Influence of Power Game between Major Shareholders and CEO on Company Risk-taking

——*Empirical Data from China's Securities Market*

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Abstract

Based on the theory of behavioural economics, this study starts from the cognitive behaviour and the power game of the major shareholders and CEO to explore the high risk taking of the company brought by irrational decision-making behaviours such as "overconfidence" and "loss avoidance" due to the high concentration of managers' power and major shareholders' power. Furthermore, the empirical tests show that domination of either the major shareholders or CEO will have a significant positive effect on the company's operational risk. However, the greater power from both parties will inevitably result in power game, and its resulting checks and balances have a significant adjustment effect on the company's risk taking.

Keywords: Cognitive behaviour, Power of major shareholders, CEO power, Risk-taking

1. Introduction

1.1 Introduce the Problem

In studies on company's governance, procuration can be divided into two categories: procuration between managers and shareholders, and procuration between major shareholders and minority shareholders. In most companies, ownership and control are separated, that is, shareholders are principals and executives are agents. The moral hazard of information asymmetry is particularly prominent at the manager level, because managers are more concerned with the company's performance. In particular, under the strong salary incentives, managers have greater cognitive motivation to invest in high-risk projects, resulting in increased risks. In the case of a relatively dispersed shareholding structure, seen from the psychological expectation of shareholders, shareholders do not have enough motivation to supervise the behaviour of executives due to the existence of "free-rider" psychology, resulting in greater power of CEOs at the top of management. The internal governance structure with high concentration of individual power often affects the company's performance, which in turn affects the company's risk-taking level. Accounting net profit is usually used as an indicator for performance evaluation, so there is a strong incentive for management to invest in more risky projects in order to achieve a greater increase in net profit. Thus, the purpose of this paper is to research whether CEO power's effect on company's risk-taking can be offset by the major shareholder's power. In view of this, this study explores the impact of power distribution between major shareholders and CEO on company risk-taking from the perspective of cognitive behavior and irrational decision-making of major shareholders and CEO. Risk-taking refers to that the decision-maker irrationally or rationally take the initiative to take risks to invest in risk projects and obtain risk benefits. A common point can be found from the research on a large number of company bankruptcy cases in recent years, that is, the irrationality (blind or impulsive) of investment and financing decision-makers leads to the ultimate investment failure of those companies. By further exploring this irrational investment and financing decision-making behaviors, it is found that the root cause lies in the excessive concentration of the company's decision-making power. Based on the analysis framework of "the power of the major shareholders, the power of the CEO - the power interaction between the major shareholders and the CEO - the company risk-taking," this study discusses the influence of the power game between the major shareholders and the CEO on the company risk-taking level. It is found that, firstly, either the increase in power of major shareholders or in CEO power will raise the risk-taking level of the company. Secondly, when the controlling

shareholders and the executives have the same power and there is a balance between them, the interest encroachment of the major shareholders and the moral hazard of the CEO have been effectively alleviated, thus there is a smaller volatility in company's performance and the company operational risk is reduced. That is, the power game between the major shareholder and the CEO has a significant regulatory effect on the company's risk.The innovative characteristics of this study lie in the following points. Firstly, based on the financial decision-making behavior generated by the psychological cognition of the major shareholders and the CEO, this study theoretically explores the influence of the power game between the major shareholders and the CEO on the company's risks. Secondly, this study examines the checks and balances between the power of major shareholders and that of CEO to analyze their impact on company's performance volatility. Thirdly, unlike the previous studies that only focus on the company's performance while neglecting the company's risks, this study emphasizes the relationship between the risks and operation performance of the company, and analyzes the power of controlling shareholders and that of executives within a framework.

