

Financialization and Risk Taking of Non-Financial Corporations

Empirical Evidence from Chinese Listed Companies

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Abstract

Using China's A-share listed companies as a sample, this paper provides empirical evidence that with the deepening of financialisation in non-financial corporate sector, the level of corporate risk-taking is significantly reduced, and the complete mediating effect is R&D innovation. The results are still robust when we use instrumental variable method, and the negative impact of financialisation on corporate risk taking is significantly reduced under the constraints of a good governance mechanism. It is further found that as the degree of financialization in non-financial corporate sector deepens, even if enterprises have the ability to take risks, they have no willingness to take risks. This paper theoretically demonstrates the micro-inducement of the insufficient motivation for enterprise development, under the “siphon effect” of financialization.

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Keywords: Financialization; Risk taking; Entrepreneurial spirit; Corporate governance.

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1 Introduction

As China's economy steps into a "new normal" phase, China's industrial development pattern has undergone new changes. The advantages of traditional manufacturing industry are declining, the overcapacity problem is prominent and market competitiveness is declining. However, the returns of broad financial sectors such as finance, insurance, and real estate have continued to go far than the non-financial industries. The structural imbalance of industrial development is attracting more and more attention (Huang Qunhui, 2017).

During a long time, on the one hand, a large amount of financial capital is keen to self-circulating within the financial system, unwilling to serve the development of the real economy; on the other hand, the huge profits of the financial sectors erode the entrepreneurial enthusiasm and the passion of employees. More and more non-financial corporations (NFCs) are gradually deviating from their main business, and become eager to invest in financial assets and real estate, etc. A large amount of social capital and physical firm capital flow into the fields of finance and real estate, resulting in insufficient investment in the real industry. The increased trend of NFCs' financialization aggravates the "hollow phenomenon" of the real industry (Jiazhi Xie et al., 2014; Song Jun and Lu Yang, 2015).

From a theoretical perspective, NFCs' excessive financialization may squeeze out corporate innovation investment (Hongjian Wang et al., 2017), inhibit technological innovation capabilities (Jiazhi Xie et al., 2014), reduce the corporate investment rate in the real industry, compress the effectiveness of monetary policy (Chengsi Zhang and Buyu Zhang, 2016), damage the future development of the NFCs' primary business (Yong Du et al., 2017). Moreover, NFCs' excessive dependence on the finance-related income also raises the corporate leverage ratio, increases the difficulty of macro-control for the leverage reduction, and hinders the supply-side reform. However, some studies document that a higher proportion of financial assets is allocated as a "reservoir" for financing, which reflects the corporate preventive saving motives (Guanchun Liu et al., 2018). It alleviates corporate financing constraints (Jun Zhang and Dan Ding, 2008) and upgrades corporate investment ability.

Facing the pressure from the corporate transformation and upgrading, corporate behavior may continue to present new heterogeneity characteristics, especially in the face of the increasingly accelerated financialization trend in non-financial corporate sector. So, we need new research perspectives and further theoretical research.

Corporate risk taking has an important impact on the corporate development and overall economic growth. It can better reflect the capital expenditure

characteristics of corporations (Bargeron et al., 2010), the grasp of investment opportunities (Yu Minggui et al., 2013), the firms' risk preference behavior, the attitude towards corporate long-term development (Cucculelli and Ermini, 2013; Li Wengui and Yu Minggui, 2013; Zhang Min et al., 2015), and the entrepreneurial spirit. Moreover, the level of corporate risk-taking also reflects the momentum of social innovation-based development and potential of sustainable economic growth (John et al., 2008; Xie Weimin and Tang Qingquan, 2013; Zhang Min et al., 2015).

Therefore, from the perspective of corporate risk-taking, this paper examines the consequences of financialization in NFCs and its mechanism of influence. We do not only theoretically explore the potential value and possible harm of NFCs' financial activities, but also the changes in the entrepreneurial spirit in the context of NFCs' financialization. This study is designed to explore that with the continuous deepening of financial development, how we better stimulate entrepreneurship, optimize risk investment decisions, and promote the transformation and upgrading of real industry.

Our primary contributions are in the following: (1)we find the possible obstacles in the process of transformation and upgrading of NFCs under the new normal of economy, which is from the perspective of financialization. We furtherly provide empirical evidence of the micro-inducing factors that affect long-term development of Chinese real industry. (2)we advance the relevant theoretical research on the financialization of non-financial corporate sector. Much of the existing literature work on the performance of NFCs under the influence of financialization (Song Jun and Lu Yang, 2015; Du Yong et al., 2017), R&D innovation (Xie Jiazhi et al., 2014; Wang Hongjian et al., 2017), etc. We take the perspective of firm risk-taking, explore the economic consequences of financialization on NFCs' investment behavior and its mechanism. (3)this paper explores, in the process of Chinese capital market construction, how the regulatory authorities can avoid the "siphon effect" generated from the financial deepening process while promoting financial reform and reducing financial repression. (4)some studies have shown that due to the crowding out effect of corporate financialization, the NFCs' R&D investments are reduced. However, they are still based on the limited view of enterprise resources, ignoring the intrinsic incentives for under-investment in corporate innovation under the conditions of market economy and the capital market environment where the financing of listed companies is relatively available. On this basis, we further explore that the negative impact of NFCs' financialization on the level of corporate risk-taking may not be mainly due to the crowding out effect, but more likely to stem from the decline of managers' enterprising spirit, resulting in lower investment willingness.

That is, with the increased financialization, even if the entrepreneurs have the ability to take risks, but have no willingness to take risks.

This paper provides empirical evidence that with the deepening of the NFCs' financialization, the level of corporate risk-taking is significantly reduced. The results are still robust to using instrumental variable method and the measurement of the substitution variable, etc. Intermediary effect test suggests that increased financialization erodes the enterprising spirit and reduces the R&D innovation, so as to reduce risk taking. Under the constraints of good governance mechanism, the negative impact of financialization on corporate risk-taking is significantly reduced. Further study shows that when cash flow is relatively abundant and financing constraints are low, the negative impact of increased financialization degree on corporate risk taking level is more significant.

Further tests suggest that with the increased financialization, even if the entrepreneurs have the ability to take risks, but have no willingness to take risks. That is, financialization in NFCs don't play the role of "reservoir" or lead to serious crowding out effects, but rather change the entrepreneur's intrinsic will. Excessive financialization reduces the entrepreneur's innovation enthusiasm, damages the entrepreneurial spirit, restrains the capital expenditure of firms, significantly reduces the level of corporate risk-taking, and aggravates the hollow phenomenon of the real industry.

The remainder of the paper is organized as follows. Section 2 provides theoretical analysis and research hypothesis, while Section 3 discusses the research design. Section 4 presents the empirical result and analysis. Section 5 investigates the impact mechanism. Section 6 provides the further test. Section 7 concludes the paper.

