



The Influence of Common Ownership on Corporate Default Risk

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Abstract. With the frequent occurrence of default events, how to reduce the corporate default risk has become the focus of researches. Therefore, from the view of common ownership, we focus on whether and how common owners reduce default risks. We study listed companies in China from 2010 to 2022 and find that common ownership are significantly negative with default risk. Mechanism analysis shows that common ownership take their resource, information and governance advantages to reduce financial constraints and agency problems, leading to reduced default risk.

Keywords: Common ownership, Default risk, Financial constraints, Agency problems.

1 Introduction

Corporate default risk generally defined as the likelihood of a firm failing to make contractual payments to debt holders. Recently, default events have occurred frequently in China. Defaults will not only have a devastating impact on the development or survival of individual enterprises, but also cause systemic risks and bring serious consequences to the entire financial market. Therefore, in the context of frequent default events, it is of great significance to study how to reduce the default risk of enterprises.

Common ownership refers to shareholders who hold a large proportion of the shares, usually more than 5%, in more than two enterprises within the same industry simultaneously. In recent years, due to the rapid development of the domestic capital market, enterprises with common owners in China have become more and more general. Compared with the owners holding shares in a single company, common owners will participate more frequently in the companies' decision-making processes and corporate governance under the goal of maximizing the value of their investment portfolio [1]. Meanwhile, enterprises with common ownership can carry out important economic activities such as information transmission and resource sharing through the network of common ownership. These information and resource advantages owned by common ownership can help enterprises reduce difficulties in financing activities.

Literatures about the determinants of default risk mainly focuses on two aspects. On the one hand, the mainly external explaining factors are economic policy [2] and capital

market [3]. On the other hand, the mainly internal determinants are corporate governance [4] and corporate financial characteristics [5]. Recently, the key factors that can explain default risk are concentrated on financial constraints and agency problems [6]. We argue that the information and resources advantages that common owners have and their monitoring and governance role can enable them to have an influence on above two factors. Although the existing literature has studied that shareholders' characters have an impact on default risk, the role of common ownership on impacting default risk has received little attention in the current literature. Therefore, from the view of common ownership, we focus on whether and how common ownership influence corporate default risk.

2 Research Hypothesis and Research Design

2.1 Research Hypothesis

Existing researches show that the main determining factors of default risk are the external financial constraints faced by enterprises and the internal agency conflicts. Firstly, some scholars have pointed out that the occurrence of substantial default is usually caused by the problems in financing activities. When the extent of financial constraints faced by enterprises is high, it is more difficult for them to obtain external finance, and then pressure of cash flow will become greater, thus reducing the ability to repay debts and increasing the default risk. Secondly, according to the principal-agent theory, the agency problems between shareholders and management lead managers to make opportunistic behaviors such as excessive investment and on-duty consumption resulting in the reduction of cash flow and company value, thereby increasing default risk [3].

From the view of financial constraints, common ownership can take their resource and information advantages to reduce the financial constraints faced by enterprises, leading to lower default risk. First, common ownership can use their resource advantages to broaden corporate financing channels. As the node in the network formed by common owners, the more common owners are, the more nodes allowing resources shared within the network are. Under the goal of maximizing the value of the portfolio, the common owners are motivated to improve the cooperative relationship within network [7] and promote resource sharing between enterprises, such as finance resources, supplier and customer resources and so on. Among them, it is helpful for enterprises to have more opportunities and channels to get finance through the sharing of finance resources especially. Second, common ownership can take their information advantages to reduce costs of debt. Common owners can have more opportunities to communicate with management, therefore they will master more information about companies' strategic objectives, business activities, industry risks and so on which will be communicated to other enterprises through the network and to the capital market through investors' preferences which can reduce the degree of information asymmetry between the enterprise and creditors [8]. This helps to reduce the costs of debt, therefore reducing the financial constraints of enterprises leading to lower default risk.

