EnPress Publisher

A Study on the Impact of Controlling Shareholder Equity Pledge, Debt Capital Cost, and Financialization

Yuting Zong

Guangxi Normal University Guilin, Guangxi 541006,China

Abstract:In recent years, financial development has gradually detached itself from its driving role in the real economy. Some real enterprises have withdrawn from their main business and invested a lot of capital used for industrial development into high return financial industries, leading to a trend of "financial melting" in the investment structure of real enterprises. Based on the data of A-share listed companies in China's Shanghai and Shenzhen stock markets from 2008 to 2022,a study was conducted on the relationship between controlling shareholder equity pledge and corporate financialization. It was found that the higher the proportion of controlling shareholder equity pledge,the higher the degree of corporate financialization. Mechanism testing shows that equity pledge affects the degree of corporate financialization by acting on the cost of debt capital,and the higher the analyst's attention,the lower the significance of controlling shareholder equity pledge in corporate financialization.

Keywords:Equity pledge financialization,debt financing cost

1. Introduction

In recent years,with the development of global economic integration,China's economy and finance have also experienced rapid growth. According to relevant data from Guotai An,in recent years,the proportion of non-financial listed companies in financial assets in China has been continuously increasing,and the reality of "shifting from real to virtual" has occurred from time to time. Although companies may increase their financial asset holdings in the short term in order to achieve excess returns,the real economy,as the cornerstone of promoting stable economic development in China,will inevitably have a negative impact on industrial investment in the long term,resulting in phenomena such as "capital flight" and "detachment from reality to illusion",which will have adverse effects on the healthy and stable development of the economy.

Compared with traditional commercial bank loans,the prominent advantage of equity pledge is that its financing threshold and requirements are relatively low,and it is also very convenient to handle. In this process,the controlling shareholder does not transfer control of the company,and during this period,the controlling shareholder only sacrifices part of their cash flow rights as a cost. However,controlling shareholders also face risks arising from equity pledge. As the value of pledged collateral fluctuates with the stock price,once the stock price drops to the warning line or closing line,controlling shareholders who engage in equity pledge financing behavior are required to increase margin or redeem stocks in advance according to the provisions of the pledge contract. When the stock price continues to fall to the point where the pledgee can forcibly sell the stock,the controlling shareholder may lose control of the listed company due to the decrease in shareholding ratio. Therefore,in order to stabilize the stock price of the listed company,the controlling shareholder carries out preventive fund reserves. Financial assets can help companies prevent liquidity shortages that may occur in the future for a certain period of time,while also achieving profits from financial asset investments,improving the company's profit level,masking the problem of weak physical development,and achieving the goal of short-term increase in the company's stock price.

2. Literature review

2.1. Pledge of controlling shareholder's equity

2.1.1. Motivation for equity pledge:

Existing research has found that the main motivations for controlling shareholders to adopt equity pledge behavior are three types: financing demand motivation,hollowing out motivation,and leverage increase motivation. Firstly,Pengetal The study in (2011) shows that when listed companies face financing constraints,controlling shareholders will use their resource advantages to help the company. However,in situations where loan approval requirements are high and the time is long,shareholders will choose equity pledge as a more convenient method. Li Changqing et al. (2021) found through a sample of controlling shareholders pledging their own equity and lending it to pledged enterprises that major shareholders support listed companies that are bound to their own interests and are in a financing crisis,which has a long-term positive impact on the company. Secondly,Kaoetal In a study of companies in Taiwan,China (2004),it was found that the majority of shareholders pledged their equity due to their own financing issues,rather than investing in listed companies. Zheng Guojian et al. (2014) also found that in the case of equity pledge,controlling shareholders are more likely to occupy company funds,and external supervision and internal checks and balances can constrain this behavior. Cheng Fei and Zhang Qingjun (2018) found that after equity pledge,controlling shareholders increase their holdings and share risks with listed companies in order to reduce stock price fluctuations,stabilize the sentiment of small and medium-sized investors,and enhance control. In addition,Du Lizhen et al. (2019) found that major shareholders of listed companies may increase their holdings of listed company stocks by pledging funds to stabilize the company's position in order to compete for control when their shareholding ratio is low.

