Financial Engineering and Risk Management (2023)
Clausius Scientific Press, Canada

DOI: 10.23977/ferm.2023.060807
ISSN 2523-2576 Vol. 6 Num. 8

A Study on the Threat of Non-Controlling Shareholders' Withdrawal and Its Impact on the Relationship between Lend Short and Invest Long

Yunru Chen[1], Jiaxin Yao[2]

[1]Business Management Scientific Academy, Chengdu University of Technology, Chengdu, Sichuan, 610059, China

[2]School of Business Administration, Harbin Cambridge College, Harbin, Heilongjiang, 150069, China

Keywords: Uncontrolling major shareholders exit threat, short-term loans, long-term investments, enterprise management

Abstract: This article aims to explore the impact of the threat of uncontrolled major shareholders withdrawal on the phenomenon of short-term versus long-term borrowings investments under the influence of a high-quality economic environment. This project examines the correlation between the "exit" risk of major shareholders and their short-term lending and long-term investment behaviors based on data from Shanghai and Shenzhen for the period 2007-2021. The results show that the "exit" of non-controlling majority shareholders plays a restraining role in short-term borrowing and long-term investment in listed companies in China. As the amount of stock outstanding increases, competition among non-controlling majority shareholders becomes more intense and the risk of their departure becomes greater, which has a greater impact on short-term borrowing and long-term investment in the company. This article has a novel research perspective, enriches relevant literature, and serves as a decision-making reference for corporate governance in reality, which is beneficial for internal management and subsequent development of enterprises.

1. Introduction

In recent years, scholars have gradually deepened their research on non-controlling major shareholders. Major shareholders, as internal stakeholders of the company, have a significant impact on corporate decision-making, such as negotiating with management, submitting proposals, and participating in internal management changes, all of which play a crucial role in corporate governance activities. Exit threat refers to the major shareholder threatening the management and controlling shareholders to make concessions on the grounds of selling stocks, in order to change the company's business decisions and prevent damage to their own interests; As a concept in Social psychology, exit threat has been introduced into the field of corporate governance in recent years. Both parties of interest force the other party to make concessions and change the other party's behavior decisions through threat games. Long-term investments play an important role in the long-term development of a company and in the economic development of a country, means that enterprises need more long-term capital inflows.

The research on exit threats is still in its infancy, and existing research mainly focuses in the second part, the significance of exit threats from a corporate governance perspective is explored. Jiang Fuxiu et al. (2015) found empirically threat of uncontrolled majority shareholders withdrawing can significantly suppress the self-interest behavior of controlling shareholders and management [13]. Chen Kejing (2019) found that the threat the withdrawal of major shareholders can alleviate two types of problems Principals–agent problem and inhibit the degree of earnings management. Based on existing literature analysis, the uncontrolled shareholder is concerned with the internal manager that and their changes in equity structure or constraints can directly or indirectly lead to financial flows, financial financing, and other situations of the company [14]. Yu Nutao et al. (2023) found that non-controlling shareholders can greatly improve the financial quality of a company reporting through the exit threat mechanism [15]. Yang Chunhua (2020) [16] Similarly, there is a clear opposite relationship between exit threats and business growth tax avoidance behavior. In recent years, the threat of exit has been mostly related to investment efficiency and auditing, but few people have linked threat of divestment by non-controlling majority shareholders with external short-term loans and long-term investments. At the same time, whether the internal shareholder structure of a company will affect its financial situation this is of great importance for the sustainable development of the company.