1.2 Explore Importance of the Problem

Some studies show that the root cause of the financial crisis in the United States lies in the excessive risk-taking of companies, which is caused by the improper allocation of management power or the shareholders' incentives. In the case of relatively concentrated equity, the power of the major shareholder will influence the managers' power to a certain extent, and confine their behaviors through a series of contracts. Thus the relationship between major shareholders' power and CEO's power plays an important role in the company's risk taking. On the one hand, the highly concentrated shareholding structure will result in "shareholding domination" and cause the absolute control of the major shareholders over the listed company, that is, the so-called major shareholder control. The major shareholders who have control of the company can use the control right to consume the resources of the company or monopolize the benefits that the minority shareholders cannot share (Grossman, Sanford J. & Oliver, 1980). Particularly, in the case of insufficient protection of minority-sized investors' interest, it is easier for major shareholders to use their control rights for personal gain, thus affecting the company's performance, cash flow and other aspects, thereby increasing the company's operational risks. The stockholder controlled banks have incentives to take higher risk (Saunders & Travlos, 1990). On the other hand, the CEO power has a positive or negative effect on the company's risk-taking depending on different situations. Some studies found that CEO power negatively affect risk-taking in banking areas (Pathan S., 2009). Thus, in one case where both major shareholder's power and CEO are powerful, to test whether the whole company's risk-taking is reduced or increased in this situation can give some suggestions on how to improve the power disposition and thus avoid excessive risk taking.

1.3 Describe Relevant Scholarship

Company risk-taking reflects the company's tendency to pursue high profits and be willing to pay for them (Lumpkin & Dess, 1996), and is embodied in the company investment decision-making as the initiative selection of high-risk and high-income projects (Amihud & Lev, 1981). Classical economics theory believes that entrepreneurs are brave enough to take risks to pursue excess profits, and this behavior is the driving force behind the continued economic growth. However, financial decision-making cannot be separated from decision-maker's understanding and judgment of the problem. A large number of psychological and behavioral research evidence shows that agency problems are prevalent in most companies and most companies have taken some measures to tackle with such problems such as monitoring. To preempt CEO entrenchment, shareholders may assemble an adviser-heavy board (Tim, Nahum & Meng, 2013).

Seen from the perspective of theoretical research, the high concentration of decision-making power will lead to a higher level of company risk. Seen from the perspective of company development history, many entrepreneurs have undergone many hardships to make their enterprises stronger and larger, which are only to be destroyed by a certain investment failure in their prime time. There are many reasons for investment failure, but the psychological perception of entrepreneurs is a very important reason. When an enterprise is in a prime time, its entrepreneur will receives numerous praises and compliments, which leads to irrational investment and financing decision-making behavior out of "overconfidence" (Malmendier & Tate, 2005). Studies on some failed projects in some companies show that decision makers have blindly invested in projects that lack sufficient justification due to their overconfidence. However, when the projects begin to lose money, decision-makers are reluctant to stop the project out of the psychology of avoiding losses, thus causing greater losses. Through the relevant case study, it is found that the important way to solve this problem is to change the high concentration of decision-making power for a rational power distribution and restriction.

In recent years, the control of major shareholders has become the focus of the researches on the structure of shareholdings shows that the control of major shareholders has become the focus of research. Moreover, the control of large shareholders of listed companies in China has been analyzed comprehensively from the perspective of company performance, large shareholders' profit appropriation and large shareholders' procuration cost (Jensen & Meckling, 1976). The difference in shareholding ratio of major shareholders in listed companies will lead to differences in their interests in listed companies and their influence on the company. In addition, in the company's business activities,

CEOs and other executives are at the top of the management level, thus their cognitive ability has a significant impact on company behavior (Finkelstein, 1992). However, the previous literature is more inclined to test how executives' behavior affects company performance while ignores their impact on company risk. When there are controlling shareholders, executives exercise decision-making management rights, controlling shareholders exercise decision-making control rights, and the decision-making behaviors of the two parties will affect the company's behavior characteristics. The greater the power of the CEO, the higher the company's operational performance will be, and the influence of the power of CEO has a greater influence on the operation performance in the state-owned enterprises than in non-state-owned enterprises. (Quan Xiaofeng & Wu Shinong, 2010). Therefore, the research in this area mainly focuses on the influence of the power of the major shareholder and that of the CEO on the company's operating performance, but less on the risk-taking of the company.

1.4 State Hypotheses and Their Correspondence to Research Design

Research hypothesis 1 (H1-1): Other things being equal, the more concentrated the equity is, the higher the company's risk-taking level is. Equity concentration can bring both "supervision effect" and "entrenchment effect" to the company. On the one hand, the big shareholders have the motive to supervise the CEO; on the other hand, the big shareholders will abuse the control right to entrench on the interests of the small shareholders to obtain the private income. The higher the concentration of equity is, the greater the control right of large shareholders is, and the greater the possibility of irrational investment and financing decision-making behavior of "overconfidence" or "avoidance of loss" is, which leads to the higher level of irrational risk-taking.