2 Theoretical Analysis and Hypothesis

2.1 Theoretical analysis

In reference to existing theory, financialization is known as the phenomenon that the proportion of corporate financial assets is increasing, and the proportion of financial channel profits to total profits is gradually increasing (Mingrong Cai and Shichi Ren, 2014; Yong Du et al., 2017).

Financialization improves the utilization efficiency of corporate resources and optimizes the space-time allocation of corporate resources. To a certain extent, corporate asset-liability structure, as well as the external financing ability, can also be improved by financialization, which provides resource support for the main business investment (Theurillat, etc., 2010). Therefore, the allocation of financial

assets by NFCs may be based on long-term development strategy motives (Yong Du et al., 2017).

However, other several studies claim that the financialization in real industry is mainly to pursue short-term profits rather than preventive savings (Yuchao Peng et al., 2018). It leads to the transfer of income from the non-financial sector to the financial sector, and may expose the economy to debt tightening and long-term recession risk (Palley, 2013). Along the same lines, Hongjian Wang et al.(2017) prove that financialization does not ease the financing constraints of firms, but even more, produces a squeeze-out effect on corporate R&D innovation. As illustrated in Yong Du et al.(2017), negative effects of financialization hinder the development of NFCs' main business in the future.

The virtual economy can increase monetary wealth, enhance purchasing power, and promote the development of the real economy to a certain extent. However, it does not directly enhance material wealth such as technology and services. Even under the spree of finance, real estate and usury loans industries in China, a large number of the firm's profit flows to the virtual economy, which should have supported the investment of the real industry. This kind of corporate behavior causes the excessive expansion of the virtual economy and the self-circulation of capital in the financial system (Laijun Luo et al., 2016). To a certain extent, it leads to the hollowing out of the real industry, causes an imbalance in the economic structure, undermines the law of the economy itself, and hinders the transformation and upgrading of the industrial structure (Ortiz, 2014). As suggested in Tadesse(2002), the appropriate financial architecture itself may be the source of value creation, but for emerging economies and transition economies, the indiscriminate formulation of a market-oriented financial development system may hide risks.

From academic points of view, the impact of financialization on economy and corporate behavior is ambiguous. In general, from the macro perspective, excessive financialization leads to capital that should have flowed to the real industry, but flows to the virtual economy field such as finance and real estate, causing the hollow phenomenon of the real industry. From the micro perspective, the income obtained by NFCs should form the corporate capital accumulation to be used in expanding reproduction and technological innovation. However, under the influence of financialization, it is invested in the financial market and the real estate sector. What is more serious is that this not only causes insufficient funds for business operations and real investment, but also erodes the entrepreneurial spirit and risk-taking willingness. Corporate behaviors become increasingly short-sighted under the guidance of the short-term benefits of financialization, and gradually divorces from the origin of the operating NFCs.

In addition, many existing literatures, more from a macro perspective, focus on reducing financial suppression and promoting financial deepening by the opening up of Chinese capital market (Zihui Yang and Chuanglian Chen, 2015), interest rate and exchange rate marketization (Ji Yang et al., 2015), etc.

In brief, theoretical research on corporate financial behavior from a micro perspective is still insufficient. This may be due to the relatively low development of Chinese corporate financialization and the excessive trust in the financial industry's support for economic development in theory and practice. Therefore, in the face of the accelerating trend and reality of Chinese NFCs' financialization, it is necessary to carry out more systematic theoretical research, so we can further understand the value creation and potential risks and hazards NFCs' financialization may cause.

2.2 Research hypothesis

Corporate risk taking reflects the company's attitude toward risk and long-term (short-term) gains in business decisions. Generally speaking, higher levels of risk taking mean higher capital expenditures (Bargeron et al., 2010), more aggressive innovations (Hilary and Hui, 2009) and a better grasp of investment opportunities (Minggui Yu et al., 2013). Risk-taking is conducive to enhancing the development capability of firms and their future competitive advantages (Cucculelli and Ermini, 2013; Wengui Li and Minggui Yu, 2013; Min Zhang et al., 2015), accelerating capital accumulation, increasing shareholder wealth (John et al., 2008; Hilary and Hui, 2009), accelerating firm technology innovation and the social innovation development, and increasing total factor generation rate and sustained economic growth (John et al., 2008; Weimin Xie and Qingquan Tang, 2013; Min Zhang et al. 2015). Therefore, improving corporate risk-taking level is not only the need for long-term development of the corporation itself, but also an important condition for building an innovative country and realizing the optimization and upgrading of the economic structure.

However, due to the large investment amount of risky investment projects, the project revenue recovery period is relatively long. Risky investment requires sufficient and stable funds as a guarantee (Huilin Zhang and Yuran Ni, 2017). Qian and Strahan (2007), Junxiong Fang(2007) and other scholars find that the increase in the protection of creditors' interests by the law will increase corporate default costs, reduce the risk of the bank defaulting on credit, encourage the bank to increase the amount of credit, and extend the loan term. As a result, corporate financing constraints are reduced and risk-taking capacity is enhanced.

Financialization can provide financial support for corporate risk taking from both macro and micro levels, and enhance the risk-taking ability of corporations. From

a macro perspective, financial development increases opportunities for external financing, reduces external financing costs, and helps alleviate corporate financing constraints (Demirgüç-Kunt and Maksimovic, 1998; Tianding Zhang and Qiang Zou, 2015). From a micro perspective, corporations use the rapid development advantages of financial markets to improve the financial level of corporations, optimize the structure of financial assets, promote efficient management of funds, and enhance the corporate profitability and risk resistance by financial methods.

In addition, in the current Chinese financial market, the financial industry in a broad sense has a relatively high excess return rate. The improvement of NFCs' financialization degree helps corporations to share the dividends of financial market development, obtain excess returns, reduce corporate financing constraints, improve corporate risk-taking ability, and provide guarantee for the NFCs' risk investment. We speculate that financialization may provide financial support for the risk-taking of NFCs and enhance the corporate risk-taking level. The discussion so far points to the following hypothesis:

Hypothesis H1a: Under the same conditions, the level of corporate risk-taking has increased significantly with the deepening of financialization.

The risk-taking tendency is also a concentrated reflection of corporate managers' entrepreneurial spirit. However, due to the large investment amount of risky projects and long project investment recovery cycles, the future cash flow is highly volatile (Huilin Zhang and Yuran Ni, 2017), and project failure risk is relatively high. Therefore, differentiated risk-taking levels mean that managers will make trade-offs between the corporate long-term development and short-term private interests of managers themselves.

In reference to the principal-agent theory, shareholders have residual claims, but managers need to bear the salary loss and occupational risks caused by project investment failure. Principal-agent relationship between shareholders and managers limits the decision-making domain of managers. Managers may be more cautious and conservative. They are motivated to abandon projects with a positive net present value and a higher risk, resulting in insufficient investments, which not only damages corporate long-term development, but also harms the maximization of shareholder value (John Et al., 2008). Under the short-term self-interested motivation and occupational anxiety of managers, the manager's risk aversion motivation is enhanced and risk-taking willingness is reduced (Kim and Lu 2011; Chang Wei et al., 2018; Xiaorong Li and Ruijun Zhang, 2014).