Short-term borrowing and long-term investments are mostly used by private enterprises. As the main way for Chinese enterprises to obtain external financing, bank credit is strictly controlled by regulatory agencies such as the China Banking and Insurance Regulatory Commission. In addition, credit discrimination and restrictions on credit investment make it difficult for enterprises to obtain long-term funds, and their access to short-term funds is also limited. Under the pressure of limited financing and increased risk, companies may choose to take risks and invest short-term financing in high yield but long-term projects. Short term loans and long-term investments mainly refer to the phenomenon of a company violating the principle of matching asset and fund maturities by investing short-term funding sources into long-term investment activities, resulting in a mismatch between the company's assets and debt maturities. This mismatch behavior undoubtedly increases the financial risk of the enterprise, while also reducing its ability to respond to unexpected events. It may even lead to the occurrence of fund chain fractures due to unreasonable fund scheduling and unsmooth operations. To this end, this project combines "exit of non-controlling majority shareholders" with "short-term borrowing" and "long-term investment", and uses the sample data of Shanghai and Shenzhen from 2007 to 2021 as the sample to examine the correlation between "exit of non-controlling majority shareholders" and "short-term borrowing" and "long-term investment". We examine the correlation between "exit of non-controlling majority shareholders" and "short-term borrowing" and "long-term investment".

The novelty of this thesis is the choice of a new research perspective. At present, few studies have considered the "exit" of non-controlling majority shareholders at the same time. This thesis will study the impact of "delisting" of non-controlling majority shareholders on short-term borrowing and long-term investment of listed companies in China investments from the perspective of non-controlling major shareholders, further enriching relevant research in this area. At the same time, the innovation of the author of this article lies in the ideological aspect. Currently, no one has linked threat of divestment by non-controlling majority shareholders with short-term loans and long-term investments, because one belongs to internal shareholder management and the other belongs to external financial conditions. Therefore, this innovation mainly focuses on connecting internal and external factors to comprehensively examine the strengths of the company's own development

2. Theoretical Assumptions

Short-term borrowing and long-term investments are commonly found in small and medium-sized enterprises because the interest rate on short-term borrowings is lower than that on long-term borrowings (Yang Xingquan, Li Shasha, Li Chuang, 2020) [7]. Enterprises often use short-term loans to solve urgent needs and play a role in capital turnover for long-term development. This requires companies to have strong liquidity (Chen Peiyou, Yang Beibei, Gao Taiguang, 2022) [8].

Threat of uncontrolled majority shareholder withdrawing can suppress short-term loans and long-term investments.Uncontrolled major shareholders can directly participate in the company's strategic decision-making by appointing directors and can exercise direct supervisory functions by proposing changes in management, rejecting salary incentive plans, and other means. No controlling majority shareholder if the threat of divestment is not established may choose to directly exit (Liao Jia, Zhanyun, 2023) [1-3], but this implies a negative signal of low market value of the company, which which will cause the company's share price to fall,and the probability of the company being acquired after the major shareholder exits will also increase. From this perspective, the threat of exit plays an important role in corporate governance. The greater the risk of disinvestment by non-controlling majority shareholders, the stronger the supervisory effect (Sun Weiyan, Hu Shiji, 2022) [4-6], because the exit threat will have a stronger constraint on the agency cost of the enterprise. The higher the degree of threat of exit, the stronger the effect of internal management supervision. Why would a company seek an uncontrolled major shareholder that strengthen internal management mechanisms, implement monitoring of internal personnel changes, fund flows, and other issues.Therefore, the divestment of the non-controlling majority shareholder will have an adverse impact on short-term borrowings and long-term investments. Thereby enabling the company to better manage internal funds and stakeholders[9-11].

3. Research Design

(1) Sampling and Information sources

In this thesis, the data of listed companies in Shanghai and Shenzhen from 2007 to 2021 are selected. The data on non-controlling major shareholders' exit threats and short-term loans and long-term investments were manually calculated and collected, while all other financial data was sourced from the China Securities Market (CSMAR) database. Follow the following steps to screen and process the sample: exclude financial listed companies; Remove samples from ST and * ST; Excluding samples with an asset liability ratio greater than 1; Eliminate samples with missing data. In order to avoid the impact of extreme values, a 1% tail reduction was performed on all continuous variables, resulting in 32982 valid observation samples[12].