Research hypothesis 2 (H1-2): Other things being equal, the greater the power of CEO is, the higher the company's risk-taking level is. The greater the CEO's power is, the greater the possibility of CEO's control over the company is, which results in the greater motivation of CEO's rational or irrational risk-taking. Investment in higher risk projects with internal resources or debt capital of the Company will result in higher risk-taking level of the Company and affect the Company's operating performance.

Research hypothesis 3 (H1-3): Other things being equal, the interaction of powers between CEO and major shareholders has a regulating effect on risk taking. The game and balance between CEO power and major shareholders' power can effectively reduce the irrational behavior of investment and financing decision-making of the company, avoid the phenomenon of company decision-making through deciding everything by one man's say, blindly investing in high-risk projects, regulate the company's risk-taking level, and enable the company to develop stably and healthily.

2. Method

In order to test our hypotheses, we establish a regression model using panel data. We divide this section into three parts: (1) Sampling procedures; (2) Sample Size, Power, and Precision; (3) Research Design.

2.1 Sampling Procedures

(1) Dependent variable -- risk taking

The performance volatility index cannot only reflect the stability of the profitability of the company, but also reflect the level of the risk facing the company, which has been used by many scholars to measure the risk-taking level of the company (Adams et al., 2005; Boubakri et al., 2011). This study uses the vertical volatility of performance to characterize the company's risk-taking level. The vertical volatility of performance reflects the degree of deviation between the performance of each year of the same company and its mean value over a certain period of time, that is, the standard deviation of the performance of each year over a period of time. The calculation method is as follows: firstly, determine the observation period. According to the method of Faccio et al. (2011a, 2011b) and Boubakri et al. (2011), this study also adopts the year scrolling method, with every three years as an observation period. Second, calculate the standard deviation of the sample company for each time period, which is denoted as σ (ROA). The larger the σ (ROA), the greater the degree of dispersion of the company's performance ROA during the observation period, and correspondingly, the higher the company's risk-taking level.

$$\sigma（ROA）=\sqrt{\frac{1}{N-1}\sum_{t=1}^{N}(ADJ_{ROA_{it}} - \frac{1}{N}\sum_{t=1}^{N}ADJ_{ROA_{it}})}\text{^2}$$

$$ADJ_{ROA_{it}}=\frac{profit_{it}}{asset_{it}} \qquad N=3$$

(Since the duration of executives is usually three years, thus three years are sleeved as an observation period)

(2) Independent variables - CEO's power variables, major shareholders' power variables, and interaction term between power variables of CEO and major shareholder

1) Power of CEO

Referring to Finkelstein's (1992) classification of CEO power, power is divided into power 1, power 2, and power 3.

Power=power1+power2+power3

Where, Power1 is position power. If CEO is chairman concurrently, take 1, otherwise take 0;

Power2 is expert power. If the CEO has a Ph. D degree or above, take 1, otherwise take 0;

Power3 is the owner's power. If the CEO holds the company's equity, take 1, otherwise take 0;

Add the three indexes to obtain the comprehensive power of CEO.

2) Major shareholders' power

The shareholding ratio of the largest shareholder directly reflects the change in the concentration of ownership, which can characterize the change of shareholders' power to a certain extent. This study mainly investigates the effect of the mutual game between the power of shareholders as a whole and the power of managers on the risk-taking level of the company. Therefore, the shareholding ratio (Con) of the largest shareholder is selected as a measure of shareholders' power.

3) Power game between major shareholders and CEO

In this paper, the interaction term cross = power * con is used to measure the interaction between major shareholders' power and CEO's power.

4) Control variables

The company's risk-taking level will also be affected by some other factors, in addition to the power of the CEO, and the power of major shareholders. In combination with the actual situation, this study selects the following variables as control variables:

① Company size

Larger companies may have economies of scale and are more likely to invest in riskier projects. This study uses the "logarithm of the company's total assets" (lnAsset) to measure the size of a company.

② Asset and liability ratio

Generally, the higher the debt level of a company, the higher its debt and financing costs, and the greater the risk the company is likely to face. In this paper, "total liabilities / total assets" (Lev) is used to measure a company's asset and liability ratio.

③ Company's profitability

Companies with poor performance are more likely to raise their risk-taking levels in order to improve their performance in the next phase. Therefore, profitability may have a greater impact on risk. This study uses the return on equity (ROE) to measure a company's profitability.