From the view of agency problems, common ownership is more motivated and capable to conduct governance and monitoring role in enterprises, thereby lowering default risk through reducing the agency problems. On the one hand, common ownership holds shares in multiples enterprises in the same industry simultaneously, then the similarity between enterprises makes the accumulated industry-specific knowledge and management and supervision experience shift between enterprises, thus cost of governance will decrease with the increase of enterprises connected by common ownership. Therefore, from the view of cost of governance, common ownership can be more motivated to play their monitoring and governance role with lower governance cost to reduce the agency problem. On the other hand, common ownership gains more experiences about supervision, governance and management, so they are more able to play an effective monitoring role. When managers and shareholders get different opinions, common owners can vote against the managers' proposals or even restrain managers' misconduct by imposing exit threat. In addition, common owners can also directly participate in the business decision-making processes by appointing directors to reduce the opportunistic behavior of the managers thereby reducing the agency problems. This will improve the managers' willingness to pay debts leading to lower default risk. Therefore, based on the above analyses, we propose following hypotheses:

Hypothesis 1: The common ownership is negatively correlated with corporate default risk.

Hypothesis 2: The common ownership is negatively correlated with corporate default risk through reduced financial constraints and reduced agency problems.

2.2 Research Design

Sample and Data Source

We select all A-share listed firms on Shanghai Stock Exchange and Shenzhen Stock Exchange from 2010 to 2012 as our initial sample. Following common practice, we remove companies in financial industries, insolvent samples and ST and *ST companies. To avoid the influence of extreme values, we winsorize all continuous variables at the 1% level. Finally, our sample includes 24,342 observations. The data are obtained from China Stock Market and Accounting Research database.

Variable Descriptions

Referring to Qing et al. [9], we use the expected default probability calculated by the KMV model to measure the corporate default risk (Risk). Referring to He and Huang [10], we use the number of common owners to define common ownership (Common). Firstly, we identify each enterprise's quarterly major shareholders with shareholding exceeding the threshold by 5%. Then, we identify the major shareholders who also hold more than 5% shareholdings in other enterprises and through this process we can get quarterly number of common owners. Finally, we calculate the average numbers of common owners at the annual level and variable Common equals the natural logarithm of one plus average number annually.

For mediator variables, in reference of Sheng et al. [11], we use the absolute value of SA index (SA) to measure the financial constraints. The greater the value of this variable, the higher the degree of the financial constraint is. Drawing on Hong et al. [12], we use the total asset turnover rate as the measurement of the agency problems. The higher the total asset turnover rate is, the less agency problems are. Details of control variables are shown in Table 1.

Table 1. Variable descriptions

Variable	Variable Descriptions
Risk	Default probability under KMV model
Common	Natural logarithm of one plus average number annually
SA	The absolute value of SA index
Agency	Total assets turnover rate
Size	The natural logarithm of total assets
Lev	Total liabilities/total assets
ROA	Net profit/total assets
Dual	A dummy variable that equals one if the firms have the same person acting as both the CEO and the chairman and zero otherwise
First	The shareholding proportion of the largest shareholder
Age	The number of years elapsed since company was listed

Model Design

To test hypothesis 1 common ownership on the default risk, we proposal regression model (1). To test hypothesis 2 two channels of financial constraints and agency problems between common ownership and default risk, we proposal regression model (2) and (3) in which $M_{i,t}$ equals financial constraints or agency problems.

$$Risk_{i,t} = \alpha_0 + \alpha_1 Common_{i,t} + \sum Controls + \sum Industry + \sum Year + \varepsilon_{i,t} \quad (1)$$

$$M_{i,t} = \alpha_0 + \alpha_1 Common_{i,t} + \sum Controls + \sum Industry + \sum Year + \varepsilon_{i,t} \quad (2)$$

$$Risk_{i,t} = \alpha_0 + \alpha_1 Common_{i,t} + \alpha_2 M_{i,t} + \sum Controls + \sum Industry + \sum Year + \varepsilon_{i,t} \quad (3)$$

3 Empirical Results

3.1 Description Statistics

Table 2 presents the summary statistics of our key variables. Regarding the variable of default risk, it shows a mean value of 0.221 and a standard deviation of 0.306, indicating our sample companies get average default probability of 0.221 and certain differences exists among our samples. The mean value of the measure of common ownership, Common, is 0.116, with a standard deviation of 0.268, which implies that there are about 26.8% of companies that are associated with common ownership in our sample.