In the process of financial deepening, market is relatively imperfect. A large number of arbitrage opportunities give the financial industry a relatively high excess return. Not only is it easy to cause the speed and the number of financial

industry capital flowing to real industry are reduced, resulting in the worthless self-circulation of capital in the financial sector, and real industry also tends to invest in the financial industry to obtain higher returns. However, because the scale of funds available to firms in a certain period of time is relatively stable, if the funds invested by the real industry in the financial sector increase, it will inevitably lead to a reduction in the capital used to expand the reproduction and investments in R&D innovation. It leads to squeeze-out effect under the financialization (Seo et al., 2012; Hongjian Wang et al., 2017).

In addition, in the process of economic transformation and upgrading, the Chinese real industry is under a new economic normal development phase and facing the pain of supply-side reform. In sharp contrast, the financial industry grows faster and the investment return period is shorter. Inspired by career anxiety and short-term gains, managers have opportunistic tendencies to transfer capital that could have been invested in long-term real industry projects to financial sector. Once managers are profitable in the financial sector, they tend to be overconfident in the financial sector (Gervais and Odean, 2001; Gao et al., 2018). In reference to the theory of limited attention, managers gradually focus on the financial sector, and are more keen on short-term speculation in the capital market. As a result, managers' enthusiasm in real industry is gradually eroded and long-term risk-taking declines, leading to a gradual decline in investments of the real sector, especially long-term risk investments.

In summary, financialization may also cause corporate managers to turn their attention to the broad financial field and squeeze out real investment capital, which essentially leads to the following contrary hypothesis:

Hypothesis H1b: Under the same conditions, as the degree of financialization increases, the level of corporate risk-taking will decrease.

3 Research Design

3.1 Data sample

This paper takes all listed companies in Shanghai and Shenzhen stock markets from 2007 to 2017 as the initial sample and filters the data according to the following criteria. (1) Excluding financial listed companies; (2) Excluding ST companies; (3) Excluding B shares; (4) Excluding data missing samples. The final annual observations of 14,767 companies are obtained. The data in this article is from the CSMAR database.

3.2 Variable selection and measurement

3.2.1 Interpreted variable

(1) Risk exposure (RiskT). Drawing on the research of scholars such as John et al. (2008), Faccio et al. (2011), Yu Minggui et al. (2013), we use the volatility of corporate earnings as the primary proxy for firm risk-taking. The specific calculation equation is the following:

$$RiskT_i = \sqrt{\frac{1}{N-1} \sum_{n=1}^N (ADJ_ROA_{i,n} - \frac{1}{N} \sum_{n=1}^N ADJ_ROA_{i,n})^2} |N=5$$

(1)

$$ADJ_ROA_{i,n} = \frac{EBITAD_{i,n}}{ASSETS_{i,n}} - \frac{1}{X_n} \sum_{k=1}^X \frac{EBITDA_{k,n}}{ASSETS_{k,n}} \quad (2)$$

Where *i* indexes firm, *n* indexes year. ADJ_ROA is the ratio of the industry-adjusted EBIT and ASSETS. We measure performance volatility in five overlapping yearly periods (t-2 to t+2).

In the robustness test section, we conduct adjustment test to window period.

3.2.2 Explanatory variables

Following the previous literature on financial degree (Demir., 2009; Song Jun and Lu Yang, 2015; Wang Hongjian et al., 2017; Du Yong et al., 2017), we measure financial level as the follows.

Financial = Financial Asset Allocation / Total Assets

Among them, financial asset allocation includes trading financial assets, derivative financial assets, net loans and advances, net available-for-sale financial assets, net held-to-maturity investments, and net investment real estate.

3.2.3 Control variable

Following Hilary and Hui (2009), Barger et al. (2010), Cucculelli and Ermini (2013), Yu Minggui et al (2013), Zhang Min et al (2015) and other studies, we also controls for a vector of firm characteristics that have been shown to affect firm risk taking: profitability (Roa), which is the net profit ratio of total assets; corporate debt ratio (Lev), which is the total debt of the enterprise compared to the total assets; operating income growth rate (Growth), revenue from the previous period's operating income minus the previous period's operating income, divided by the previous period of operating income; the corporate size (Size), which is the natural logarithm of corporate total assets at the end of the year; the fixed asset ratio (Ppe), which is the net fixed assets ratio to the total assets; the ownership (Ownership), which is the sum of the shareholding ratio of the top five shareholders; the executive pay (pay), which is the natural logarithm of the top

three total compensation of company executives; the board size (Board), which is the natural logarithm of the number of board personnel; the capital expenditure (Cap), which is the natural logarithm of cash paid for the purchase and construction of fixed assets, intangible assets and other long-term assets. In addition, we also control the Year (Year) and industry (dust) dummy variables.

3.3 Model setting

In this section, we use financial assets allocation (Financial) as an explanatory variable to examine the changes in the level of corporate risk-taking when the NFCs' financialization degree increases. we examine hypothesis H1 by the following regression model.

$$RiskT_{i,t} = \alpha + \beta_1 Financial_{i,t} + \gamma Control_variables_{i,t} + \varepsilon_{i,t} \quad (3)$$

Where $RiskT_{i,t+1}$ is a measure of corporate risk taking degree, $Financial_{i,t}$ is corporate financialization degree, $Control_variables_{i,t}$ is a set of control variables. If H1a is assumed to be true, the coefficient of β_1 is expected to be positive, indicating that corporate risk-taking level increases as the corporate financialization degree increases. Conversely, if H1b is assumed to be true, the coefficient of β_1 is expected to be negative, indicating that with the corporate financialization degree increases, the level of corporate risk-taking decreases. We cluster the standard errors in all the regressions analysis of this paper.

4 Empirical Results and Analysis

4.1 Descriptive statistics of major variables

Table 1 reports descriptive statistics for the main variables. As shown in Table 1, the average value of the firm risk-taking level is 0.462 and the variance is 0.382. About 79.3% of the companies in the sample have financial asset allocation behaviors, indicating that the current financialization of Chinese NFCs is universal. The distribution of other variables are within reasonable limits.