(2) Determination of variables and design of the model

1) Variable definition method

(a) Uncontrolled major shareholders withdrawal threat (NET). Drawing on the research of Dou et al. (2018) and Chen Kejing (2018), the productStock liquidity and competitive level among non-controlling major shareholders is used as a measure of major threats that cannot be controlled shareholders exiting. The process of indicator construction is as follows: firstly, retaining shareholders with a shareholding ratio of over 5%. Existing literature and relevant laws believe that shareholders with a shareholding ratio of over 5% can have a significant impact on the company's business management (Pan et al., 2020); Secondly, construct the stock liquidity index (SL=daily average turnover rate of Shares outstanding). Higher stock liquidity, the easier it is for non-controlling major shareholders to exit, and the easier it is to realize the exit threat; Furthermore, to construct an indicator level of competition from uncontrolled major shareholders, the calculation formula is as follows.

$$\left(\mathrm{BHC}_{\mathrm{i},\ t}=(-1)*\sum_{\mathrm{K}=1}^{\mathrm{N}}\left(\frac{\mathrm{NC}lS_{k,i,t}}{SSBH_{i.t}}\right)^{2}\right) \tag{1}$$

Finally, calculate the possible divestment by uncontrolled major shareholders indicator using the following formula. The higher the liquidity of stocks, the greater level of competition among shareholders who do not constitute a majority, and the greater the threat of exit (Dou et al., 2018).

$$(\mathrm{NET}=\mathrm{SL}*\mathrm{BHC}) \tag{2}$$

Table 1: Variable Definition Table

Variable Name	Variable number	Variable Definition
Threat of withdrawal from non-controlling major shareholders	NET	The interaction term SL * BHC between stock liquidity and the degree of competition among non-controlling major shareholders
Short term loan and long-term investment	SFLI	Calculated in the balance sheet and Cash flow statement, "short-term loan and long-term investment"=cash expenditure from investment activities such as purchase and construction of fixed assets - (increase in long-term borrowings in the current period+increase in equity in the current period+net cash flow from operating activities+cash inflow from sale of fixed assets), and the total assets of the previous year are used to eliminate the scale effect
Enterprise size	Size	Pairs of total assets taken
Debt paying ability	Lev	Total liabilities/total assets
corporate performance	ROA	Net profit margin of total assets
Total asset turnover rate	ATO	Net sales revenue/average total assets
Cash flow ratio	Cashflow	Net cash flow from operating activities/total assets
Number of directors	Board	Natural logarithm of the number of directors
Shareholding ratio of the largest shareholder	Top1	Shareholding ratio of the largest shareholder
Proportion of independent directors	Indep	Number of independent directors/number of directors
Listing period	ListAge	Date of company listing
Shareholding ratio of institutional investors	INST	Total number of shares held by institutional investors/circulating share capital

(b) Short-term borrowing and long-term investments (SFLI).Short-term lending vs. long-term lending are defined as the behavior of obtaining short-term loans from external financial institutions for long-term production and operation projects. Referring to the research results of Zhong Kai and Liu Xiaoguang, Professor Zhong Kai (2016) defined the balance sheet and the Cash flow statement calculation, "short-term loans and long-term investments"=cash expenditure from investment activities such as acquisition and construction of fixed assets-(Long-term borrowings during the period Net cash flows from operating activities during the equity period Cash flows from sales of fixed assets),and the definition of total assets excluding the effect of scale in the past year ; Referring to the approach of Professor Liu Xiaoguang and Professor Liu Yuanchun (2019), The difference between the short-term debt ratio (short-term debt/total debt) and the short-term debt ratio (short-term debt/total debt) is used to measure a company's long-term short-term debt. The larger the indicator, the more it is used over a longer period of time.

(c) Control variables. We controlled for the following financial characteristic variables and corporate governance variables that may affect the company's violation behavior in the model: company size (Size), asset liability ratio (Lev), company performance (ROA), total asset turnover rate (ATO), cash flow ratio (Cashflow), number of directors (Board), proportion of independent directors (Indep), proportion of the largest shareholder's shareholding (Top1), and listing age (ListAge), Institutional investor shareholding ratio (INST). Also, we consider the fixed effects of time and industry. The definitions of the specific variables are presented in Table 1.

