

The Impact of the Exit Threat of Non-controlling Major Shareholders on Surplus Transparency—Empirical Evidence from Chinese Listed Companies

Beibei Jiang^{1,*}, Luyao Wang²

¹Ginling College, Nanjing Normal University, Nanjing, 210023, China

²School of Economics and Management, Beijing Jiaotong University, Weihai, 100044, China

*Corresponding author: 1320160678@qq.com

Abstract: As the most direct indicator of the performance of the company's operating results in a certain period of time, surplus transparency can solve the problem of information asymmetry, help to improve enterprise performance and promote enterprise technological innovation. Exit threat as a concept in social psychology has begun to be introduced into the field of corporate governance in recent years. As an effective way of equity governance, the exit threat of non-controlling large shareholders plays an increasingly significant role in corporate governance. We demonstrate that the exit of non-controlling major shareholders can enhance the transparency of earnings by examining a sample of 20,415 observation values of Chinese A-share listed enterprises from 2001 to 2020, and propose certain targeted suggestions which have a significant effect on the betterment of information disclosure systems and corporate governance.

Keywords: Exit Threat, Non-controlling Major Shareholder, Quality of Accounting Information Disclosure, Surplus Transparency

1. Introduction

The essence of corporate governance is to reduce or eliminate the agency cost and the information asymmetry caused by the principal agent. In improving corporate governance, the exit threat of non-controlling major shareholders plays a non-negligible role. According to McCahery et al. (2016) [1-2], major shareholders often use the "exit" governance mechanism in the process of corporate governance, and its exit threat plays a significant role in reducing not only the degree of information asymmetry but reducing the agency cost. Li et al. (2009) The study of the influence of the non-dominant major shareholders' withdrawal threat on the company's financial reporting and information asymmetry from multiple perspectives revealed a tremendous positive outcome. Chen Kejing (2019) [3] revealed that this kind of threat is able to reduce the agency cost of the first type and the second type effectively, and inhibit the tunnel excavation behavior of the controlling shareholders and the opportunistic behavior of the management. The audit pricing can be reduced due to the potential for non-controlling major shareholders to exit (Sun Weiyan, et al.), (2023) [4] by reducing the degree of earnings management, upgrade financial reporting, and enhance the efficiency of the capital market (Yu Nutao, et al., 2021) [5].

The quality of corporate governance is largely reflected in surplus transparency, which should be taken into account. To explore the effect of non-controlling significant shareholder withdrawal threats on surplus disclosure, this article utilizes the Shanghai and Shenzhen A-share listed firms from 2001 to 2020 as a research sample. The endogenous analysis and robustness test demonstrate that the withdrawal threat of non-controlling large shareholders has a beneficial effect on surplus transparency, as indicated by the results.

This paper's contribution is mainly evidenced by its utilization of the threat of major shareholders as a means of corporate governance, which has been demonstrated in numerous literatures to have an effect on the company's capital expenditure. However, at the present stage, there are few literature studies on whether the non-controlling major shareholders have a positive effect on the transparency of surplus. Second, on the basis of the existing research, this paper supplements and extends the relevant theory of shareholder activism, and expand the relevant research on the threat of exit. Third, this paper provides

policy inspiration on the importance of non-controlling major shareholders and the sound information disclosure system. Non-controlling major shareholders should be actively guided by enterprises to take part in corporate governance, optimize the internal governance process, and enhance the board and independent director systems. In addition, the government and relevant institutions should also actively intervene, further strengthen the legal construction and the role of government supervision, improve the enterprise surplus information disclosure mechanism, so as to effectively reduce the agency conflict and information asymmetry, and optimize the environment of China's capital market.