Table 1 Descriptive statistics of the main variables

Variable	MEAN	SD	MIN	MAX	P25	P50	P75
<i>RiskT</i>	0.462	0.382	0.017	9.099	0.248	0.370	0.559
<i>Financial</i>	0.030	0.066	0.000	0.394	0.000	0.003	0.025
<i>Roa</i>	0.040	0.060	-0.225	0.216	0.014	0.038	0.068
<i>Lev</i>	0.503	1.922	-0.195	142.700	0.267	0.438	0.611

<i>Growth</i>	0.506	1.614	-0.786	12.460	-0.039	0.136	0.445
<i>Size</i>	21.860	1.287	19.100	25.750	20.940	21.700	22.590
<i>Ppe</i>	0.228	0.172	0.002	0.734	0.093	0.192	0.329
<i>Ownership</i>	53.330	15.820	18.370	88.310	41.640	53.720	65.260
<i>Payment</i>	14.060	0.759	12.040	16.010	13.590	14.080	14.540
<i>Board</i>	2.263	0.182	0.000	2.996	2.197	2.303	2.303
<i>Cap</i>	18.310	1.928	12.110	23.000	17.280	18.400	19.490

3.2 Correlation analysis

Table 2 shows the correlation analysis results of the main variables, in which the lower left corner and the upper right corner are the Pearson and Spearman correlation coefficients of the variables. From the analysis results, we can see that the correlation coefficient between the risk-taking level (RiskT) and the financialization (Pearson) of NFCs is negative, suggesting that when other factors are not considered, the higher the corporate financialization degree, the lower level of risk taking is. These estimations initially provide supports the hypothesis H1b.

Table 2: Pearson and Spearman correlation coefficients

Variable	<i>RiskT</i>	<i>Financial</i>	<i>Roa</i>	<i>Lev</i>	<i>Growth</i>	<i>Size</i>	<i>Ppe</i>	<i>Ownership</i>	<i>Payment</i>	<i>Board</i>	<i>Cap</i>
<i>RiskT</i>	1.000	-0.041***	0.057***	0.044***	-0.013	-0.075***	-0.040***	0.044***	-0.075***	0.004	-0.045***
<i>Financial</i>	-0.017**	1.000	0.011	0.001	0.057***	0.106***	-0.278***	-0.085***	0.151***	-0.024***	-0.080***
<i>Roa</i>	0.041***	-0.002	1.000	-0.377***	0.023***	0.066***	-0.134***	0.191***	0.301***	0.024***	0.145***
<i>Lev</i>	0.037***	-0.014*	-0.076***	1.000	0.043***	0.338***	0.014*	-0.026***	-0.025***	0.129***	0.134***
<i>Growth</i>	0.040***	0.026***	0.026***	0.010	1.000	-0.014***	-0.269***	-0.018**	0.031***	-0.067***	-0.130***
<i>Size</i>	-0.074***	-0.046***	0.100***	-0.010	-0.020**	1.000	-0.004***	0.264	0.478***	0.241***	0.692***
<i>Ppe</i>	-0.043***	-0.243***	-0.142***	0.017***	-0.187***	0.052***	1.000	0.033***	-0.175***	0.146***	0.313***
<i>Ownership</i>	0.057***	-0.096***	0.171***	-0.017***	0.024***	0.313***	0.049***	1.000	0.167***	0.064***	0.223***
<i>Payment</i>	-0.069***	0.024***	0.273***	-0.038***	-0.030***	0.485***	-0.159***	0.164***	1.000	0.101***	0.337***
<i>Board</i>	0.001	-0.070***	0.027***	-0.003	-0.068***	0.261***	0.153***	0.075***	0.110***	1.000	0.239***
<i>Cap</i>	-0.065***	-0.159***	0.172***	-0.062***	-0.184***	0.700***	0.301***	0.248***	0.353***	0.252***	1.000

*, **, *** indicate significant at the 10%, 5%, and 1%, respectively (the same below).

3.3 The empirical results

Table 3 reports the test results for hypothesis H1 and provide evidence for hypothesis H1b. In column (1), we control for the annual and industry fixed effects. In column (2), we further include all the control variables. The coefficient of the corporate financialization degree is significantly negative at the level of 5%, suggesting that as the degree of corporate financialization increases, the level of corporate risk-taking is significantly reduced. This conclusion preliminarily indicates that under the influence of the higher corporate financialization degree, manager's willingness of taking risks is reduced. More capital will be allocated to the financial sector, resulting in insufficient risk investments. For other control variables, Roa, Lev, Growth, and Ownership are significantly positively correlated with the level of corporate risk taking. Size and Ppe are significantly negatively correlated with the level of corporate risk taking. It is basically consistent with the findings of Low (2009), Boubakri et al (2013), Yu Minggui et al (2013), Li Wengui et al (2015), Zhang Min et al (2015).

Table 3: Hypothesis test results of H1

	(1) <i>RiskT</i>	(2) <i>RiskT</i>
<i>Financial</i>	-0.128** (-1.99)	-0.146** (-2.29)
<i>Roa</i>		0.181** (2.23)
<i>Lev</i>		0.008** (1.98)
<i>Growth</i>		0.007* (1.86)
<i>Size</i>		-0.012* (-1.79)
<i>Ppe</i>		-0.075** (-2.41)
<i>Ownership</i>		0.002*** (4.87)
<i>Payment</i>		0.012 (1.53)
<i>Board</i>		-0.003 (-0.12)
<i>Cap</i>		-0.002 (-0.59)
Constant	0.607*** (18.87)	0.657*** (5.06)
<i>Year</i>	Yes	Yes
<i>Industry</i>	Yes	Yes
Observations	14767	14767
R-squared	0.108	0.120

The t test value is in parentheses (the same below).

3.4 Robustness test

3.4.1 Tool variable method

In order to control the interference of potential endogeneity on the research conclusions, we use tool variables to control it. Drawing on the research of Wang Hongjian et al. (2017), we select the ratio of investment income to net profit (*Invest_Profit*) as a tool variable for the degree of corporate financialization. The reason is that the investment income depends on the level and structure of the corporate financial assets allocation and meets the correlation requirements of tool variables. However, the investment income can not provide stable financial support for the long-term risky investment projects of corporations. Therefore, from the perspective of economic significance, there is no significant correlation between investment income and corporate risk-taking level, which also meets the exogenous requirements of instrumental variables. The test results of the tool variables are shown in Table 4.

As shown in column (1) of Table 4, in the first-stage regression, the coefficient of the instrumental variable (*Invest_Profit*) is significantly positive. Investment income has a significant positive correlation with corporate financialization level. In the second-stage regression, the coefficient of the predicted value of NFCs' financialization (*Pre_Financial*) is significantly negative, consistent with the previous main test results. This test excludes potential endogeneity problems and further supports the research conclusions of this paper.