Table 2. Description statistics

VarName	N	mean	sd	min	median	max
Risk	24342	0.221	0.306	0.000	0.079	1.000
Common	24342	0.116	0.268	0.000	0.000	1.099
SA	24342	3.820	0.259	2.847	3.832	4.378
Agency	24342	0.646	0.447	0.027	0.549	2.568
Size	24342	22.415	1.314	19.004	22.254	26.064
Lev	24342	0.455	0.202	0.069	0.452	0.888
ROA	24342	0.036	0.064	-0.349	0.034	0.281
Dual	24342	0.238	0.426	0.000	0.000	1.000
First	24342	0.355	0.152	0.090	0.335	0.762
Age	24342	2.330	0.734	0.693	2.485	3.332

3.2 Regression Results

Table 3 presents the relationship between common ownership and corporate default risk and its mechanism. Column (1) shows the result of whether common ownership has influence on default risk. The coefficient of Cross is significantly negative at the 1% confidence level supporting the hypothesis 1. Column (2) and (3) shows the result of financial constraints mechanism. We argue that common ownership can reduce default risk through reduced financial constraints as indicated by significantly negative coefficient of Cross in column (2) and significant coefficients of Cross and SA in column (3). Column (4) and (5) shows the result of agency problems mechanism. The coefficients of Cross in column (4) and Cross and Agency in column (5) are significant at 5%, 1% and 1% confidence level respectively. It indicates that agency problem is also a viable channel under which common ownership can reduce default risk, supporting hypothesis 2.

Table 3. Regression results

	(1)	(2)	(3)	(4)	(5)
	Risk	SA	Risk	Agency	Risk
Common	-0.029*** (0.007)	-0.039*** (0.003)	-0.026*** (0.007)	0.020** (0.009)	-0.029*** (0.007)
SA			0.064*** (0.011)		
Agency					-0.025*** (0.004)
Size	0.098*** (0.002)	-0.003*** (0.001)	0.100*** (0.002)	-0.055*** (0.003)	0.097*** (0.002)
Lev	0.555*** (0.011)	-0.019*** (0.004)	0.555*** (0.011)	0.256*** (0.015)	0.563*** (0.011)
ROA	-0.271*** (0.022)	0.049*** (0.008)	-0.278*** (0.022)	0.838*** (0.029)	-0.247*** (0.022)

Dual	-0.007**	-0.004***	-0.007**	-0.009*	-0.008**
	(0.004)	(0.001)	(0.004)	(0.005)	(0.004)
First	0.154***	-0.003	0.157***	0.075***	0.157***
	(0.014)	(0.006)	(0.014)	(0.021)	(0.014)
Age	-0.079***	0.065***	-0.086***	0.024***	-0.079***
	(0.003)	(0.002)	(0.003)	(0.005)	(0.003)
Constant	-2.152***	3.531***	-2.406***	1.617***	-2.125***
	(0.046)	(0.024)	(0.063)	(0.075)	(0.046)
N	24343	24550	24343	24549	24342
R	0.271	0.829	0.271	0.108	0.272
IndustryFE	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES

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

4 Conclusions

In the context of frequent defaults, we study the influence of common ownership on the risk of default. Using panel data in China, we argue that common ownership can reduce corporate default risk. Further mechanism analysis shows that financial constraints and agency problems are viable channels between common ownership and default risk. Common ownership can take their information, resources, monitoring and governance advantages to reduce the debt default risk of enterprises by reducing the financial constraints and agency problems of enterprises. Overall, our findings enrich the literature in common ownership and provide a path of how to reduce corporate default risk.

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