2.1.2. Economic consequences of equity pledge:

Based on different understandings of the motives behind equity pledge,scholars have different opinions on some phenomena and economic consequences after pledge. However,most scholars believe that the design of the equity pledge system is still not perfect,which makes the positive economic consequences after pledge far less than the negative economic consequences,and has a negative impact on the operation of the company. Zhang Taoyong and Chen Yanhua (2014) found that when pledged funds are invested in themselves or third parties,the company's performance is lower than when invested in listed companies. Wen Wen et al. (2018) also pointed out that equity pledge behavior will lower the controlling shareholder's expectations for the future development of the company,further reducing innovation investment that can enhance the company's competitiveness,and leading to an increasingly serious agency problem of the separation between control and cash flow rights. Li Changqing et al. (2021) indicate that only a small portion of controlling shareholders will support listed companies in specific circumstances,so existing literature mainly focuses on the adverse effects of equity pledge on the company. Therefore,this article studies the impact of controlling shareholder equity pledge on corporate financialization,and can also explore the motives for corporate financialization from the perspective of individual shareholder behavior.

2.2. Enterprise financialization

2.2.1. The motivation for corporate financialization:

There are two main types of motivations discussed in existing research regarding the allocation of financial assets by enterprises: one is the "reservoir" motivation,and the other is the "investment substitution" motivation. On the one hand,it is believed that the purpose of holding financial assets by enterprises is to serve as a liquidity reserve to cope with potential future funding needs,and to avoid financial difficulties caused by broken capital chains or missed investment projects due to funding shortages. Xu Gang and Zhu Weidong (2017) believe that the motivation for corporate financialization is to provide sufficient reserve funds for future business development,as financial assets can fully leverage the characteristics of cash and cash equivalents,and have strong liquidity and liquidity. Dai Zao et al. (2018) also believe that corporate financialization is motivated by preventive fund reserves,aimed at storing energy in advance for the subsequent development of enterprises. In addition,the empirical research results of Du Yong et al. (2017) demonstrate that when there is a funding gap in a company's subsequent main business,it will be resolved by reducing the proportion of financial asset holdings. On the other hand,it is believed that the essence of financialization is capital driven profit,and enterprises hold financial assets in order to obtain excess returns and achieve maximum profits. Peng Yuchao et al. (2018) found that in situations where financial assets have a greater investment advantage compared to industrial investment and the economic environment is unstable,physical enterprises will choose to hold financial assets to earn high profits. Meng Qingbin et al. (2020) also pointed out through empirical research that companies mainly allocate financial assets to obtain short-term returns,rather than to develop their main business. In summary,the motivation for "reservoir" is mainly based on providing reserves for the future business development of enterprises,while the motivation for "speculation" is based on obtaining short-term high returns.

2.2.2. The influencing factors of corporate financialization:

The existing research on the influencing factors of financialization of physical enterprises is mainly divided into macro and micro levels. At the macro level,it mainly involves aspects such as monetary policy,tax policy,and overall economic policy environment. At the micro level,it mainly involves aspects such as corporate profitability,corporate governance,external supervision,and executive characteristics. Macroeconomic factors such as the macroeconomic environment (Deng Chao et al.,2017) and monetary policy (Zhang Weiguo et al.,2020); Micro factors such as CEO financial background (Du Yong et al.,2019) and non controlling major shareholders (Yu Nutao et al.,2021). However,few scholars have paid attention to the recent prevalence of controlling shareholder equity pledge behavior in the capital market and its impact on corporate financialization.