④ Cash flow ratio

The more cash flow a company has, the more likely it is to invest in high-risk projects, thereby increasing the company's risk-taking. This study uses "net cash flow in operating activities / total firm assets" (RFC) to measure the cash flow ratio.

⑤ Industrial dummy variables

In order to control the impact of industrial differences on regression results, this study classifies the industries of the sample companies, in which the financial and insurance industries are excluded, with a total of eight industries (dum_nind).

⑥ Equity nature dummy variable

The nature of equity refers to the identity attribute of the company's actual controller (SOE). China's listed companies can be divided into two categories: one is the listed company with a state-owned background, and the other is the listed company with a non-state-owned background. The virtual variable SOE is taken as 1, if the actual controller of a listed company is a state-owned enterprise, and as 0, if it is a natural person or other, and the company is defined as a non-state-owned listed company.

The names, interpretations and synbols of variables are shown in table 1.

Table 1. Names, interpretations and symbols of variables

Variable type	Variable name	Symbol	Interpretation
Dependent variable	Risk-taking	σ（ROA）	Measuring the company's risk with the volatility of the financial performance indicator ROA.
Independent variables	Power of CEO	power	Represented by the sum of the variables in three dimensions.
	Power of major shareholders	Con	Represented by the shareholding ratio of the largest shareholder
	Interaction between powers of CEO and major shareholder	Power*con	
Control variable	Company size	lnasset	Represented by logarithm of the company's total assets
	Asset and liability ratio	Lev	Total liabilities / Total assets
	Cash flow ratio	rfc	Net cash flow / total firm assets
	Company's profitability	ROE	Return on equity
	Actual controller	soe	Take 1, when the actual controller is a state-owned enterprise, otherwise take 0.
	Industrial dummy variables	dum_nind	According to the industry classification of the CSRC, this sample covers a total of 8 industries.

Table 2. Descriptive statistics of all variables

Variable	Obs	Mean	Std.Dev.	Min	Max
stkcd	5647	90195	136140	2	300412
presmn	5647	0.390	0.488	0	1
asset	5647	4.150e+09	1.940e+10	1.340e+06	8.310e+11
rfc	5646	2.154	5.384	-4.359	167.5
lev	5647	0.390	1.526	0.00708	96.96
roa	5647	0.0439	0.753	-51.30	22.01
time	5647	5.562	2.487	1	9
con	5647	0.335	0.143	0.0362	0.960
lnasset	5647	21.36	1.011	14.11	27.45
stdroa	5647	0.0417	0.520	0.000231	24.25
degree	5647	3.352	0.917	1	6
own	5647	0.665	0.472	0	1
nind	5647	3.972	1.630	1	8
roe	5647	0.178	9.679	-141.8	713.2
eps	5647	0.410	0.524	-5.019	13.33
soe	5647	0.466	0.499	0	1
dum nind1	5647	0.0151	0.122	0	1
dum nind2	5647	0.0117	0.107	0	1
dum nind3	5647	0.655	0.476	0	1
dum nind4	5647	0.0136	0.116	0	1

dum nind5	5647	0.0370	0.189	0	1
dum nind6	5647	0.194	0.395	0	1
dum nind7	5647	0.0253	0.157	0	1
dum nind8	5647	0.0487	0.215	0	1
dum soe1	5647	0.534	0.499	0	1
dum soe2	5647	0.466	0.499	0	1
degree1	5647	0.491	0.500	0	1
power	5647	1.546	0.892	0	3
cross	5647	0.509	0.378	0	2.113
resi	5646	0.410	0.163	-1.278	5.087
resi1	5646	0.413	0.155	0.00230	5.087

2.2 Sample Size, Power, and Precision

This study selects A-share companies listed on Shenzhen Stock Exchange before December 31, 2015 as the research sample, and the sampling period is from 2008 to 2017. According to the research requirements of this paper, the samples are selected and processed as follows. Eliminate the research samples of financial and insurance companies, because the financial structure of these companies is different from that of other companies. Eliminate the companies whose whole period is ST or PT, so as to avoid the disturbance of the singular value of financial index of these companies to the total sample under the abnormal operation state. Eliminate the observed values of the samples without CEO or with more than one CEO during the research year. Eliminate the observed values of missing samples. In the end, a total of 5,646 sample observed values are obtained.

