The Impact of Institutional Investor Ownership on Corporate Financial Risk - Empirical Evidence and Heterogeneity from Listed Companies in China

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Abstract. Under the background of China's increasingly mature capital market, institutional investors have become the dominant force affecting resource allocation and market trend. Using data from companies listed on the Shanghai Stock Exchange and Shenzhen Stock Exchange from 2015 to 2024, this paper explores in-depth how their stock behavior affects corporate financial risks. According to the study, unlike the 'supervisory effect' common in mature markets, rising shares of Chinese institutional investors have been shown to considerably exacerbate the financial risk of the company as a whole. Further heterogeneity analysis shows that there is a significant heterogeneity across ownership types in this "risk intensification effect". In private enterprises lacking implicit guarantee, institutional shareholding significantly pushes up the risk level, while in state-owned enterprises, the impact is not significant, potentially due to the implicit guaranteed mechanism and governance constraints. In addition, the study also reveals that the "picking winners" of institutional investors often masks the real consequences of their higher risk, that is, institutions tend to hold large cap stocks with better fundamentals, thus presenting the illusion of low risk on the surface. This paper provides important empirical evidence for regulators to optimize classified regulatory policies and maintain financial security of private economy.

Keywords: Institutional Investors, Corporate Financial Risk, Heterogeneity, The Nature of Property Rights, Risk Taking.

1 Introduction

In recent years, individual traders have largely been superseded by institutional entities as the primary participants in the global capital market. Chemmanur et al. pointed out scholars observe that institutions are becoming central to how firms allocate resources and manage finances and resource allocation, deeply affecting the investment and financing decision-making and innovation path of enterprises [1]. As financialization deepens, discussions in academia about the function of institutional investors have expanded from a simple 'governance improvement' to more complex dimensions. In

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China, with the growth of professional institutions such as public funds and social security funds, the depth of their participation in governance is increasing, but its impact on corporate risk is still widely controversial.

There are two main opposing views in existing literature. The traditional "effective supervision hypothesis" holds that institutional investors, as active owners, can reduce agency costs and curb financial distress. However, a growing number of recent studies have begun to challenge this consensus, especially in emerging markets or specific incentives. According to the latest study by Lewellen and Lewellen, the participation motivation of institutional investors is mainly due to the expansion of management fee income and asset size, and this incentive dislocation may lead to encouraging management to adopt more aggressive strategies [2]. In addition, Huang et al.'s research based on cross-border data also found that in order to pursue high returns beyond the benchmark, institutional investors tend to push up the level of risk tolerance of enterprises [3].

At the same time, with the rise of ESG and sustainable development concept, institutional investors began to promote green innovation and strategic transformation of enterprises. Although Zhao et al. Pointed out that this promotion contributes to long-term value, intensive innovation investment and strategic adjustment inevitably increase operational uncertainty and financial volatility in the short term [4].

Based on the above theoretical disputes and practical background, the research theme of this paper focuses on how corporate financial stability in China is influenced by the level of institutional holdings. The primary objective is to paper is to clarify whether institutional investors play a "supervisory effect" in mature markets to reduce corporate risk or show the unique "risk-taking behavior" characteristics of emerging markets under the special institutional background of China. To answer this question, this study used a bidirectional fixed effect model for validation, analyzing a dataset of Chinese listed companies over a 10-year period from 2015 to 2024. Firstly, this article examines the overall relationship between institutional shareholding and corporate risk. Secondly, by dividing the sample into state-owned and non-state-owned enterprises, this article uses group regression to explore the moderating effect of property rights. Finally, this article provides a new perspective for understanding the governance role of institutional investors in transitional economies through empirical research.

2 Literature Review and Research Hypothesis

According to the traditional agency theory, institutional investors play the role of "gatekeeper" by virtue of capital scale and professional advantages. Research by Manzaneque et al. shows that the probability of financial crisis can be reduced by institutional buyers [5]. However, this theory is mostly based on the rule of law environment in mature markets, ignoring the conflicts of interest of institutional investors themselves.

In recent years, frontier literature has focused more on the "profit seeking nature" of corporate investors. Lewellen and Lewellen pointed out by building a model that the participation of institutional investors is not cost-free, and their aggressive behavior

often serves their own cash flow incentives, rather than the long-term stability of the invested company [2]. When high-risk strategies can bring short-term stock price outbreaks to attract more capital inflows, institutional investors have the incentive to tolerate or even encourage risks. Huang et al. Provides more direct evidence that foreign institutional investors have significantly increased the level of risk tolerance of enterprises worldwide [3]. This is compatible with the findings of Cella et al. that institutional investors with shorter investment horizons tend to amplify market shocks and volatility, rather than act as stabilizers [6].