2. Literature review and theoretical assumptions

Accounting information has an important influence on asset pricing. The capital market's effect on the quality of accounting information is the focus of some documents, whereas others investigate the factors that shape the quality of listed companies' accounting data. On the study of surplus transparency, Bhattacharya et al. (2003) [6] for the first time measured the transparency of surplus with loss avoidance, radical surplus and total surplus from the perspective of short-term, and long-term surplus manipulation, and defined the surplus opacity as the degree to which the surplus distribution reported by the company deviates from the company's real economic surplus. The earnings transparency of an enterprise marks whether the economic earnings information such as the operating results and earnings changes can truly and objectively reflect the earnings distribution situation, and effectively transmit it to the capital market, and then affect the investment decision and supervision function of the users of the external information of the enterprise and the operative decision of the internal management.

Most of the existing studies have inherited and developed the "shareholder activism" of the Chicago School, that is, that the major shareholders can play their role in corporate governance through positive restraint and supervision. According to signal theory, major shareholders, as the dominant party of information, can send negative signals to the capital market through exit behavior, thus affecting the stock price to achieve the purpose of corporate governance. Since the withdrawal behavior of major shareholders can threaten the value of the enterprise, major shareholders can cause management to reconsider management decisions through the threat of selling their held shares (Palmiter, 2001) [7]. In addition, according to Sun Weiyan et al. (2023) [8], the withdrawal threat of non-controlling major shareholders has a significant inhibitory effect on the violations of enterprises, and suppresses the violations of enterprises by alleviating the cost of the first and second types of agents and improving the transparency of enterprise information. [9]

Studies have demonstrated a correlation between the exit threat of major shareholders and the quality of environmental information disclosure, with the betterment of the exit threat leading to an enhancement of the quality of environmental information disclosure (Wang Jing et al.), (2022) [10]. Non-controlling major shareholders hold a large proportion of stocks involved in corporate governance, and the market value of these stocks is largely determined by the financial performance and operating conditions of the company, so they have a strong incentive to participate in corporate governance. Non-controlling major shareholders mainly improve their corporate governance through two behavior modes of supervision and withdrawal. By participating in corporate governance processes such as management change proposals, non-controlling major shareholders can effectively supervise and intervene. The analysis of Zeng Ying and Lu Zhengfei (2006) [11] reveals a significant negative correlation between the information disclosure quality of listed companies and the cost of equity financing. This correlation is mainly due to the smoothness of earnings and the overall quality of disclosure, which are the main factors that affect the cost of equity. From the point of view of corporate governance, the potential for non-controlling major shareholders to pull out can diminish the investment expense of shareholders and enhance the enterprise's financial capability by making surplus more transparent.

Based on the above analysis, the following assumptions are made:

H1: The exit threat of non-controlling major shareholders can increase the transparency of surplus.

3. Research design

3.1 Data source and sample selection

From 2001 to 2020 Shanghai and Shenzhen A-share companies were chosen as the initial samples for this paper. Excluding those from the financial industry, those with missing data, ST and * ST, and

those with abnormal relevant data, the total number of valid observation samples was 2,911, amounting to 20,415. The study data are mainly from Wind China financial database and CSMAR database. In order to exclude the effect of extreme values, all continuous variables were treated with Winsorize tail reduction of 1%.

3.2 Variable definitions

3.2.1 Interpretation variable-surplus transparency

Based on the method of Kwok Ai (2016) [12], the surplus transparency (CT) is measured by the weighted composite index of earnings activist (EA) and surplus smoothness (ES), the greater the CT value, the lower the transparency of the surplus of the enterprise. The specific meanings are shown in Table 1 below.

Table 1: Measures of corporate governance level

| Variable | Description | Measure |
|----------|--|---|
| EA | Surplus Rativity (Earnings Aggressiveness) | EA = (net profit of the year 1 net cash flow of the year) total assets at the beginning of the year |
| ES | Surplus smoothness (Earnings Smoothing) | ES = standard deviation of the ratio of the net cash flow from operating activities during the (t-3, t) period to total assets at the beginning of the year the standard deviation of the ratio of the company's net profit during the (t-3, t) period to the total assets at the beginning of the year |
| CT | Composite index (Comprehensive Transparency) weighted by surplus inactivity and surplus smoothness | CT =50%*EA +50%*ES |

