in column (3) was robustly revised based on column (2).

It could be seen that the coefficients of CR5 and SQ were relatively smaller than those of DFR and LPA, indicating that the ownership concentration and the deviation of control and ownership has relatively little impact on the value of private listed companies.

Table 2. Multiple linear regression results

Variables	(1)	(2)	(3)
CR5		0.001(2.09)**	0.001(2.07)**
DFR		-0.115(-4.94)***	-0.115(-4.00)***
SQ		-0.010(-2.09)**	-0.010(-2.05)**
LPA		0.126(8.89)***	0.126(8.13)***
MOC	0.029(2.28)**	0.022(1.89)*	0.022(2.01)**
SEC10	0.010(1.34)	-0.003(-0.48)	-0.003(-0.46)
LA	0.027(3.29)***	0.072(8.22)***	0.072(6.88)***

* Significant at the 0.1 level (two-tailed), ** Significant at the 0.05 level (two-tailed), *** Significant at the 0.01 level (two-tailed), T value in parentheses.

Both DFR and LPA were significantly positive at the 1% level, indicating that there is a significant relationship between ownership concentration, price deviation of tradable shares and non-tradable shares and enterprise value. The coefficient of LPA was positive, indicating that the greater the stock price deviation between tradable shares and non-tradable shares, the higher the value of private listed companies. This result was consistent with the above theoretical analysis.

However, the coefficient of DFR was negative, which was inconsistent with the theoretical analysis. After carrying out the curve fitting between DFR and ROE, the result was as follow:

$$ROE = 0.158DFR^2 - 0.162DFR + 0.137 \qquad (2)$$

The adjusted R^2 was 0.6%. The F value was 2.12. The first-order condition of DFR was 51.3%.

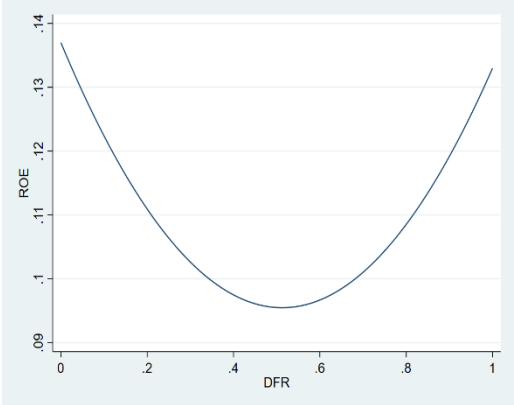

Figure 1 The relationship between ROE and DFR.

From the above results, when the debt financing ratio exceeds 51.3%, the debt financing ratio is directly proportional to the enterprise value. It could be seen from Table 1 that the debt financing ratio cannot improve the enterprise value of most private listed companies.

3.3Robustness check

To test the correctness of the model and prevent the omission of variables, this paper used the regression specification error test (RESET) of the regression model concerning the general practice of the existing literature. The test result of P-value was 0.1426, so there were no omitted variables in the model.

4. DISCUSSION

4.1 Split share structure and the allocation efficiency of capital market

Based on the empirical study of 373 private listed companies, the results show that the most fundamental and serious agency conflict of listed companies is the price separation of tradable shares and non-tradable shares. The split share structure system, formed in the early 1990s, is the product of the joint-stock reform of state-owned enterprises. In the period of non-tradable shares, the shares of listed companies are divided into state-owned shares, corporate shares, individual shares and foreign shares. State-owned shares and legal person shares cannot circulate in the market and are called non-tradable shares. Individual shares and foreign capital shares can be traded in the secondary market and are called tradable shares. Non-tradable shares are transferred based on net assets per share outside the market and cannot be circulated in the secondary market. Tradable shares circulate at the market price in the secondary market, and the price is generally higher.

The split share structure leads to the division of tradable shares and non-tradable shares, different rights for the same share and different prices for the same share, which leads to the distortion of the capital factor market and leaves "sequelae" for the healthy development of listed corporate governance and capital market. Tradable shareholders pursue the rise of stock price, while non-tradable shareholders pay attention to the net assets per share, resulting in the problem that non-tradable shareholders encroach on the interests of tradable shareholders under control. In addition, the split share structure also makes the original functions of the capital market, such as rational allocation of resources and price discovery, ineffective.

4.2 The reform of split share structure

With the advancement of China's market-oriented reform, the disadvantages of split share structure increasingly restrict the development of China's capital market, and the full circulation of shares has attracted much attention. After two failed explorations of the circulation of corporate shares from 1992 to 1999 and the reduction of state-owned shares from 1999 to 2002, on April 29, 2005, the CSRC issued Notice on Issues Related to the Pilot of the Split Share Structure Reform of Listed Companies, and the reform of split share structure was officially launched. On May 9 of the same year, Tsinghua Tongfang, Sany Heavy Industry, Zijiang Company and Jinniu Resources, as the first batch of pilot companies, began to reform. On June 19, another 42 companies were selected as the second batch of pilot companies. The pilot companies have wider coverage and are more diversified in the pilot schemes and specific measures of split share structure reform. After the two batches of pilot projects, the pace of split share structure reform has accelerated.

The split share structure reform of Chinese listed companies focused on 2005, 2019 and 2007. The split share structure reform is a revolutionary change in the capital market. The circulation right is obtained by paying the "consideration" from the non-tradable shareholders to the tradable shareholders so that the large and small shareholders have a common interest foundation, which has an important impact on improving the corporate governance mechanism and correcting the distortion of the factor market.