3. Research Design

3.1. Theoretical analysis and assumptions

In recent years,equity pledge by controlling shareholders and the financialization of physical enterprises have become a preferred financing method for controlling shareholders due to their flexible and efficient nature,simple approval procedures,and the fact that pledging does not affect the shareholder's influence on the listed company's business operations. However,this financing method is not without drawbacks for the controlling shareholder. In the context of equity pledge,the controlling shareholder's motivation to "empty out" increases,and the risk of control transfer increases. This not only damages the value of the enterprise and triggers inefficient investment,but may also encourage the controlling shareholder to use control to allocate more financial products,leading to excessive financialization of the enterprise. Based on the above analysis,this article proposes hypothesis 1.

H1:The pledge of controlling shareholder equity is significantly positively correlated with the financialization of physical enterprises.

In order to avoid "liquidation" and transfer of control caused by delayed stock price decline due to quality issues,controlling shareholders have a strong motivation to use various means to maintain stock price stability. If the major shareholder's equity is pledged,it is more likely to occupy the resources of the listed company and manipulate accounting information. These behaviors harm the interests of listed companies and other stakeholders,increase the risk and risk of listed companies,thereby leading to an increase in capital costs and a decrease in the financial competitiveness of listed companies. Meanwhile,the cost of capital is the rate of return required by investors to correspond to their risk-taking. In order to achieve the corresponding rate of return,both industrial and financial investments can generate profits,and there is a certain degree of substitutability between the two. However,financial asset investment has advantages such as low entry barriers,low transaction costs,high reversibility,and high profit margins. Enterprises will increase their investment in financial assets with higher returns. Therefore,under the pressure of high capital costs,it will lead to an increase in the degree of financialization of enterprises. Based on this,Hypothesis 2 is proposed:

H2:The equity pledge of the controlling shareholder affects its degree of financialization by affecting the cost of debt capital.

As an important component of external supervision and governance mechanisms,securities analysts were first recognized by Jensen et al. to be able to supervise the behavior of listed companies,improve the level of target company governance,and increase company value. Moreover,many analysts have professional knowledge in accounting and finance,which can effectively identify major risks of the enterprise and suppress the behavior of controlling shareholders. Based on the research scenario presented in this article,the analyst's attention can play a moderating role in the relationship between controlling shareholder equity pledge and corporate financialization. According to reputation trading theory,accurate ratings from analysts can not only improve their own compensation,but also enhance their reputation in the industry,which has a positive impact on their career. Therefore,analysts have a strong motivation to discover the "abnormal" activities of the enterprise. Based on the above analysis,this article proposes hypothesis 3:

H3:Under certain other conditions,the higher the analyst's attention,the lower the positive correlation between controlling shareholder equity pledge and corporate financialization.

\

3.2. Sample selection and data sources

This article takes Chinese A-share listed companies in the Shanghai and Shenzhen stock markets from 2008 to 2022 as research samples and conducts the following treatments: ① excluding enterprises in the real estate and financial industries; ② Exclude enterprises in ST and PT status; ③ Remove samples with missing data. On this basis,this article conducted tail reduction on all continuous variables at the 1% and 99% percentiles. The relevant data were all from the CSMAR database,resulting in 38963 observations.

3.3. Variable construction:

3.3.1. Dependent variable:

Corporate financialization (FINRATIO). This article refers to the measurement method of Du Yong et al. (2017) and uses the ratio of financial assets to total assets to define corporate financialization. The definition of financial assets in this article is different from the provisions on financial assets in the Enterprise Accounting Standards. The specific differences are as follows: ① Considering that a company's monetary funds may also be held to meet the needs of operating activities,this article does not classify them as financial assets. ② Considering that some listed companies attempt to indirectly engage in shadow banking activities through equity investments in subsidiaries,associates,or joint ventures in the financial industry,this article also includes long-term equity investments in the calculation of financial assets.

3.3.2. Explanatory variables:

Pledge of controlling shareholder's equity (PLD_DUM). This article refers to the method of Xie Deren et al. (2016) and adopts two methods to measure the equity pledge of controlling shareholders. One approach is to use the dummy variable PLD_DUM,which determines whether the controlling shareholder will use equity as collateral for financing. If there is a situation in the sample company where the controlling shareholder will use equity as collateral for financing at the end of the period,PLD_DUM will be assigned a value of 1,and if not,it will be assigned a value of 0. Another method is the proportion of equity pledge by the controlling shareholder at the end of the year (PLD_RATE),which is defined as the ratio of the number of shares used by the controlling shareholder for pledged financing to the total amount of shares held at the end of the year.