The data used in this study includes the CEO's power data and the company's financial data. The companies' financial data are derived from the CSMAR database. The CEO's power data is mainly based on the personal information files of the executives in CSMAR database, and some samples with missing information are excluded. The descriptive statistics results of all variables are shown in table 2.

2.3 Research Design

$$\sigma(ROA)_{it} = \alpha_0 + \beta_1 Power_{it} + \beta_2 Con_{it} + \beta_3 Power_{it} * Con_{it} + \beta_4 lnAsset_{it} + \beta_5 rfc_{it} + \beta_6 Lev_{it} + \beta_7 ROE_{it}$$

$$+ \sum_{n=1}^{8} \beta_{7+n} dum_{Nind} + \sum_{n=1}^{2} \beta_{15+n} dum_{Soe} + \xi_{it}$$

In order to verify H1-1, H1-2, and H2, the model (1) is used to directly estimate the impact of CEO's power, major shareholders' power, and the interaction of powers between CEO and major shareholders on the company's risk-taking level. In model (1), β_1 represents the partial regression coefficient of CEO's power to the company's risk-taking level. If $\beta1$ is significantly positive, it means that the greater the CEO's power, the greater the volatility of the company's performance, and the higher the risk-taking level of the company. If $\beta2$ is significantly positive, it indicates that the greater the power of the major shareholders, the greater the volatility of the performance of the company, and the higher the risk-taking level of the company. $\beta3$ is the partial regression coefficient of the interaction between CEO's power and major shareholders' power. If $\beta3$ is significantly negative, it shows that the mutual restriction of the two powers has the regulating effect on the company's risk-taking level. At the same time, whether the coefficient symbol of each control variable and its significance level are as predicted still to be tested by the empirical results.

3. Results

Column (1) of Table 2 shows the regression results of model (1). Major shareholders' power (Con) and CEO's power (power) are significantly positively correlated with the volatility of company's performance, which verifies H1-1 and H1-2. The interaction term (con * power) is negatively correlated with the volatility of performance, which verifies H2. In order to make the results more robust, we establish another model by using the volatility of EPS to subsitiute the the volatility of ROA.

$$EPS_{it} = \alpha_0 + \beta_1 Power_{it} + \beta_2 Con_{it} + \beta_3 Power_{it} * Con_{it} + \beta_4 lnAsset_{it} + \beta_5 rfc_{it} + \beta_6 Lev_{it} + \beta_7 ROE_{it}$$

$$+ \sum_{n=1}^{8} \beta_{7+n} dum\_Nind + \sum_{n=1}^{2} \beta_{15+n} dum_{Soe} + \xi_{it}$$

$$|\xi\_EPS|_{it} = \alpha_0 + \beta_{0EPS_{it}} + \beta_1 Power_{it} + \beta_2 Con_{it} + \beta_3 Power_{it} * Con_{it} + \beta_4 lnAsset_{it} + \beta_5 rfc_{it} + \beta_6 Lev_{it}$$

$$+ \beta_7 ROE_{it} + \sum_{n=1}^{8} \beta_{7+n} dum\_Nind + \sum_{n=1}^{2} \beta_{15+n} dum_{Soe} + \xi_{it}$$

Table 3. Influence of major shareholders' power, CEO's power and their interaction on risk-taking level

VARIABLES	(1)	(2)	(3)
eps			0.00482***
			(0.000836)
con	0.230***	0.738***	0.711***
	(0.0859)	(0.0886)	(0.00559)
lnasset	-0.0657***	0.0946***	0.0850***
	(0.00675)	(0.00696)	(0.000443)
lev	0.0515***	-0.0138***	0.0125***
	(0.00426)	(0.00439)	(0.000275)
roe	0.0158***	0.00719***	0.00669***
	(0.000665)	(0.000686)	(4.34e-05)
cross	-0.141***	-0.148***	-0.140***
	(0.0504)	(0.0519)	(0.00326)
power	0.0466**	0.0740***	0.0717***
	(0.0190)	(0.0196)	(0.00123)
rfc	-0.00137	0.0144***	0.0144***
	(0.00123)	(0.00126)	(8.02e-05)
dum_nind1	1.308***	-1.905***	-1.707***
	(0.155)	(0.160)	(0.0102)
dum_nind2	1.317***	-2.015***	-1.811***
	(0.158)	(0.163)	(0.0104)
dum_nind3	1.326***	-1.889***	-1.687***
	(0.146)	(0.150)	(0.00955)
dum_nind4	1.300***	-1.960***	-1.757***
	(0.156)	(0.160)	(0.0102)
dum_nind5	1.599***	-2.027***	-1.796***
	(0.156)	(0.161)	(0.0102)
dum_nind6	1.285***	-1.877***	-1.680***