Table 4: Tool Variable Method

	(1) the first-stage regression <i>Financial</i>	(2) the second-stage regression <i>RiskT</i>
<i>Invest_Profit</i>	0.006*** (11.92)	
<i>Pre_Financial</i>		-0.924** (-1.99)
<i>Roa</i>	-0.009 (-0.91)	0.173*** (3.22)
<i>Lev</i>	-0.001*** (-2.75)	0.007*** (3.19)
<i>Growth</i>	-0.002*** (-6.22)	0.006*** (2.81)
<i>Size</i>	0.001* (1.77)	-0.010** (-2.49)
<i>Ppe</i>	-0.080*** (-21.38)	-0.138*** (-3.20)
<i>Ownership</i>	-0.000*** (-8.34)	0.002*** (6.35)
<i>Payment</i>	0.001 (1.49)	0.012** (2.45)

<i>Board</i>	-0.015 ^{***} (-4.82)	-0.015 (-0.79)
<i>Cap</i>	-0.002 ^{***} (-5.03)	-0.004 (-1.51)
<i>Constant</i>	0.098 ^{***} (7.03)	0.737 ^{***} (8.16)
<i>Year</i>	Yes	Yes
<i>Industry</i>	Yes	Yes
N	14767	14767
R-squared	0.149	0.102

3.4.2 Nonlinear relationship

Financialization may have a non-linear effect on corporate risk-taking behavior. We include Financial's quadratic term (*Fin_Fin*) in model (3). The coefficient before the intersection term *Fin_Fin* is the focus of our attention. The empirical results are shown in column (1) of Table 5.

3.4.3 Subsample regression

First of all, since manufacturing is the cornerstone of modern industry and the main body of the real economy, if financialization has a negative impact on NFCs' risk taking, it will inevitably cause greater harm to China's industrialized power building. We study the subsamples of the manufacturing industry. The regression results are shown in column (2) of Table 5. According to column (2) of Table 5, we find the coefficient before Financial is still significantly negative, indicating that the increase of financialization degree causes a significant negative impact on the risk-taking level of manufacturing enterprises.

Secondly, due to the impact of a severe economic crisis in the world in 2008, China has not been spared, which may interfere with the conclusions of this study. Therefore, we exclude the sample of the year in which the economic crisis occurred and conduct further tests. The regression results are shown in column (3) of Table 5. According to column (3) of Table 5, the coefficient of Financial is still significantly negative, which still supports our conclusion.

Table 5: Nonlinear and subsample regression test

	(1) Nonlinear <i>RiskT</i>	(2) Manufacturing <i>RiskT</i>	(3) Subsample without 2008 <i>RiskT</i>
<i>Financial</i>	-0.327* (-1.89)	-0.174** (-2.47)	-0.125*** (-2.74)
<i>Fin_Fin</i>	0.603 (1.24)		
<i>Roa</i>	0.181** (2.23)	0.240*** (3.61)	0.136** (2.48)
<i>Lev</i>	0.008**	0.013***	0.009***

	(1.98)	(3.92)	(3.34)
<i>Growth</i>	0.007*	0.010***	0.008***
	(1.86)	(3.23)	(4.64)
<i>Size</i>	-0.012*	-0.016***	-0.011***
	(-1.77)	(-2.96)	(-2.79)
<i>Ppe</i>	-0.076**	-0.058**	-0.067***
	(-2.47)	(-2.13)	(-3.15)
<i>Ownership</i>	0.002***	0.001***	0.002***
	(4.83)	(5.22)	(9.20)
<i>Payment</i>	0.012	0.009	0.009*
	(1.56)	(1.45)	(1.78)
<i>Board</i>	-0.004	0.012	0.002
	(-0.13)	(0.51)	(0.12)
<i>Cap</i>	-0.002	0.005	-0.002
	(-0.59)	(1.32)	(-0.92)
<i>Constant</i>	0.656***	0.747***	0.666***
	(5.04)	(7.69)	(8.63)
<i>Year</i>	Yes	Yes	Yes
<i>Industry</i>	Yes	Yes	Yes
Observations	14767	8663	13541
R-squared	0.120	0.120	0.101

3.4.4 Adjusting the measurement of corporate risk taking degree

In order to further enhance the reliability of the research results, we remeasure NFCs' risk taking degree. We set the variable RiskT2, which is calculated in the same way as models (1) and (2), but the calculation window is adjusted to three years (t-1 year to t+1 year). The regression results are shown in column (1) of Table 6. According to column (1) of Table 6, the coefficient before Financial is still significantly negative, indicating that the hypothesis H1b is still supported after adjusting the measurement of corporate risk-taking level.

3.4.5 Adjusting the measurement method of corporate financialization level

First, we use the cash paid by corporate investment to compare the net cash flow generated by investment activities (Fin_inv), and divides its ratio by 1000 to measure the level of corporate financialization. The cash paid by the enterprise investment is the cash paid by the enterprise for equity investment and debt investment, including the transactional financial assets, the held-to-maturity investment, and the available-for-sale financial assets acquired by the enterprise other than cash equivalents,

Secondly, we set the dummy variable Dummy_fin. If the enterprise has financialization behavior, it is assigned a value of 1, otherwise it is assigned a value of 0. The regression results of the above two methods are shown in columns (2) and (3)

of Table 6, respectively.

According to the columns (2) and (3) in Table 6, the coefficients before *Fin_inv* and *Dummy_fin* are both significantly negative. After transforming the measurement method of explanatory variables, the conclusions of this paper are still robust.

Table 6: Measurement methods for adjusting variables

	(1) <i>RiskT2</i>	(2) <i>RiskT</i>	(3) <i>RiskT</i>
<i>Financial</i>	-0.116** (-2.24)		
<i>Fin_inv</i>		-0.018*** (-24.43)	
<i>Dummy_fin</i>			-0.009* (-1.65)
<i>Roa</i>	0.382*** (5.30)	0.178** (2.16)	-0.002*** (-3.23)
<i>Lev</i>	0.012*** (4.17)	0.008** (2.00)	0.012*** (5.02)
<i>Growth</i>	0.007*** (2.91)	0.008* (1.91)	-0.000 (-0.24)
<i>Size</i>	-0.006 (-1.06)	-0.012* (-1.84)	-0.008** (-2.57)
<i>Ppe</i>	-0.085*** (-3.07)	-0.061** (-2.01)	-0.076*** (-4.88)
<i>Ownership</i>	0.002*** (8.47)	0.002*** (4.99)	0.002*** (9.61)
<i>Payment</i>	0.011 (1.59)	0.012 (1.57)	0.014*** (3.64)
<i>Board</i>	-0.007 (-0.29)	0.001 (0.03)	-0.010 (-0.77)
<i>Cap</i>	-0.009*** (-2.72)	-0.002 (-0.48)	-0.001 (-0.61)
<i>Constant</i>	0.918*** (9.03)	0.634*** (4.87)	0.577*** (9.75)
<i>Year</i>	Yes	Yes	Yes
<i>Industry</i>	Yes	Yes	Yes
N	18442	14698	14767
R-squared	0.115	0.120	0.160

5 Influence mechanism test

5.1 Analysis of influence mechanism 1: mediation effect test

According to the test of hypothesis H1, it is found that as the degree of NFCs'

financialization deepens, the level of corporate risk-taking decreases. The existing studies show that the level of firm risk-taking is affected by many factors such as managerial overconfidence (Yu Minggui et al., 2013) and social network relationship (Zhang Min et al., 2015), but fundamentally, the level of corporate risk-taking from one aspect depends on the amount of resources available to corporations, and on the other hand depends on the enterprising spirit of the entrepreneur.

