

Study on the Impact of Short Selling Mechanisms on Corporate Violations

Yuxi Huang

Macao University of Science and Technology, Accounting, Zhuhai, China

Abstract: Against the backdrop of China's margin trading system implementation, this study examines the governance effects of short-selling mechanisms on listed companies' non-compliant behavior. Findings indicate that short-selling mechanisms effectively constrain corporate misconduct. Further analysis reveals that financing constraints weaken this governance effect, while the misconduct-suppressing impact of short-selling mechanisms is more pronounced during market downturns and within high-tech industries.

Keywords: Short-Selling Mechanism; Corporate Misconduct; Margin Financing Constraints; Governance Effect

1. Introduction

Effectively curbing corporate misconduct and improving corporate governance mechanisms remain critical concerns for both academia and capital market practitioners. In recent years, China's capital markets have witnessed frequent violations-ranging from false disclosures to unauthorized guarantees-which not only severely undermine the legitimate rights of small and medium investors but also disrupt the efficiency of resource allocation in capital markets (Meng Qingbin et al., 2019^[1]; Lei Xiao et al., 2019^[2]). Statistics indicate that between 2010 and 2022, the A-share market disclosed a cumulative total of 11,327 violations, involving direct economic losses exceeding RMB 280 billion (China Securities Investor Protection Fund, 2023). Following the pilot registration-based system reform in 2016, corporate violations exhibited a new pattern of "decreasing frequency but rising individual case amounts" (Shenzhen Stock Exchange White Paper, 2022), reflecting diminishing marginal returns from traditional regulatory approaches.

Existing research, grounded in the fraud triangle theory, has explored pathways to curb violations through two dimensions: internal governance

and external oversight. Internally, factors like board structure, equity concentration, and internal control quality have been shown to curb violations by reducing fraud opportunities and mitigating agency conflicts (Lei Xiao et al., 2019^[2]; Huang Shunwu et al., 2022^[3]). Externally, media oversight, audit quality, and government regulation exert governance effects by raising violation costs and improving information environments (Zhou Kaiguo et al., 2016^[4]; Lennox and Pittman, 2010^[5]). However, existing research predominantly focuses on the direct relationship between short selling and earnings management or investment efficiency. There remains insufficient exploration of how short selling indirectly influences non-compliance by affecting specific corporate operational decisions, and the moderating role of market sentiment-a crucial external environmental factor-has not been adequately addressed.

As a vital external governance tool in capital markets, short selling constrains listed companies' non-compliance through dual pathways:

First, the information-seeking effect. Short sellers possess a natural incentive to continuously uncover negative corporate information to generate profits. Unlike internal governance mechanisms, short sellers operate independently of management, enabling them to penetrate information barriers and identify potential violations such as financial fraud and related-party transactions, thereby creating a persistent deterrent against opportunistic behavior. Second, the market signaling effect. Short selling itself serves as a trigger mechanism for releasing negative information, inducing chain reactions among market participants through price fluctuations. Essentially, the short-selling mechanism introduces market-based oversight forces, effectively mitigating information asymmetry and suppressing agency conflicts, thereby optimizing the corporate governance ecosystem.

Based on the regulatory practices of the China Securities Regulatory Commission (CSRC), violations by Chinese listed companies can be categorized into two core types:

First, information disclosure violations, primarily manifested as financial fraud (e.g., fictitious profits, falsified assets), inaccurate disclosures (including false statements), and procedural breaches (e.g., omissions of material matters). Second, operational governance violations, encompassing issuance fraud (fraudulent listings, inadequate capital contributions), misuse of funds, market manipulation (insider trading), and internal control failures. These two categories fundamentally point to deficiencies in corporate transparency and failures in corporate governance mechanisms, respectively, and have become major sources of risk that disrupt capital market order and harm investor rights. Existing literature indicates that short-selling mechanisms can serve as a new tool to curb corporate misconduct.