	(0.146)	(0.150)	(0.00956)
dum_nind7	1.318***	-1.936***	-1.736***
	(0.156)	(0.161)	(0.0102)
dum_nind8	1.280***	-1.800***	-1.605***
	(0.149)	(0.153)	(0.00972)
dum_soe1	0.0415**	-0.0591***	-0.0543***
	(0.0180)	(0.0186)	(0.00117)
dum_soe2	-	-	-
Observations	5,646	5,646	5,646
R-squared	0.146	0.441	0.995

Standard errors in parentheses

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

The second and third columns are the results of the robustness test. In order to make the conclusion more stable, the horizontal volatility of earnings per share (EPS) is used as a proxy variable for the level of risk-taking. Under normal circumstances, the company's goal is to maximize the wealth of shareholders. Earnings per share reflect the quality of the company's investment and operation, and the rationality of company's governance and its volatility reflects the level of risk-taking of investors. According to the methods of Adams et al. (2005), this study returns the earnings per share (EPS) instead of σ(ROA) and the respective variables in the model setting to obtain the residual ξ. The absolute value of residual ξ, $|\xi|$, indicates the horizontal dispersion of performance, and the larger the $|\xi|$, the greater the degree of dispersion of performance, and correspondingly, the higher the risk-taking level of the company.

4. Discussion

Although the management and development of a company cannot be separated from certain risk-taking, the outstanding characteristics of the entrepreneurs are taking risks and being good at innovation. However, a large number of case studies show that the irrational (blind or impulsive) pursuit of high-risk and high-income projects will lead to the decline in operating performance or even bankruptcy of the company in a market that is not fully competitive. The decision-making behavior of major shareholders and CEOs is actually the reflection of their expected psychological activities, but the psychology of decision makers is often impossible to prove. In accordance with the assumption that "the action transfers information", the empirical study shows that the risk-taking level of a company will be influenced by the power game between the major shareholders and the CEO. Under normal circumstances, whether the increase of pure shareholders' power or that of executives' power will raise the company's risk-taking level. When the shareholding ratio of major shareholders increases, it means that the major shareholders have more voting rights. Under this structure of power decision-making, the lack of group decision-making mechanism makes it easier for major shareholders to infringe on the interests of the company for personal gain, thus adversely affecting the performance of the company and increasing the operational risk. When the company's shareholding structure is relatively loose, the executives' decision-making power is often big without sufficient supervision, causing moral hazard and increasing operational risks. However, if the two have sufficient capacity to restrict each other, that is, when the company's power structure evolves into a more uniform power distribution, in which both the controlling shareholders and the executives have an equal great power, then the company's risk-taking level can be reduced to a certain extent. Therefore, the company shall improve its governance structure to prevent any party from monopolizing power, and shall effectively regulate its power distribution to reduce risks and maintain stable performance. When the power of the major shareholders is big, the company shall improve the control of the major shareholders by introducing the strategic investors. Those strategic investors who pay attention to the growth of the company and the increase of the equity value are more helpful in controlling the encroachment of the major shareholders. In addition, the company can also play the regulatory role of the managers in controlling the major shareholders by optimizing the board mechanism and establishing a monitoring mechanism with extensive participation of the shareholders' meeting, the board of directors and the board of supervisors.

When the executives have greater autonomy, the company shall improve its decision-making mechanism. Particularly, in the decision-making of major issues, the company shall give more decision-making power and voting rights to minority shareholders, so as to avoid unnecessary risk to the company due to errors in the individual decision-making. The executives' equity incentives shall be controlled within a certain range to prevent the executives from becoming the company's major shareholders, which will cause failure of power restriction, thus effectively controlling the company's

operational risks.

The limitation of this study is that the psychology of decision-makers is very complex, the attitude of managers of different age, gender and personality to take risks is different. What different psychological reaction does different managers show when they face the decision-making of venture capital projects? The empirical study has not solved this problem well. Perfecting the capital market and company governance and reducing the irrational investment and financing behaviors of company decision-makers are still the directions of our further research in the future.

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