In addition to financial incentives, emerging strategic orientation has also changed the risk map. Velte's systematic review of existing literature shows that institutional investors are a key force in promoting corporate sustainability strategies [7]. Zhao et al. further found that institutional investors significantly promoted the green innovation of enterprises [4]. However, innovation is essentially a high-risk activity, which requires a large amount of capital investment and a long return cycle. This strategic transformation is often manifested in the deterioration of financial indicators and the fluctuation of Z-score in the short term.

Combined with the characteristics of China's capital market and the latest literature, this paper believes that Chinese institutional investors are more inclined to show the characteristics of "risk-taking behavior". Whether motivated by the financial incentives described by Lewellen and Lewellen or the transformational pressures discussed by Zhao et al., institutional investors are increasingly inclined to intervene in management decisions [2, 4]. These drivers jointly promote enterprises to break their defensive posture and adopt more aggressive investment strategies.

H1: after controlling the characteristic variables such as enterprise size, financial situation and ownership structure, the institutional investor shares have a positive association with the financial risk of the company.

As observed in other emerging markets, Ikhsan et al. pointed out that the government plays a dual role as a shareholder and regulatory in State-Owned Enterprises (SOE), providing implicit guarantees for SOE, so the aggressive strategy of institutional investors has limited impact on their risks [8].

In addition, the study of Beck and Brë dsgaard further emphasizes that the deep embedding of Party organizations in the governance of SOE constitutes a "political core" governance model with Chinese characteristics [9]. This special governance structure requires state-owned enterprises to give priority to social stability and macro policy objectives in business decisions, thus forming a natural institutional constraint on the radical profit seeking behavior of external institutional investors. In contrast, Li et al.'s research on the Chinese market has found that family control, the main form of private enterprise, shows greater vulnerability in the face of financial distress [10]. Non state-owned enterprises have strong financing constraints, high dependence on institutional funds, weak bargaining power, and the rising proportion of institutional holdings will force enterprises to increase leverage ratio, thus exacerbating financial risks.

H2: The aggravating effect of institutional investor Shareholding on corporate financial risk is more significant in non state-owned enterprises.

3 Research Design

In this paper, China A-share listed companies from 2015 to 2024 are selected as the sample. Excluding financial and ST companies, excluding companies with incomplete financial data, only the data of consolidated statements are analyzed, and 0.1% and 99.9% of continuous variables are winsorized to remove the influence of extremes.

The variable explained of this paper is financial risk (risk_proxy), using the opposite number of Altman Z-score (zscore), the risk is positively correlated with the value. The opposite number of Altman Z-score is selected to measure financial risk because the index comprehensively considers the dimensions of profitability and solvency, and is suitable for financial risk assessment of listed companies; At the same time, the fixed effect of the industry is controlled to alleviate the impact of the difference in Z-score benchmark values in different industries.

The explanatory variable of this paper is the shareholding ratio of all institutions (Inst), and the follow-up heterogeneity analysis will be further divided into transactional institutions (trans_inst) and stable institutions (stable_inst).

Transactional institutions are defined as short-term investors, this classification draws on the distinction of investment horizons modeled by Cella et al. and the incentive structures discussed by Lewellen and Lewellen [2,6]. In the empirical design using the CSMAR database, this category corresponds to mutual fund holdings and brokerage holdings.

Instead, stable institutions are characterized as long-term investors, consistent with the sustainability emphasized by Velte and Zhao et al. [4,7]. This paper used insurance funds and social security funds in the CSMAR database to measure this variable.

The control variables of this paper are enterprise size, asset liability ratio, return on assets, growth and shareholding of the largest shareholder (TOP1).

This paper constructs a two-way fixed effect model.

$$\mathrm{Risk}_{i,t} = \alpha_0 + \beta_1 \mathrm{INST}_{i,t} + \sum \beta \mathrm{Controls}_{i,t} + \mu_t + \epsilon_{i,t} \quad (1)$$

4 Empirical Results Analysis

4.1 Analysis of Descriptive Statistics and Correlation

Table 1. Descriptive statistics

Variable	N	Mean	Std. Dev.	Min	Max
Risk_Proxy	33593	-1.135	0.9698	-5.8288	7.1229
INST	33593	40.9227	24.7851	0.0037	95.7609
Size	33593	22.3345	1.3494	18.9267	28.1448
Lev	33593	0.4184	0.2065	0.0279	1.2218
ROA	33593	0.0261	0.0881	-0.8931	0.3585
Growth	33593	0.1861	1.1876	-0.8928	27.7854
Top1	33593	32.6745	14.7244	4.15	82.4763