3.2.2 Interpretive variables-The withdrawal of non-controlling major shareholders threatens NET

This paper defines the non-actual controlling shareholder with a shareholding ratio greater than 5% as the non-controlling major shareholder. According to Chen Kejing (2019) [3] to quantify the withdrawal of non-controlling major shareholders threatening NET, NET is defined as the product of the competition degree of stock liquidity between StkL and non-controlling major shareholders NCMEC. The daily average turnover rate of tradable shares is used as the index to measure the liquidity of stocks. The calculation method of NCMEC is as follows:

$$NCMEC_{it} = \sum_{k=1}^n \left(\frac{NCMS_{k,i,t}}{TPMS_{i,t}} \right)^2 \tag{1}$$

Through the above calculation, the calculation model of NET threat is obtained.

$$NET_{it} = StkL_{i,t} \times NCMEC_{it} \tag{2}$$

3.2.3 Control Variables

Referring to the research of Gao Yan (2022) [13], Chen Kejing (2018) [14] and Bai Xijuan (2022) [15], the following controlling variables are selected: company scale Size, asset-liability ratio Lev, ROE, ratio of fixed assets FIXED, growth rate of operating income Growth, Dual of two jobs, and Top 1 of equity concentration. Table 2 outlines the variables that this article controls for, both in terms of annual and industry fixed effects.

Table 2: Variable definition table

| Variable | Description | Measure |
|----------|---|--|
| CT | Surplus transparency | See in 3.2.1 |
| NET | Non-controlling major shareholder exit threat | See 3.2.2 for Formula (2) |
| Size | company size | ln(total assets) |
| Lev | asset-liability ratio | Total liabilities / total assets |
| ROE | Return on equity | Net income / net assets |
| FIXED | The proportion of fixed assets | Fixed assets / total assets |
| Growth | increase rate of business revenue | Growth amount of operating revenue / total operating |

| | | |
|--------------|----------------------|---|
| | | revenue of the previous year |
| <i>Dual</i> | Two jobs in one | When the chairman and the general manager is the same person, the value is 1, and otherwise it is 0 |
| <i>Top 1</i> | Equity concentration | Number of outstanding shares held by the largest shareholder / total number of outstanding shares |

3.3 Model design

To examine the association between the potential for non-dominant major shareholders to withdraw and the corporate governance level, the paper has created the following model.

$$CT_{it} = \alpha_0 + \alpha_1 NET_{it} + \alpha_2 Size_{it} + \alpha_3 Lev_{it} + \alpha_4 ROE_{it} + \alpha_5 FIXED_{it} + \alpha_6 Growth_{it} + \alpha_7 Dual_{it} + \alpha_8 Top\ 1_{it} + \sum Year_{it} + \sum Indu_{it} + \varepsilon \tag{3}$$

The regression coefficient α_1 of NET_{it} , among them, being significantly negative, implies that the exit threat of non-controlling major shareholders of i company in year t is conducive to enhancing the transparency of earnings, thus confirming the research hypothesis of this paper.

4. Mpirical results and analysis

4.1 Descriptive statistics

The model's variables are depicted in Table 3 with descriptive statistical results. The exit threat has a maximum of 0.016, a minimum of 0, and an average of 0.001, suggesting that there are distinctions between enterprises in terms of the exit threat. The surplus transparency of various companies varies significantly, with an average of 2.067, a maximum of 182.5, a minimum of -1.323, and a standard deviation of 4.711.

Table 3: Descriptive statistics

| variable | observed value | mean | standard error | least value | crest value |
|---------------|----------------|-------|----------------|-------------|-------------|
| <i>CT</i> | 20415 | 2.067 | 4.711 | -1.323 | 182.5 |
| <i>NET</i> | 20415 | 0.001 | 0.002 | 0 | 0.016 |
| <i>Size</i> | 20415 | 22.14 | 1.293 | 19.52 | 26.40 |
| <i>Lev</i> | 20415 | 0.418 | 0.209 | 0.031 | 0.925 |
| <i>ROE</i> | 20415 | 0.064 | 0.135 | -1.072 | 0.397 |
| <i>FIXED</i> | 20415 | 0.208 | 0.159 | 0.002 | 0.725 |
| <i>Growth</i> | 20415 | 0.164 | 0.430 | -0.660 | 4.330 |
| <i>Dual</i> | 20415 | 0.288 | 0.453 | 0 | 1 |
| <i>Top 1</i> | 20415 | 0.345 | 0.148 | 0.0830 | 0.758 |