2) Model construction

This project intends to examine the impact of non-controlling exit of major shareholders on short-term borrowing and long-term investment of the company by constructing the following model.

$$SFLI = \beta_0 + \beta_1 NET + \beta_2 Controls + \sum Year + \sum Industry + \varepsilon_{i,\ t} \quad (3)$$

SFLI is the mediating variable between short-term borrowing and long-term investment, NET is the mediating variable between majority shareholder ownership risk, and control is the relevant control variable. The specific definitions are listed in Table 1. Also, this study takes into account the effects of time and industry factors.

4. Empirical Results and Analysis

Table 2: Descriptive Statistical Characteristics Table

Variable	N	Mean	SD	Min	p25	p50	p75	Max
Zhong_w	32982	-0.102	0.202	-1.095	-0.157	-0.0700	0.00200	0.282
NET_w	32982	0.00100	0.00200	0	0	0	0.00100	0.0100
Size _w	32982	22.16	1.267	19.90	21.25	21.98	22.88	25.95
Lev _w	32982	0.437	0.203	0.0600	0.276	0.433	0.589	0.879
ROA _w	32982	0.0400	0.0610	-0.205	0.0140	0.0380	0.0700	0.208
ATO _w	32982	0.655	0.442	0.0810	0.362	0.555	0.816	2.490
Cashflow_ w	32982	0.0470	0.0690	-0.149	0.00800	0.0460	0.0880	0.232
Board _w	32982	2.136	0.199	1.609	1.946	2.197	2.197	2.708
Indep _w	32982	0.374	0.0530	0.333	0.333	0.333	0.429	0.571
Top1 _w	32982	0.342	0.147	0.0900	0.226	0.320	0.443	0.729
ListAge_w	32982	2.172	0.754	0.693	1.609	2.303	2.833	3.332
INST_w	32982	0.382	0.233	0.00100	0.184	0.385	0.564	0.870

(1)Descriptive Statistics

Descriptive statistics of the key variables are shown in Table 2. From the results, it can be seen that the proxy variable for short-term loans and long-term investments (SFLI) shows a mean (median) of -0.102 (-0.07), a minimum value of 0, and a maximum value of 0.282, indicating significant differences in companies' behavior towards short-term loans and long-term investments. The mean (median) of the non-controlling major shareholder exit threat (NET) is 0.001, with a minimum value of 0 and a maximum value of 0.010, indicating that there is little difference in the exit threat of non-controlling major shareholders among different companies. Table 2 details the descriptive statistical properties of the control variables, which is basically consistent with existing literature.

(2) Correlation coefficient test

Correlation tests are shown in Table 3 between each variable. From Table 3, it can be seen that the correlation coefficient matrix between the exit threat of non-controlling major shareholders and short-term loan and long-term investment is negative, so it can be preliminarily determined that the exit threat of non-controlling major shareholders can inhibit the behavior of short-term loan and long-term investment, which also preliminarily verifies the basic hypothesis we put forward earlier. The coefficients of other explanatory variables are less than 0.6, which means that there is no Multicollinearity problem with the remaining explanatory variables. Among them, the lower triangle is the result of the Pearson correlation coefficient matrix.

Table 3: Correlation coefficient test

	Zhong_w	NET_w	Size_w	Lev_w	ROA_w	ATO_w	Cashflow_w	Board_w	Indep_w	Top1_w	ListAge_w	INST_w
Zhong_w	1											
NET_w	-0.007	1										
Size_w	-0.146	-0.161	1									
Lev_w	0.085	-0.056	0.471	1								
ROA_w	-0.427	-0.052	0.009	0.363	1							
ATO_w	-0.037	-0.037	0.048	0.149	0.180	1						
Cashflow_w	-0.377	-0.027	0.054	0.160	0.391	0.131	1					
Board_w	-0.029	0.019	0.238	0.159	0.020	0.043	0.050	1				
Indep_w	0.013	-0.029	0.007	0.021	0.022	-0.034	-0.024	-0.522	1			
Top1_w	-0.039	-0.313	0.190	0.051	0.135	0.086	0.089	0.024	0.034	1		
ListAge_w	-0.040	-0.134	0.382	0.349	0.204	0.011	-0.015	0.128	0.030	0.079	1	
INST_w	-0.109	-0.145	0.437	0.169	0.126	0.093	0.125	0.183	0.042	0.345	0.277	1