As shown in Table 1, the Risk_Proxy variable exhibits a mean of -1.135 (SD = 0.970). The minimum value of the data is - 5.829 and the maximum value is 7.123, this wide distribution highlights the substantial heterogeneity of financial stability of Chinese A-share companies and ensures sufficient variation in subsequent regression analysis, and the distribution range is wide, with good discrimination, which is suitable for regression analysis. Secondly, in terms of core independent variable Inst, the data show that the degree of institutional participation is significant, with an average shareholding of 40.92% and a significant dispersion of 24.79%. This data feature deserves attention, with an average shareholding of more than 40%, indicating that institutional investors are no longer supporting actors in the market, but mainstream shareholders with important voices, and the minimum is 0.004%, the maximum is 95.76%, and the SD is large. This high degree of heterogeneity shows that different enterprises are greatly concerned by institutional investors, which provides rich data variability for this paper to explore the marginal impact of institutional holdings on corporate risk.

For the control variables, the sample companies maintained an average leverage ratio (Lev) of about 41.84%, while the return on assets (ROA) averaged 2.61%, consistent with typical Chinese market conditions.

Table 2. Correlation matrix

Variable	Risk_Proxy	INST	Size	Lev	ROA	Growth	Top1
Risk_Proxy	1	-0.056	-0.012	0.417	-0.702	-0.041	-0.18
INST	-0.056	1	0.459	0.157	0.119	0.044	0.492
Size	-0.012	0.459	1	0.455	0.078	0.025	0.18
Lev	0.417	0.157	0.455	1	-0.329	0.038	0.004
ROA	-0.702	0.119	0.078	-0.329	1	0.078	0.172
Growth	-0.041	0.044	0.025	0.038	0.078	1	0.01
Top1	-0.18	0.492	0.18	0.004	0.172	0.01	1

Table 2 reports the Pearson correlation coefficient matrix between variables. This part of the result reveals a very important economic phenomenon. As shown in table 2, the correlation coefficient between institutional shareholding and financial risk is -0.056. This means that from the simple correlation of univariates, the higher the institutional ownership of companies, the lower the risk seems to be. This seems to be contrary to the hypothesis (H1) of "institutional shareholding intensifies risk" in this paper, but combined with the correlation of control variables, scholars can find that this is actually an illusion caused by picking winners. The correlation coefficient between institutional shareholding and enterprise size is 0.459, and the correlation coefficient with ROA is 0.119. This shows that institutional investors tend to invest in large and profitable "blue chip stocks". Table 2 also shows that the factor between ROA and Risk_Proxy is as high as - 0.702, and the factor between size and risk is also negative. That is to say, the blue-chip stocks themselves have a low risk of default.

Therefore, it is concluded that the negative correlation (-0.056) in Table 2 reflects the real consequences of picking winners, an institutional investor, obscuring its treatment effect. Only in the subsequent multiple regression analysis (Table 3), after controlling the factors such as size and ROA, stripping out the impact of picking winners,

will the real face of institutional investors pushing up corporate risk (the regression coefficient is positive) be revealed. This reversal from "surface negative correlation" to "return to positive correlation" just proves the necessity of controlling endogenous factors more strongly. In addition, the correlations between explanatory variables are mostly less than 0.5 (except for the endogenous correlation between risk and ROA), showing that there are no serious multicollinearity problems in the model.

4.2 Benchmark Regression Analysis

Table 3. Baseline regression results

Variable	Coef	SE	P-value	Sig
INST	0.0019	0.0003	0	***
Size	-0.0957	0.013	0	***
Lev	1.2785	0.0629	0	***
ROA	-6.5218	0.1065	0	***
Growth	-0.0031	0.004	0.442	
Top1	-0.0068	0.0006	0	***
Constant	1.0844	0.2895	0	***
Industry FE	Yes			
Year FE	Yes			
N	33593			
R-squared	0.6067			

The baseline regression results are presented at table 3. After excluding the interference of factors such as enterprise size and profitability, the coefficient of institutional ownership, the core explanatory variable, is 0.0019. This is significant at the level of 1%. In an economic sense, for every 10 percentage points increase in the proportion of institutional holdings, the financial risk of enterprises will rise by 0.019 units. More specifically, for every standard deviation (24.79%) increase in the proportion of institutional holdings, the financial risk of enterprises will increase by about 0.047 units, which is equivalent to 4.9% of the standard deviation of the sample of risk variables. Considering that corporate financial risk is usually affected by many complex factors, a single indicator can produce nearly 5% of the explanatory power of the standard deviation, indicating that the fluctuation of institutional buyers' holdings has a substantial marginal influence on corporate risk, and its role cannot be ignored. This shows that at the Chinese invest environment, institutional investors are not traditional "risk averses" but actively push up the operating leverage of enterprises in pursuit of excess return incentives emphasized by Lewellen and Lewellen [2].