4.2 Correlation analysis

The Pearson correlation coefficients among the variables are shown in Table 4. The correlation coefficient between the threat of exit and the level of corporate governance are 0.104, which was significant at the 1% level. Judging the positive correlation between the two variables, the hypothesis was preliminarily verified. The absolute value of the correlation coefficient between the control variables is small, indicating that the correlation is weak and there is no multicollinearity problem.

Table 4: Pearson correlation coefficient table

| | <i>CT</i> | <i>NET</i> | <i>Size</i> | <i>Lev</i> | <i>ROE</i> | <i>FIXED</i> | <i>Growth</i> | <i>Dual</i> | <i>Top 1</i> |
|---------------|-----------|------------|-------------|------------|------------|--------------|---------------|-------------|--------------|
| <i>CT</i> | | | | | | | | | |
| <i>NET</i> | -0.103*** | | | | | | | | |
| <i>Size</i> | 0.120*** | -0.062*** | | | | | | | |
| <i>Lev</i> | 0.151*** | -0.044*** | 0.454*** | | | | | | |
| <i>ROE</i> | 0.145*** | -0.029*** | 0.212*** | -0.070*** | | | | | |
| <i>FIXED</i> | -0.154*** | -0.020*** | -0.005 | -0.013* | -0.103*** | | | | |
| <i>Growth</i> | 0.093*** | 0.036*** | 0.092*** | 0.006 | 0.360*** | -0.065*** | | | |
| <i>Dual</i> | -0.012* | 0.035*** | -0.123*** | -0.084*** | -0.011 | -0.072*** | 0.030*** | | |
| <i>Top 1</i> | 0.105*** | -0.353*** | 0.239*** | 0.104*** | 0.157*** | 0.077*** | -0.000 | -0.092*** | |

4.3 Basic regression results and endogeneity analysis

4.3.1 Endogeneity analysis

Table 5: Regression results and endogeneity analysis

| | (1) | (2) |
|----------------|-----------------|--------------------|
| | The main return | Endurance analysis |
| variable | CT | CT |
| NET | -40.828*** | -38.377*** |
| | (-3.23) | (-2.82) |
| Size | 0.042 | 0.032 |
| | (1.59) | (1.13) |
| Lev | 1.829*** | 1.927*** |
| | (12.48) | (12.12) |
| ROE | 2.174*** | 2.296*** |
| | (15.42) | (14.85) |
| FIXED | -1.387*** | -1.417*** |
| | (-7.34) | (-6.93) |
| Growth | -0.121*** | -0.156*** |
| | (-3.16) | (-3.59) |
| Dual | -0.012 | -0.026 |
| | (-0.23) | (-0.47) |
| Top 1 | -0.340* | -0.233 |
| | (-1.72) | (-1.04) |
| constant | 0.079 | 0.238 |
| | (0.12) | (0.33) |
| observed value | 20,415 | 17,099 |
| Year fixed | YES | YES |
| Industry fixed | YES | YES |

z-statistics in parentheses

*** p<0.01, ** p<0.05, * p<0.1

To circumvent sample selection bias, the PSM propensity score matching technique was employed, with all the control variables being the matching variables and passing the balance test. The regression was performed with the matched data. Table 5's column (2) displays the regression results, and the coefficient was still significant at 1%, in line with the prior regression results, thus demonstrating the robustness of the results, as shown in Table 5.

4.3.2 and the robustness test

1) Consider the lag effect.

Consider the hysteresis effect. Due to the possible lag in the impact of the exit threat on the composite index of surplus transparency CT, this paper resumed the regression after the lag of the exit threat NET. The regression coefficient was -35.108, which was significantly positive at the 5% level, indicating relatively robust experimental results.