Note: Bold font indicates significant at the 10% level.

(3) Multicollinearity test

The results of the extended factor test are presented in Table 4. As can be seen from the table, the VIF values of each explanatory variable are less than 10, which further proves that there is no multicollinearity problem in each explanatory variable, and therefore shows that the variables selected in this paper are reliable.

Table 4: Variance inflation factor test

Variable	VIF	1/VIF
Size_w	1.75	0.570952
Lev_w	1.70	0.587833
Board_w	1.51	0.660348
ROA_w	1.51	0.663585
INST_w	1.46	0.685701
Indep_w	1.41	0.708094
ListAge_w	1.38	0.723583
Top1_w	1.32	0.755517
Cashflow_w	1.21	0.829223
NET_w	1.15	0.868636
ATO_w	1.11	0.897802
Mean VIF	1.41	

(4)Baseline regression analysis

The results of the base regression are shown in Table 5. The article adopts a stepwise regression method, and both time and industry fixed effects are controlled for in the table. Column (1) represents the regression results without adding control variables, and column (2) represents the regression results with all control variables included. The regression results of column (1) indicate that the coefficient of the threat of non-controlling major shareholders' exit is significantly negative at the 1% level, while the regression results of column (2) also indicate that the coefficient of the threat of non-controlling major shareholders' exit is significant at the 1% level, indicating that the threat of non-controlling major shareholders' exit has a inhibitory effect on short-term loans and long-term investments. That is, the greater the degree of threat of non-controlling major shareholders' exit, the more effective it is to suppress the company's short-term loans and long-term investments. Regarding control variables, such as company size and total asset net profit margin, there is a significant inhibitory effect on short-term lending and long-term investment behavior.

Table 5: Benchmark Regression

	SFLI	SFLI
	(1)	(2)
Variables	Zhong_w	Zhong_w
NET_w	-0.496*** (-0.87)	-2.414*** (-4.770)
Size_w		-0.019*** (-18.836)
Lev_w		0.033*** (5.337)
ROA_w		-0.870*** (-46.417)
ATO_w		0.038*** (16.136)
Cashflow_w		-0.808*** (-55.941)
Board_w		0.023*** (4.104)
Indep_w		0.054*** (2.732)
Top1_w		0.025*** (3.464)
ListAge_w		-0.024*** (-16.916)
INST_w		0.011** (2.425)
Constant		0.325*** (13.357)
Time and industry fixed	control	control
Observations	32,982	32,982

5. Conclusion and inspiration

This article is based on the background of corporate management in China and examines how the uncontrolled shareholder threat withdrawal affects the company's short-term lending and long-term investment behavior. The research results indicate that the withdrawal threat of non-controlling major shareholders has an inhibitory effect on short-term loans and long-term investments. In management practice, this article has the following inspirations: on the one hand, companies should comprehensively consider the impact of the threat of non-controlling major shareholders' withdrawal on corporate governance, and thus form a reasonable equity structure and improve stock liquidity. Due to the influence of external environment, the tunneling behavior of controlling shareholders has led to more complex corporate governance issues in China. Simply emphasizing the prevention of short-term loans and long-term investments may not be effective. Listed companies should optimize the equity structure of non-controlling major shareholders, increase shareholder competition, enhance stock liquidity, fully leverage the corporate governance effect of exit threats, suppress the motivation of management and controlling shareholders to seek personal gain, optimize fund allocation efficiency, and control the flow and direction of funds. On the other hand, policy and regulatory makers should improve the level of investor protection and optimize the environment for shareholder participation in corporate governance. The channels for shareholder participation in corporate governance need to be improved. Therefore, corporate governance needs to balance the threat of non-controlling major shareholders exiting and the relationship between short-term loans and long-term investments in order to operate smoothly and continuously.