For NFCs with higher degree of financialization, they have relatively more available financial resources and lower financing constraints. Based on this consideration, the improvement of financialization degree should enhance the corporate risk-taking ability, but the empirical results of this paper do not support the hypothesis H1a. Another possibility is that financialization affects the corporate risk-taking level by influencing entrepreneurs' enterprising spirit. Ortiz (2014) believes that some of the characteristics of financialization are similar to the invasion of HIV in the human body, not only because they self-replicate and grow rapidly within the corresponding system, but also because of its adverse consequences in the system, destroying the body structure and eroding human spirit and confidence. Excessive financialization also harms NFCs, hinders corporate investment in real industries, and hollows out of the real economy (Jiazhi Xie et al., 2014; Ortiz, 2014; Jun Song and Lu Yang, 2015). Therefore, under the erosion of profits from the financial and real estate industries, it may seriously impact entrepreneurs' innovative enthusiasm and enterprising spirit, and reduce the passion of employees

So we speculate that the increase in financialization degree may reduce the entrepreneur's enthusiasm for innovation and enterprising spirit, and thus reduce corporate risk-taking level. We draw on the research of Li Hongbin et al. (2009) and Li Houjian (2013), and use enterprise R&D innovation to measure the innovation enthusiasm and enterprising spirit of enterprise managers. Following Baron and Kenny (1986), Wen Zhonglin et al (2004) and Yang Xingquan et al (2015). and other related research, we investigate the impact of corporate financialization on corporate risk taking through the mediation effect test method. We construct a recursive model to test the above speculation, that is, whether financialization reduces the corporate risk-taking level by reducing the R&D innovation of enterprises. The recursive model is as follows.

$$\text{Innovation}_{i,t} = \alpha_0 + \alpha_1 \text{Financial}_{i,t} + \lambda \text{Control_variables}_{i,t} + \varepsilon_{i,t} \quad (4)$$

$$\text{RiskT}_{i,t+1} = \beta_0 + \beta_1 \text{Financial}_{i,t} + \lambda \text{Control_variables}_{i,t} + \varepsilon_{i,t} \quad (5)$$

$$\text{RiskT}_{i,t+1} = \gamma_0 + \gamma_1 \text{Innovation}_{i,t} + \gamma_2 \text{Financial}_{i,t} + \lambda \text{Control_variables}_{i,t} + \varepsilon_{i,t} \quad (6)$$

Among them, Innovation is a research and development innovation for NFCs. The measurement method is to take the natural logarithm after adding 1 to the number of patent applications. Other variables are defined as above. First, the model (4) is regressed to test the correlation between the degree of financialization of NFCS and corporate innovation ability. If the coefficient α_1 is significantly negative, it indicates

that with the improvement of the degree of financialization of NFCs, the corporate R&D and innovation ability is reduced. At this point, the next test is performed, otherwise the test is stopped. Then, we regress the model (5) to examine the relationship between the corporate financialization degree and risk-taking level. This model is the same as model (3), and will not be repeated here. Finally, we regress the model (6). If γ_1 is significantly positive, γ_2 is significantly negative, and γ_2 is decreased compared with β_1 , it means that there is a partial mediating effect. If γ_2 is not significant, it means that there is a complete intermediary effect. The results of recursive regression are shown in Table 7.

It can be seen from column (1) of Table 7 that NFCs' financialization is negatively correlated with the innovation of the enterprise, indicating that the degree of corporate financialization has led to a decline in the corporate R&D and innovation ability. In column (2), the coefficient of corporate financialization level (Financial) is significantly negative at 5%. After the regression of the model (6), the coefficient of corporate innovation ability in the column (3) is significantly positive at the level of 5%, indicating that the innovation capability of the enterprise is positively related to corporate risk taking. However, the regression coefficient of the financialization level of NFCs no longer shows significantness, indicating that the enterprise's ability to innovate has a complete mediating effect. The empirical results in Table 7 support the above speculation that financialization reduces the risk-taking level by reducing the R&D innovation of enterprises. It indicates that corporate financialization damages the entrepreneur's innovative spirit and enterprising consciousness, which lead to a decrease in the willingness of entrepreneurs to take risks.

Table 7: Mediation effect test

	(1) <i>Innovation</i>	(2) <i>RiskT</i>	(3) <i>RiskT</i>
<i>Innovation</i>			0.023** (2.57)
<i>Financial</i>	-0.411* (-1.72)	-0.146** (-2.29)	-0.038 (-0.31)
<i>Roa</i>	-0.021 (-0.08)	0.181** (2.23)	0.226 (1.63)
<i>Lev</i>	-0.073 (-1.05)	0.008** (1.98)	0.108** (1.97)
<i>Growth</i>	-0.008 (-1.50)	0.007* (1.86)	0.007 (1.30)
<i>Size</i>	0.182*** (6.91)	-0.012* (-1.79)	-0.030** (-2.35)
<i>Ppe</i>	-0.416*** (-3.67)	-0.075** (-2.41)	-0.010 (-0.20)
<i>Ownership</i>	0.000 (0.39)	0.002*** (4.87)	0.002*** (2.92)
<i>Payment</i>	0.097*** (3.73)	0.012 (1.53)	-0.004 (-0.39)

<i>Board</i>	-0.109 (-1.30)	-0.003 (-0.12)	-0.001 (-0.03)
<i>Cap</i>	0.045*** (3.91)	-0.002 (-0.59)	0.017*** (2.76)
<i>Constant</i>	-5.637*** (-8.59)	0.657*** (5.06)	0.525*** (2.85)
<i>Year</i>	Yes	Yes	Yes
<i>Industry</i>	Yes	Yes	Yes
N	14767	14767	14767
R-squared	0.198	0.120	0.138

5.2 Impact Mechanism Test 2: Corporate Governance Perspective

The "Regulatory Guidelines for Listed Companies No. 2 - Regulation Requirements for the Management and Use of Funds Raised by Listed Companies" issued by the CSRC stipulates that listed companies should be reviewed and approved by the board of directors and independent directors should clearly express their consent when listed companies use idle raised funds for financial investments. The corporate financial assets allocation is subject to the constraints of the board of directors to a certain extent, but due to the differences in the powers of the board of directors in different corporations, it may lead to heterogeneity in the implementation of financial asset allocation by managers.

The self-interest of management rights is the main cause of the financialization of listed companies and the self-cycling of funds (Chunhui Wen et al., 2016). A good corporate governance mechanism can inhibit the opportunistic motives of managers and constrain the private interests of managers (Yuhui Wu and Shinong Wu, 2011), which may reduce the improper financial speculation and encourage managers to take the interests of shareholders as the starting point of investment strategy. Therefore, this paper speculates that under the condition of high corporate governance, managers' excessive financialization behavior will be restricted.