3.3.3. Mediating variables:

Cost of debt financing (Cost). Drawing on the approach of Zhou Kaitang (2017),this study examines the proportion of corporate financial expenses to total liabilities at the end of the period.

3.3.4. Adjusting variables:

Analyst attention. Drawing on the methods of Xia Fanshe and He Dexu (2021),this article uses the natural logarithm of the number of research reports released by analysts who track companies within a year plus 1 as the measurement indicator of analyst attention.

3.3.5. Control variables:

This article refers to previous literature on the influencing factors of corporate violations and sets the following control variables: enterprise size: the natural logarithm of the total assets of the enterprise; Financial leverage (Lev): Asset liability ratio,total liabilities divided by total assets; Growth rate of operating revenue: the ratio of the increase in current operating revenue to the previous operating revenue; Property Nature (SOE): Based on the judgment of the actual controller,if it is a state-owned enterprise,the value is 1,while others are 0. Fixed assets ratio (Fixed)=Net fixed assets/Total assets; Loss: If the net profit of the current year is less than 0,take 1; otherwise,take 0; Audit opinion: If the company's financial report for the year was issued with a standard audit opinion,the value is 1,otherwise it is 0.

In addition,to avoid the problem of bias in estimation results caused by the characteristics of individual industries and macroeconomic policies,this article also controls for fixed effects of industries and years.

3.4. Model design

To clarify the impact of equity pledge by controlling shareholders on corporate financialization,this article takes whether controlling shareholders pledge equity as the dependent variable and the degree of corporate financialization as the main explanatory variable. Based on panel data at the enterprise level,a fixed effects estimation model for years and industries is constructed. The following model is constructed to test hypothesis 1:

FINRATIOi, t=α0+α1PLD_DUMi, t+α2Controlsi, t+∑Year+∑Industry+εi, t(1)

To verify hypothesis 2,multiple regression models (2) and (3) were constructed on the basis of model (1). Compared with model (1),model (3) only adds the explanatory variable of debt financing cost (Cost),as follows:

Costi, t=δ0+δ1PLD_DUMi, t+δ2Controlsi, t+∑Year+∑Industry+εi, t(2)

FINRATIOi, t=β0+β1PLD_DUMi, t+β2Costi, t+β3Controlsi, t+∑Year+∑Industry+εi, t(3)

To verify hypothesis 3,multiple regression models (4) and (5) were constructed on the basis of model (1). Specifically,as follows:

FINRATIOi, t=β0+β1PLD_DUMi, t+β2anaattentioni, t+β3Controlsi, t+∑Year+∑Industry+εi, t(4)

FINRATIOi, t=β0+β1PLD_DUMi, t+β2anaattentioni, t+β3XMi, t+β4Controlsi, t+∑Year+∑Industry+εi, t(5)

4. Empirical analysis

4.1. Pledge of controlling shareholder’s equity and corporate financialization

To test hypothesis H1,this article used a fixed effects panel data model to conduct regression analysis on the impact of controlling shareholder equity pledge on corporate financialization. The results are shown in Table 1. According to regression (1),it can be seen that there is a significant positive correlation between the pledge of controlling shareholder equity and corporate financialization at the 1% level. This result indicates that the pledge of controlling shareholder equity has a significant positive impact on corporate financialization,which means that the occurrence of pledge of controlling shareholder equity is likely to lead to an increase in the degree of corporate financialization.