Additionally, the regression results of control variables are also consistent with the expectations of traditional corporate finance theory, which proves that the regression results are effective and meaningful: the coefficient of enterprise size is considerably negative (- 0.0957), meaning that the larger the scale of enterprises, the stronger their ability to resist risks, and the lower the possibility of falling into financial difficulties, which is in line with the market law of "big but not falling". The coefficient of ratio of asset liability is significantly positive (1.2785), indicating that financial leverage is the

main driving force to push up corporate risk, and the heavier the debt burden, the higher the default probability of enterprises. The coefficient of return on assets is significantly negative (-6.5218), which means that enterprises with strong profitability have a thicker "safety cushion" and can effectively resist external shocks. The coefficient of the largest shareholder's shareholding ratio is significantly negative (-0.0068), indicating that in enterprises with high equity concentration, major shareholders have a stronger incentive to supervise management and maintain the long-term survival of enterprises, thus playing a stabilizing role.

Table 4. Analysis of heterogeneity

Variable	(1) SOE	(2) Non-SOE	(3) Inst Types
INST	0.0012 （0.0027）	0.0020*** （0.0003）	
Trans_INST			-0.001 （0.0012）
Stable_INST			-0.0024 (0.0041)
Controls	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
N	1302	32291	33593
R-squared	0.8114	0.6062	0.6053

Controls means that it controls variables such as enterprise size, the ratio of asset liability and ROA (return on assets) and the Industry Fixed effect (FE) and Year FE.

Table 4 shows that there is significant "ownership discrimination" in the risk effect of institutional investors. In non state-owned enterprises, the Inst coefficient is significantly positive; It is not significant in state-owned enterprises. This result is highly in line with Li et al.'s finding that private enterprises (often family controlled) lack a buffer mechanism similar to state-owned enterprises in the face of external capital pressures [10]. At the same time, this also verifies the theoretical framework of Ikhsan et al. That is, the special attributes of state-owned capital make it constrained by more nonmarket factors (such as social stability) in risk taking, thus shielding the radical impact of some institutional investors [8]. Although this may be partly due to the small sample size of state-owned enterprises, it is consistent with the theoretical expectation that state-owned enterprises have "implicit guarantees" and stricter political constraints, which can buffer external capital pressures.

Interestingly, in column (3) of Table 4, when further decompose institutional investors into trading and stable types, neither coefficient shows statistical significance (P>0.1). This result provides a nuanced insight unique to the Chinese market: it suggests that the risk-enhancing effect of institutional ownership is likely to be an "aggregation effect" rather than driven only by specific types of investors. In the highly volatile A-share market, even theoretically "stable" investors (such as social security funds) may face pressure to prioritize short-term returns or imitate trading strategies of trading funds to maintain relative performance rankings. This "behavioral homogenization"

means that as long as the total shareholding ratio of institutions is high, regardless of the composition of investors, the pressure for management to pursue aggressive strategies will accumulate.

5 Suggestion

Based on the empirical conclusion that institutional investors aggravate the financial risks of non-state-owned enterprises, this paper puts forward targeted policy suggestions to build a sound capital market governance system.

The regulatory authorities should implement differentiated supervision based on the characteristics of ownership: for state-owned enterprises, people need to break the implicit guarantee of repayment, weaken the implicit guarantee expectation of the government, establish a market-oriented risk isolation mechanism, and prevent institutions from using the credit endorsement of state-owned enterprises to speculate excessively; For non state-owned enterprises, it should be listed as the focus of risk monitoring, establish a risk early warning system for private enterprises with high institutional holdings, and monitor leverage ratio and short-term solvency. At the same time, people should improve the financing role of multi-level capital market, broaden the financing ways of private enterprises, and reduce their dependence on radical funds; Establish private economic support funds to alleviate the liquidity crisis caused by institutional "herd effect" through counter cyclical adjustment.

In addition, although the empirical results show that the behavior of different institutional types is homogeneous, this means that market wide pressure on short-term performance is everywhere. Therefore, regulators should give priority to optimizing the evaluation system of various institutional investors, reduce the short-term performance weight, guide institutional investors to focus on enduring value creation of enterprises, and give full play to the efficiency of capital governance.