2) Add the control variables.

Increase three control variables: BM (book market value ratio), Indep (independent director ratio) and M share (management shareholding ratio), and return to the regression. The regression results remained significant at the 1% level. It can be seen in Table 6 that the regression results have not been significantly changed, proving that the empirical results are robust.

Table 6: The robustness test

| | (1) | (2) |
|----------|-----------------|----------------------------|
| | time-lag effect | Increase control variables |
| variable | CT | CT |
| NET | -35.108** | -33.518*** |
| | (-2.43) | (-2.66) |
| Size | 0.009 | -0.120*** |
| | (0.29) | (-4.05) |
| Lev | 2.010*** | 1.478*** |

| | | |
|----------------|-----------|-----------|
| | (12.14) | (9.96) |
| <i>ROE</i> | 2.398*** | 2.355*** |
| | (15.54) | (16.67) |
| <i>FIXED</i> | -1.326*** | -1.475*** |
| | (-6.21) | (-7.86) |
| <i>Board</i> | -0.159*** | -0.100*** |
| | (-3.77) | (-2.61) |
| <i>Top1</i> | 0.001 | -0.015 |
| | (0.02) | (-0.28) |
| <i>TobinQ</i> | -0.258 | -0.245 |
| | (-1.16) | (-1.25) |
| <i>BM</i> | | 0.157 |
| | | (1.05) |
| <i>Indep</i> | | 1.276*** |
| | | (2.59) |
| <i>Mshare</i> | | 0.305*** |
| | | (12.14) |
| constant | 0.597 | 2.639*** |
| | (0.79) | (3.34) |
| | | |
| observed value | 17,292 | 20,413 |
| Year fixed | YES | YES |
| Industry fixed | YES | YES |

z-statistics in parentheses

*** p<0.01, ** p<0.05, * p<0.1

5. Conclusion

The threat of withdrawal has had a considerable impact on the degree of corporate governance in recent years, a factor of great importance. As an intermediary mechanism with the threat of the withdrawal of non-controlling major shareholders affecting the cost of equity capital, surplus transparency also reflects the level of corporate governance to a certain extent. Beginning with the domestic capital market, this paper empirically examines the influence of the withdrawal threat of non-controlling major shareholders on corporate governance by examining a-share listed companies in Shanghai and Shenzhen from 2001 to 2020 as the research sample. The regression results demonstrate that the withdrawal threat of non-controlling major shareholders has a beneficial effect on governance and can enhance the transparency of surplus.

Based on the above research, this paper has the following enlightenment: First, in terms of the importance and shareholding structure of the non-controlling major shareholders, this paper provides policy inspiration. Enterprises should attach importance to the corporate governance role of the non-controlling major shareholders. For enterprises, a reasonable shareholding structure should be constructed, so that the major shareholders can realize the governance of enterprises through various ways, and improve the transparency of enterprise surplus. Enterprises whose shareholding structure is too concentrated should actively reform the existing shareholding structure. By joining the non-controlling major shareholders, the governance structure and equity structure should be further optimized to alleviate the agency problem caused by the excessive concentration of equity. For enterprises with existing non-controlling major shareholders, enterprises should pay more attention to the decision-making opinions of non-controlling major shareholders and protect their right to know to make major decisions. Organizations should direct non-dominant major shareholders to take part in corporate governance and enhance the corporate governance framework. For the major shareholders, they should strive to discover effective methods of "speaking out" in the invested businesses and protect their rights and interests. The participation of non-controlling major shareholders in corporate governance should not only safeguard their own interests, but also consider the long-term development of the enterprise, adopt appropriate ways to enhance the credibility of exit and enhance the transparency of enterprise surplus. Non-controlling major shareholders should be given the opportunity to supervise and manage the company, their right to knowledge of the enterprise's business activities safeguarded, their rights and interests legally safeguarded, and a conducive institutional environment for their participation in corporate governance improved by government functional departments. Moreover, both individual and institutional investors should be provided with the same opportunity, they should recognize the risks, clarify the situation, think rationally and judge carefully.

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