Table 1 Pledge of controlling shareholder equity and corporate financialization

	(1) FINRATIO	(2) Cost	(3) FINRATIO
PLD_DUM	**0.199*** **	**0.0685*** **	**0.188*** **
	(0.0311)	(0.00390)	(0.0476)
Size	**0.610*** **	-0.00136**	**0.612*** **
	(0.0155)	(0.000492)	(0.0302)
Lev	-0.122	**0.102*** **	-0.335*
	(0.0857)	(0.00443)	(0.166)
Growth	-0.0000336**	**6.10e-08*** **	-0.0000330**
	(0.0000112)	(1.46e-08)	(0.0000111)
SOE	**0.377*** **	-0.00295***	**0.381*** **
	(0.0352)	(0.000830)	(0.0740)
FIXED	-1.649***	**0.0685*** **	-1.764***
	(0.104)	(0.00390)	(0.199)
Loss	**0.115* **	**0.000706**	**0.117* **
	(0.0491)	(0.000925)	(0.0588)
Opinion	-0.353***	-0.000397	-0.365**
	(0.0974)	(0.00218)	(0.130)
FINRATIO		**0.0434*** **	
		(0.00667)	
Cost			**1.779*** **
			(0.531)
_cons	-12.05***	-0.00792	-12.02***
	(0.339)	(0.00976)	(0.650)
N	38963	38963	38963
R^2			
adj.R^2			

***p<.01,**p<.05,*p<.1

4.2. The mediating effect of debt capital cost

To examine the mediating effect of corporate debt capital cost,this article sequentially established three models,namely Model (1),Model (2),and Model (3),to study the testing methods. The regression results are shown in Table 1. The results of Model (1) in Table 1 indicate that it passes the test at a significance level of 1%,and the sign of the regression coefficient is positive,indicating a positive correlation between the pledge of controlling shareholder equity and corporate financialization.

The results of Model (2) in Table 1 show a significant correlation between controlling shareholder equity pledge and debt capital cost at a 1% level. The regression results of Model (3) in Table 1 indicate a positive correlation with corporate financialization at a 1% level of significance. Therefore,debt capital cost partially mediates the relationship between controlling shareholder equity pledge and debt capital cost. Hypothesis H2 is validated.

4.3. The moderating effect of analyst attention

Model (2) adds analyst attention to this moderating variable on the basis of Model (1). From the regression results in columns (2) and (3) of Table 1,it can be seen that the dummy variable of equity pledge and the interaction term (XM) of analyst concern are significantly negatively correlated with corporate financialization at the 1% level. The above results indicate that analyst attention plays a significant negative moderating role,which means that as analyst attention increases,the positive correlation between controlling shareholder equity pledge and corporate financialization is alleviated,verifying hypothesis H3.

Table 2 Regulatory effects of analyst focus

	(1) FINRATIO	(2) FINRATIO	(3) FINRATIO
PLD_DUM	**0.199*** **	**0.184*** **	-0.0460
	(0.0311)	(0.0475)	(0.0321)
anaattention		-0.0212***	-0.00343*
		(0.00264)	(0.00138)
XM			-0.0126***
			(0.00290)
_cons	-12.05***	-13.78***	**1.160*** **
	(0.339)	(0.696)	(0.0174)
N	38963	38963	38963
R^2			
adj.R^2			

***p<.01,**p<.05,*p<.1

5. Conclusion and Outlook

Research has found that: ① Overall,there is a significant positive correlation between controlling shareholder equity pledge and corporate financialization. ② The equity pledge of controlling shareholders affects their degree of financialization by affecting the cost of debt capital From an external governance perspective,the higher the analyst's attention,the weaker the positive correlation between controlling shareholder equity pledge and corporate financialization. This indicates that analyst attention has to some extent weakened the opportunistic behavior motivation of controlling shareholders and reduced the degree of corporate financialization.

Based on the above research conclusions,the following insights are provided.

Firstly,from the perspective of the government and regulatory authorities,the government should continue to strengthen the guidance of funds to flow to real enterprises,avoid the idle circulation of funds within the financial market,and guide capital market funds to better serve the development of the real economy; Strengthen the supervision of the flow of funds obtained through equity pledge,especially for state-owned enterprises.