6 Conclusion

This paper constructs a bidirectional fixed-effect model to empirically test the impact of institutional investor ownership on corporate financial risk and its heterogeneous characteristics by targeting data from Chinese A-listed companies from 2015 to 2024. The results show that, firstly, the rise in the ownership proportion of institutional investors significantly exacerbates the financial risks of enterprises, providing strong evidence for the "risk-taking behavior" hypothesis. Research has found that institutional investors often value excess returns and scale expansion more, which in turn drives companies to adopt aggressive strategies. At the same time, their original regulatory and governance functions have not been effectively utilized. Secondly, the nature of property rights has a significant regulatory effect, and the effect of risk intensification mainly exists in non state-owned enterprises. Due to the lack of implicit guarantee, private enterprises are easy to increase leverage and expand risk exposure under the pressure of short-term performance of institutions; State-owned enterprises are constrained by government supervision and multiple social objectives, and have financing

advantages and implicit guarantees, and the risk aggravating effect of institutional shareholding is not significant.

There are three shortcomings in this paper. First, this empirical results in the heterogeneity analysis (Table 4) do not show statistically significant differences between 'trading' and 'stable' institutions. This finding deviates from initial expectations but provides a new perspective: in the Chinese market, the pressure on corporate risk is likely to be driven by the overall level of institutional ownership rather than specific types of investors. Even stable investors may show behavioral homogeneity due to market competition and relative performance evaluation.

Second, the role of enterprise financialization is not distinguished, and the regulatory effect of highly financialized enterprises and institutions conspiring to magnify risks is not tested.

Third, the heterogeneous analysis has sample structure limitations. As shown in Table 4, the sample size of SOEs (n=1302) is significantly smaller than that of non SOEs (n=32291). While this paper interprets the irrelevance of the SOE coefficient as evidence of the "implicit guarantee" shielding effect, this study acknowledges that the statistical power of the SOE group may be limited due to the small sample size. Therefore, the conclusion that "institutional ownership has no impact on state-owned enterprises" should be interpreted carefully. Future studies may expand the observation window or use specific SOE focused data sets to verify this boundary condition.

Based on the above limitations, future research can be expanded and deepened from the following dimensions: first, in the future, people can combine the investment profiles of institutional investors to deeply analyze the micro mechanism of their impact on corporate risk. By examining the position concentration, turnover rate and industry allocation preference of institutional investors, people can more accurately identify which kind of investment style is pushing up corporate risk. Secondly, refine the research scenarios, incorporate the life cycle of enterprises, the degree of market competition and macroeconomic uncertainty into the analysis framework, and explore the dynamic changes of risk effects of institutional investors in different macro and microenvironments, so as to provide more refined empirical evidence for the formulation of regulatory policies.

References

1. Chemmanur, T. J., Hu, G., Wei, K. J.: The role of institutional investors in corporate and entrepreneurial finance. Journal of Corporate Finance **66**, 101833 (2021)
2. Lewellen, J., Lewellen, K.: Institutional investors and corporate governance The incentive to be engaged. The Journal of Finance **77**(1), 213–264 (2022)
3. Huang, G., An, Z., Li, D.: Foreign institutional ownership and corporate risk‐taking international evidence. Corporate Governance: An International Review **31**(2), 260‐284 (2023)
4. Zhao, J., Qu, J., Wei, J., Yin, H., Xi, X.: The effects of institutional investors on firms' green innovation. Journal of Product Innovation Management **40**(2), 195–230 (2023)
5. Manzaneque, M., Merino, E., Priego, A. M.: The role of institutional shareholders as owners and directors and the financial distress likelihood. Evidence from a concentrated ownership context. European Management Journal **34**(4), 439–451 (2016)

6. Cella, C., Ellul, A., Giannetti, M.: Investors' horizons and the amplification of market shocks. The Review of Financial Studies **26**(7), 1607–1648 (2013)
7. Velte, P.: Which institutional investors drive corporate sustainability? A systematic literature review. Business Strategy and the Environment **32**(1), 42–71 (2023)
8. Ikhsan, M., Putri, L., Virananda, I. G. S., Saputro, A. N.: Estimating Indonesia's state-owned enterprises' value-added to the Indonesian economy. Institute for Economic and Social Research (2025)
9. Beck, K. I., Brødsgaard, K. E.: Corporate governance with Chinese characteristics: Party organization in state-owned enterprises. The China Quarterly **250**, 486–508 (2022)
10. Li, H., Gao, Y., Zhu, Y., Dai, L.: Family control, institutional investors, and financial distress Evidence from China. Accounting & Finance **64**(3), 2485–2511 (2024)

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