The structure of the board of directors has an important influence on the level of corporate governance. The internal directors and external independent directors of the board of directors constitute a supervisory and restrictive mechanism for managers. However, the role of the board of directors depends on the independence of the board of directors. The higher the independence of the board, the more effective it is to protect investors. (Mishra and Nielsen, 2000; Lu Zhengfei and Hu Shiyang, 2015). The independence of the board of directors depends on the proportion of independent directors in the board of directors and whether the chairman is also the CEO. Therefore, this paper selects the proportion of independent directors in the board of directors and whether the chairman is also the CEO as a proxy variable to measure the effectiveness of the internal supervision mechanism of corporate governance (Zheng Zhigang and Lu Xiuhua, 2009; Ye Kangtao et al., 2011).

In addition, institutional investors oversee managers' decisions (Chung et al., 2002), and promote corporate social responsibility (He Dan et al., 2018), forcing managers to increase their disclosure (Shleifer and Vishny, 1997) and inhibiting managerial

misconduct (Healy and Palepu, 2001). Ajinkya et al. (2005) find that when institutional investors hold a high proportion of shares, managers will disclose company information more efficiently, specifically and accurately, especially for strategic institutional investors, given their stable shareholding cycle. Strategic institutional investors are more motivated to obtain private information about the company, monitor corporate manager behavior, and curb manager opportunistic motivation (An and Zhang, 2013). Therefore, this paper examines the external governance of the company by the proportion of institutional investors (Qi Luguang and Han Chuanmo, 2015). The measure of the shareholding ratio of institutional investors is the number of shares held by institutional investors.

This paper speculates that when the corporate governance mechanism is weak and the managerial power is restricted to a low degree, that is, the lower the proportion of independent directors and the concurrent chairman of the board of directors, and the lower proportion of external institutional investors, financialization may be more likely to have a negative impact on the level of corporate risk taking. On the contrary, when the corporate governance mechanism is relatively perfect and the manager's power is restricted to a high degree, it may inhibit the manager's financial speculation. At this time, the negative impact on the level of corporate risk-taking is reduced. The regression results are shown in Table 8.

According to column (1) of Panel A in Table 8, column (3) of Panel B, and column (5) of Panel C, when the independent directors of the board of directors account for a relatively high proportion, the chairman and the CEO are separated from each other, and the institutional investors have a higher shareholding ratio, the coefficient before Financial is not significant. On the contrary, the coefficient before Financial is significantly negative. It proves the speculation in this paper that when the internal and external governance mechanisms of the company are weak, the managers are less constrained. They are more inclined to engage in financial speculation because of opportunistic self-interested motives, and give up risky investment projects that may have more long-term implications for the company's future development.

Table 8: Internal and external governance effect test

	(1)	(2)	(3)	(4)	(5)	(6)
	Panel A		Panel B		Panel C	
	The proportion of independent directors		Whether the chairman is also the CEO		The proportion of institutional investors	
	High <i>RiskT</i>	Low <i>RiskT</i>	NO <i>RiskT</i>	Yes <i>RiskT</i>	High <i>RiskT</i>	Low <i>RiskT</i>
<i>Financial</i>	-0.078 (-1.15)	-0.142** (-2.14)	-0.026 (-0.48)	-0.244* (-1.65)	-0.129 (-1.25)	-0.123* (-1.75)
<i>Roa</i>	0.217** (2.06)	0.232** (2.03)	-0.021 (-0.29)	0.366** (2.01)	0.322** (2.14)	0.057 (0.65)
<i>Lev</i>	0.005** (2.05)	0.060** (2.09)	0.075*** (7.50)	0.173*** (5.04)	0.001 (0.76)	0.015* (1.79)

<i>Growth</i>	0.003 (0.85)	0.013* (1.74)	0.005** (2.12)	-0.001 (-0.22)	0.004 (1.13)	0.008 (1.62)
<i>Size</i>	-0.012 (-1.52)	-0.015 (-1.49)	-0.012** (-2.54)	-0.043*** (-3.47)	-0.004 (-0.48)	-0.015* (-1.87)
<i>Ppe</i>	-0.102** (-2.43)	-0.056 (-1.42)	-0.054** (-2.18)	-0.065 (-0.91)	-0.186*** (-3.48)	-0.028 (-0.83)
<i>Ownership</i>	0.002*** (5.03)	0.002*** (3.16)	0.002*** (7.64)	0.002*** (4.34)	0.001*** (2.89)	0.002*** (4.12)
<i>Payment</i>	-0.002 (-0.23)	0.023** (2.41)	0.007 (1.17)	0.044*** (2.82)	-0.011 (-1.01)	0.018** (2.03)
<i>Board</i>	0.018 (0.64)	-0.023 (-0.42)	-0.001 (-0.06)	0.024 (0.46)	-0.027 (-0.67)	0.006 (0.20)
<i>Cap</i>	0.000 (0.02)	-0.003 (-0.60)	0.001 (0.21)	-0.001 (-0.17)	-0.007 (-1.18)	-0.002 (-0.36)
<i>Constant</i>	0.791*** (4.97)	0.569*** (3.23)	0.383*** (4.08)	0.318 (1.32)	1.056*** (5.75)	0.564*** (3.71)
<i>Year</i>	Yes	Yes	Yes	Yes	Yes	Yes
<i>Industry</i>	Yes	Yes	Yes	Yes	Yes	Yes
N	6484	8283	6224	1743	4609	10158
R-squared	0.142	0.117	0.053	0.168	0.190	0.099

6 Further Research

Through the mediation effect test, this paper finds that financialization erode the entrepreneurial enthusiasm and enterprising spirit, reduce the R&D innovation of enterprises, which lead to the reduction of the risk-taking level of NFCs. Under the characteristics of good corporate governance, the negative impact of financialization on corporate risk taking is reduced. To a certain extent, these conclusions show that financialization affects the will of managers rather than the ability of enterprises to invest, thus reducing the level of corporate risk-taking.

Studies such as Wang Hongjian et al. (2017) and Du Yong et al. (2017) have shown that financialization has a crowding out effect, resulting in limited capital for companies to invest in real industries. However, enterprises have certain flexibility in terms of funding arrangements. Especially in terms of financial assets with relatively high liquidity, the flexibility of adjustment is relatively high. Therefore, the negative impact of financialization on the level of corporate risk-taking, in addition to the crowding-out effect, may also have a deeper reason, that is, the entrepreneurial spirit of corporate managers declines and the willingness to invest decreases.

Basing on the analysis above, we speculate that when the level of disposable cash flow of NFCs is low and the degree of financing constraints is high, NFCs do not have sufficient funds to allocate financial assets, and the willingness of enterprises to allocate financial assets is not strong. Under this circumstance, if the enterprise tightens the real investment and allocates the financial assets with a higher proportion,

it will inevitably lead to a more obvious crowding effect. Therefore, if the crowding effect is established, then when the company's disposable cash flow level is low and the degree of financing constraints is high, the negative impact of financialization on corporate risk exposure will be more obvious.