References

[1] Liao Jia, Zhan Yun. Non-controlling major shareholders and corporate investment decisions [J]. Journal of Zhongnan University of Economics and Law, 2023 (03): 3-15.
[2] Jian Guanqun, Gao Ying. The Threat of Uncontrolling Major Shareholders' Exit, Social Responsibility Fulfillment, and Risk of Stock Price Collapse [J]. Finance and Economics, 2023 (05): 59-70.
[3] Yu Nutao, Wang Han, Zhang Huayu. Non-controlling major shareholders participating in corporate governance: seeking change or being conservative—From a Strategic Adjustment Perspective [J]. Luojia Management Review, 2023 (01): 53-74
[4] Wang Shengnian, Liu Yangyang. Does the threat of non-controlling major shareholders withdraw affect auditors' risk decisions? [J]. Business Economic Management, 2023 (03): 35-49.
[5] Sun Weiyan, Hu Shiji. Research on the Impact of the Threat of Uncontrolling Majority Shareholders' Exit on Audit Pricing [J]. Financial and Accounting Communication, 2023 (05): 43-47+88.
[6] Sun Weiyan, Hu Shiji. Can the threat of non-controlling major shareholders withdrawing suppress corporate violations [J]. Journal of Heilongjiang Bayi Agricultural and Reclamation University, 2023,35 (01): 91-99
[7] Yang Xingquan, Li Shasha, Li Chuang. The Threat of Uncontrolling Majority Shareholders' Exit and Company Investment Efficiency: Capital Optimization or Investment Shortsightedness [J]. Finance and Trade Research, 2022, 33 (11); 69-81+110.
[8] Li Xin. Research on the Impact of Equity Concentration on R&D Investment of ChiNext Enterprises: From the Perspective of Non-Controlling Majority Shareholders [J]. Investment and Entrepreneurship, 2022,33 (21): 143-145
[9] Liu Yangyang, Wu Haomin. The Threat of Uncontrolling Majority Shareholders' Exit and the Risk of Stock Price Collapse [J]. Finance and Accounting Monthly, 2022 (21): 35-41.
[10] Wang Lei, Sha Yifan, Yu Wencheng, Wang Yaru. The exit threat of non-controlling major shareholders and corporate social responsibility communication [J]. Management science, 2022,35 (05): 19-34
[11] Chen Peiyou, Yang Beibei, Gao Taiguang. The threat of non-controlling major shareholders' exit and the stickiness of executive compensation [J]. Finance and Accounting Monthly, 2022 (18): 25-34.
[12] Ren Shiqi, Gao Tianhong. Can the threat of non-controlling major shareholders withdrawing improve the pricing efficiency of the capital market—Empirical research based on the perspective of stock price synchronicity [J]. Journal of Zhengzhou University of Aeronautics, 2022, 40 (04): 62-69.
[13] Jiang Fuxiu, Wang Ying, Ma Jia. The Development History, Emerging Fields, and Future Prospects of Corporate Governance [J]. Academic Research, 2023 (04): 72-80+177-178
[14] Chen Kejing. Can the threat of non-controlling major shareholders withdrawing reduce corporate agency costs [J]. Nankai Management Review, 2019,22 (04): 161-175
[15] Yu Nutao, Zhang Huayu, Zhao Liping. The exit threat of major shareholders and enterprise Assumption of risk: avoiding losses or seeking opportunities? [J/OL]. Mathematical Statistics and Management: 1-21 [2023-06-12]
[16] Yang Chunhua, Wang Jinghua. The threat of major shareholder exit and corporate tax evasion [J]. Modern Economic Discussion, 2020 (12): 39-49