Secondly,from the perspective of debt capital cost,reducing costs for physical enterprises can increase their industrial investment opportunities and promote their return to reality,especially for private enterprises whose financialization is significantly affected by debt cost pressure.

Finally,policy measures that focus on internal and external factors such as improving the production and operation efficiency and profitability of enterprises,promoting market competition,etc. will also help alleviate the impact of capital cost pressure on the financialization of physical enterprises. A rational approach to equity pledge can effectively alleviate the financing difficulties of enterprises,but it can also increase the degree of financialization of enterprises,leading to slow industrial development and construction of physical enterprises.

References

[1]Li Changqing,Xing Wei. Does the pledge of controlling shareholder equity affect executive compensation - performance sensitivity? [J] Economic Management,2018 (5): 157-174.

[2]Yu Minggui,Song Huitian,Zhang Qing. Supporting Equity Pledge,Financing Constraints,and Corporate Investment [J]. Finance and Accounting Monthly,2021 (12): 23-33.

[3]Ke Yanrong,Li Yumin,Wu Xiaohui,Equity Pledge of Controlling Shareholders and Corporate Investment Behavior: From the Perspective of Financial Investment and Industrial Investment. Finance and Trade Economics,2019,40 (4): 50-66.

[4]Li Changqing,Xing Wei,Li Maoliang,Controlling shareholder equity pledge and cash holding level: emptying or avoiding control transfer risk. 1. Finance,Trade and Economics,2018,39 (4): 82-98.

[5]Wen Wen,Chen Yinmo,Huang Yuting,Research on the Impact of Controlling Shareholder Equity Pledge on Corporate Innovation [1. Journal of Management,2018,15 (7): 998-1008.

[6]Xia Fanshe and He Dexu: “Can Star Analysts Identify Company Value? - From the Perspective of Analyst Research Reports”,China Soft Science,Issue 8,2021.

[7]Zhang Xueying,Wang Congcong. Will pledging equity of controlling shareholders affect the cost of bond issuance and financing for listed companies? [J] Securities Market Introduction,2020 (06): 41-50.

[8]Song Di,Yang Chao. Pledge of controlling shareholder equity,analyst attention,and dividend policy [J]. Journal of Beijing University of Business and Technology (Social Science Edition),2018,33 (06): 102-112.

[9]Liao Ke,Cui Chenyu,Xie Deren. Pledge of controlling shareholder equity and dividend policy choices for listed companies [J]. Financial Research,2018,No. 454 (04): 172-189.

[10]Zhang Chenyu,Wu Jianfeng. Has the pledge of major shareholder equity exacerbated the violation of company information disclosure? [J] Foreign Economics and Management,2020,42 (5): 29-41.

[11]Lu Dong,Song Xinbei,Gong Yi. Controlling shareholder equity pledge and readability of annual report text information [J]. Finance and Trade Research,2020,31 (5): 77-96. [8] Chang Limin. Controlling shareholder equity pledge and company.

[12]Wu Xiancong,Luo Hongxiu,Zhang Jian. Controlling shareholder equity pledge,audit quality,and debt financing cost [J]. Audit Research,2020 (6): 86-96.

[13]Hu Weijia,Han Lirong. Have analysts paid attention to reducing the accounting information risk of listed companies—— Empirical evidence from Chinese A-share listed companies [J]. Management Review,2020,32 (4): 219-230.

[14]Li Michelle,Liu Chelsea&Scott Tom.Share pledges and firm value[J].Pacific-Basin Finance Journal,2019,55(C):192-205.

[15]Li M,Liu C,Scott T.Share pledges and firm value[J].Pacific-Basin Finance Journal,2019,55:192-205.

[16]Duchin R,Gilbert T,Harford J,et al.Precautionary savings with risky assets:When cash is not cash[J].The Journal of Finance,2017,72(2):793-852.

About the author:

Yuting Zong (1999-) female, Han Nationality, Tangshan city, Hebei Province, student, postgraduate student, research direction: Accounting.