When the company's disposable cash flow is relatively high and the degree of financing constraints is low, the funds that the enterprise can support are relatively abundant. The financial asset allocation of the enterprise has a relatively small crowding effect on the real investment of NFCs. The crowding out effect of the enterprise's risk-taking level is also relatively weak. Therefore, if the negative impact of financialization on the risk exposure of enterprises is relatively high at this time, it means that the underlying reasons is the decline in corporate managers' entrepreneurial spirit and lower investment willingness.

We divide company's cash flow and financing constraints basing on the annual industry median and conduct empirical tests. Cash flow is measured as follows: [(net profit + interest expense + non-cash expenditure) - working capital addition - capital expenditure] / total assets

Drawing on Aggarwal and Zong (2003), Liu Huan et al (2015) and other related research, we measure financing constraints: financial expenses / (net profit + income tax expenses + financial expenses). The sample is divided into two groups according to the annual industry median of cash flow and financing constraints. The regression results are shown in Table 9.

According to column (1) of Panel A and column (3) of Panel B in Table 9, it is found that the coefficients before Financial are significantly negative. We support our conclusion that when the company has more cash flow and lower financing constraints, financialization has a significant negative impact on the risk taking of NFCs. Conversely, according to column (2) of Panel A and column (4) of Panel B in Table 9, the coefficient before Financial is not significant. The above conclusions both support the speculation in this paper that with the deepening of the degree of financialization, even if the enterprise has the ability to take risks, the manager has no willingness to take risks, indicating that the financial impact on the level of corporate risk-taking is negative. In addition to the crowding out effect, the main reason is the decline in the managers' entrepreneurial spirit and the reduced willingness to invest. At the same time, the conclusions of this paper are consistent with Peng Yuchao et al. (2018). We both support financialization does not play a role in preventive savings.

Table 9: Test results of further studies

	(1)	(2)	(3)	(4)
	Panel A		Panel B	
	Cash flow		Financing constraints	
	More	Less	Low	High
	<i>RiskT</i>	<i>RiskT</i>	<i>RiskT</i>	<i>RiskT</i>
<i>Financial</i>	-0.100*	-0.094	-0.208**	-0.063
	(-1.71)	(-1.55)	(-2.22)	(-0.90)
<i>Roa</i>	0.149	0.200**	0.117	0.430*

	(1.61)	(2.51)	(1.21)	(1.84)
<i>Lev</i>	0.006	0.010**	0.005*	0.065***
	(1.29)	(2.29)	(1.95)	(2.75)
<i>Growth</i>	-0.000	0.007***	0.011	0.004
	(-1.39)	(2.80)	(1.38)	(1.41)
<i>Size</i>	-0.004	-0.011*	-0.017*	-0.009
	(-0.61)	(-1.82)	(-1.86)	(-1.16)
<i>Ppe</i>	-0.021	-0.102***	-0.116**	-0.044
	(-0.61)	(-3.20)	(-2.53)	(-1.24)
<i>Ownership</i>	0.002***	0.002***	0.002**	0.002***
	(3.88)	(4.69)	(2.29)	(5.27)
<i>Payment</i>	0.011	0.012	0.010	0.007
	(1.31)	(1.52)	(0.90)	(0.80)
<i>Board</i>	0.004	-0.018	-0.026	0.012
	(0.13)	(-0.68)	(-0.72)	(0.38)
<i>Cap</i>	-0.007	-0.000	-0.001	0.001
	(-1.29)	(-0.04)	(-0.19)	(0.13)
<i>Constant</i>	0.589***	0.649***	0.895***	0.475***
	(4.46)	(5.21)	(4.47)	(3.65)
<i>Year</i>	Yes	Yes	Yes	Yes
<i>Industry</i>	Yes	Yes	Yes	Yes
N	7310	7457	6714	8053
R-squared	0.133	0.166	0.125	0.132

7 Research conclusions

This paper takes the listed companies in Chinese A-share market from 2007 to 2017 as a sample to study the impact of financialization on the risk-taking of NFCs and its mechanism. We find that with the deepening of NFCs' financialization, the corporate risk-taking level is reduced. The conclusions are still stable after using the instrumental variable method to control the potential endogeneity and the measurement method of the substitution variables. Through the mediation effect test, it is found that the deepening of NFCs' financialization erode the enthusiasm of entrepreneurs, reduce the R&D innovation of enterprises, and thus lead to the decline of corporate risk-taking level. Under the constraints of good internal and external corporate governance mechanisms, the negative impact of financialization on the level of corporate risk-taking has been significantly reduced.

We further find that when the company's cash flow is relatively abundant and the level of corporate financing constraints is low, the negative impact of financialization on corporate risk-taking is more significant, indicating that as the degree of financialization deepens, even if the enterprise has ability to undertake risks, but has no willingness to take risks. The financialization of NFCs does not play the role of a "reservoir" and does not lead to serious crowding out effects. It is due to the change of

the entrepreneur's internal will.

The conclusions of this paper show that excessive financialization reduces the entrepreneurial enthusiasm and enterprising spirit, damages the entrepreneurial spirit, and restrains the capital expenditure of NFCs, so that the level of corporate risk-taking is significantly reduced, which exacerbates the economic detachment from real economy. Based on the above research conclusions, this paper has the following implications:

First, we must rationally adjust the development model of the financial industry, build a long-term mechanism suitable for the development of the financial industry, standardize the market order, gradually reduce the excess return rate of the broad financial industry, reduce the "siphon effect from real economy" of broad financial industry. Let financial development return to the basic logic of serving the real economy.

Second, listed companies are usually representative of outstanding enterprises in specific industries. Their behaviors have a benchmarking and exemplary role. If the listed companies are over-financialized, the capital expenditures of enterprises will decrease, and the level of risk-taking of enterprises will decline. Economic development will have a serious negative impact. Therefore, on the one hand, we must focus on cultivating the entrepreneurial spirit of listed company managers, stimulating the enthusiasm of employees and enhancing the willingness to take risks in business operations and investment. On the other hand, in the entire economic development system, we must focus on the value creativity of the real industry, enhance the status and voice of NFCs in economic development, and create a business environment that is easy, low-cost and effective in protecting property rights. At the same time, it is necessary to further optimize the governance structure of listed companies, enhance the governance and supervision functions of external directors and investors on the business activities of listed companies, and constrain the financial speculation behavior of managers in the process of financial development.

Third, under the influence of serious trade disputes between China and the United States, China's financial market is also severely frustrated. The risk of financial bubble rupture caused by the self-cycling of capital in financial markets has risen sharply, and the probability of systemic risks has increased. Therefore, the policy supervision department must not only vigorously prevent macro-systemic financial risks, but also regulate the risk behaviors of financial institutions. At the same time, it should also pay attention to guiding listed enterprises to make rational use of financial markets, prevent excessive financialization of listed enterprises, and avoid damaging the development of the real economy.

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