4.3 The impact of the reform of split share structure on enterprise value

The impact of the reform of split share structure on enterprise value is mainly realized by affecting the corporate governance cost and governance efficiency. The split share structure reform has changed the ownership structure and the composition of shareholders. The ownership structure determines the structure of the

company's decision-making organs, executive organs and supervisory organs, as well as the relationship between these organs and managers. Therefore, the split share structure reform eventually had an impact on enterprise value.

In the state of split share structure, the interest conflicts between non-tradable shareholders and tradable shareholders, major shareholders and minority shareholders are intertwined. The interest focus of non-tradable shareholders lies in the increase or decrease of net asset value. However, the interest focus of tradable shareholders lies in the fluctuation of the stock price in the secondary market, which objectively forms the "separation of interests" between non-tradable shareholders and tradable shareholders. It does not form an effective constraint on listed companies, resulting in the lack of a common interest basis for corporate governance.

After the reform, the realization of the value of non-tradable shares is no longer the book value, but the market value. The company's share price becomes the main standard for the unified value evaluation of the company's shareholders, to curb the abuse of power of major shareholders. It makes the interests of the original non-tradable shareholders and tradable shareholders tend to be consistent and form the common interest basis of corporate governance. All kinds of shareholders, especially major shareholders, begin to pay more attention to the improvement of profits, financial indicators and the growth of business performance. They start to supervise the business behavior of operators. This helps to improve the operation and decision-making efficiency, the performance, and the quality of listed companies as a whole.

In the reform of split share structure, many labor unions take equity incentive measures for senior managers. The implementation of equity incentives makes managers hold more shares, which leads to the consistency between the interests of managers and shareholders and stimulates the enthusiasm and innovation of managers. It is conducive to reducing the principal-agent cost of listed companies and increasing the value of enterprises.

4.4 Current situation of non-tradable shares in private listed companies

Nowadays, the non-tradable shares of private listed companies in China are mostly corporate shares and management shares.

Corporate shares refer to the shares invested in the non-tradable shares by an enterprise as a legal person or an institution and social organization with the status of a legal person. At present, corporate shares account for about 20% on average in the ownership structure of listed companies in China. According to the object of subscription of legal person shares, legal person shares can be further divided into three parts: domestic initiated legal person shares, foreign legal person shares and raised legal person shares. The existing legal person shares flow mainly in the following ways: agreement transfer, auction, pledge and repurchase. Due to the lack of wider participation of investors, the circulation of corporate shares is restricted, and its real value cannot be reflected through trading in the stock market.

As an incentive mechanism, management shares can play a positive role in corporate governance. With the increase of management ownership, the objective function of managers and shareholders with residual claims is gradually consistent. Therefore, managerial ownership helps to reduce the agency cost and increase the value of the company. However, this function is only effective within a certain range. If the management holds too many shares, they will have more power to control the enterprise, and the effective constraints on them will be weakened. At this time, managers will maximize their welfare by pursuing self-interest goals rather than corporate value goals at the cost of the interests of other shareholders. Therefore, private listed companies should establish a restraint mechanism matching with the equity incentive mechanism [11].

5. CONCLUSION

Based on the empirical study of 373 private listed companies, the results show that the agency problem derived from the ownership structure of most private listed companies in China is not very serious. At the same time, most private listed companies' debt financing cannot reduce but increase the agency cost, resulting in the decline of the enterprise value.

This study finds that the agency conflict caused by the deviation of control right and ownership has just emerged in private listed companies. The most fundamental and serious agency conflict of listed companies is the price separation of tradable shares and non-tradable shares, which leads to the agency conflict between controlling individuals or family shareholders and external shareholders. The objectives of controlling individuals or family shareholders deviate from those of external shareholders, which are the specific manifestations of this agency conflict. Controlling individuals or family shareholders are not committed to improving the operating performance and enterprise value of listed companies, but prefer to marginalize listed companies as money-making machines, and constantly plunder the interests of external shareholders with their help of them.

REFERENCES

[1] Mi, Z., & Wang, X. (2000). Agency cost and the crisis of China's SOE. China Economic Review, 11(3), 297-317.

[2] Xu, X., & Wang, Y. (1999). Ownership structure and corporate governance in Chinese stock companies. China economic review, 10(1), 75-98.

[3] La Porta, R., Lopez-de-Silanes, F., & Shleifer, A. (1999). Corporate ownership around the world. The journal of finance, 54(2), 471-517.

[4] Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. Journal of financial economics, 3(4), 305-360.

[5] Fama, E. F., & Jensen, M. C. (1983). Separation of ownership and control. The journal of law and Economics, 26(2), 301-325.

[6] Myers, S. C. (2000). Outside equity. The Journal of Finance, 55(3), 1005-1037.

[7] Anderson, R. C., Mansi, S. A., & Reeb, D. M. (2003). Founding family ownership and the agency cost of debt. Journal of Financial economics, 68(2), 263-285.

[8] Baek, J. S., Kang, J. K., & Park, K. S. (2004). Corporate governance and firm value: Evidence from the Korean financial crisis. Journal of Financial economics, 71(2), 265-313.

[9] Myers, S. C. (1977). Determinants of corporate borrowing. Journal of financial economics, 5(2), 147-175.

[10] Williamson, O. E. (2002). The theory of the firm as governance structure: from choice to contract. Journal of economic perspectives, 16(3), 171-195.

[11] Chen, X. & Ma, L. (2015). Study on the Relationship among the Level of Corporate Governance, Enterprise Growth and Enterprise Value: The Perspective of Internal Control. Forecasting, (06), 28-32+50.