Baker & Wurgler (2006^[6]) pioneered the investor sentiment theory, which posits that fluctuations in market sentiment influence asset pricing and corporate behavior through noise trading channels. In China's retail-dominated capital markets, where investor sentiment swings more dramatically, this volatility may disrupt the governance effects of short-selling mechanisms through two pathways: During market booms, excessive investor optimism fuels increased noise trading, weakening the deterrent effect of short-selling threats. During market downturns, pessimistic sentiment may amplify short-selling deterrence but could also constrain actual transactions due to liquidity shortages (Qiu, 2024^[7]). However, existing research has yet to systematically integrate investor sentiment theory with the short-selling oversight hypothesis, largely remaining at the static analysis level of controlling for market returns. This approach struggles to explain the dynamic impact of China's stock market volatility on institutional effectiveness.

In 2010, China launched margin trading and short selling pilot programs on the Shanghai and Shenzhen exchanges, formally introducing short-selling mechanisms to the A-share market. Through successive expansions of eligible securities and rule refinements, this mechanism has evolved into a crucial external governance tool for capital markets (Fang, Xiao Yu et al.,

2022^[8]). By granting investors the two-way right to "vote with their feet," the short-selling mechanism incentivizes them to uncover negative corporate information and profit through short-selling transactions, thereby creating both preemptive deterrence and ex post punishment for management (Massa et al., 2015^[9]; Xu et al., 2021^[10]). Existing research confirms that the short-selling mechanism can curb corporate misconduct by enhancing information transparency and reducing agency costs (Huang et al., 2022^[3]).

Building on this, this study examines the impact of short-selling threats on listed companies' non-compliance using the quasi-natural experiment of margin trading implementation among A-share listed companies from 2010 to 2021. It focuses on revealing the mediating role of financing expansion strategies. The contributions of this study are as follows: First, it extends research on the transmission channels and boundary conditions of short-selling governance effects by incorporating margin expansion and investor sentiment into the analytical framework of "short-selling threat-corporate behavior-compliance suppression." Second, it validates the dynamic moderating role of investor sentiment on the governance effectiveness of short-selling mechanisms, considering China's retail-dominated market characteristics. Third, it provides empirical insights for regulators to refine the margin trading system and for firms to optimize margin expansion decisions.

2. Theoretical Analysis and Research Hypotheses

2.1 Short Selling Threat and Listed Companies' Violations

Existing research generally posits that short-selling mechanisms curb violations through information discovery and risk deterrence. However, given China's capital market characteristics of "retail investor dominance and a speculative atmosphere," short-selling transactions may intensify corporate violation motives via two pathways: "market panic transmission" and "speculative arbitrage distortion." From the market panic transmission perspective, short sellers seeking short-term arbitrage profits may trigger panic-driven share price declines through concentrated trading. Particularly in companies

with low information transparency, irrational share price volatility may compel management to resort to non-compliant means (such as fabricating profits or concealing negative information) to stabilize share prices, thereby avoiding risks like margin calls on pledged shares or failed refinancing attempts.

From the perspective of speculative arbitrage distortion, the high leverage inherent in short selling attracts substantial participation from short-term speculators. Their frequent trading may dilute the informational content of stock prices, making it difficult for management to discern genuine market expectations through price signals. Consequently, they may be inclined to engage in non-compliant disclosures to embellish performance and guide market expectations (Yang, Jiefei et al., 2020^[11]). Based on the above analysis, we propose the following hypothesis:

H1: The higher the volume of short selling, the more severe the corporate misconduct.

2.2 The Moderating Role of Financing Constraints

Firms with high financing constraints face liquidity shortages and refinancing pressures, leading to significantly different responses to short selling compared to firms with low financing constraints. This response weakens the potential governance effects of the short-selling mechanism. When companies are in financial distress, management's tolerance for risk increases significantly. To alleviate financing constraints and avoid default risks, they may take desperate measures—even in the face of short-selling threats—by resorting to illegal means such as financial fraud to embellish financial statements and secure external funding.

From an information transparency perspective, financially constrained firms often conceal their true financial condition through complex related-party transactions to reduce financing costs. Such opaque practices increase the information-gathering costs for short sellers, diminishing their efficiency in identifying negative information. The governance effect of short-selling mechanisms relies on information discovery efficiency. When short sellers struggle to accurately identify violations by financially constrained firms, the deterrent effect naturally diminishes. Furthermore, external investor protection mechanisms in financially constrained firms are often less robust, and minority

shareholders have weaker oversight capabilities over violations. This further provides management with opportunities to evade short-selling scrutiny and engage in misconduct. Based on the above analysis, we propose the following hypothesis:

H2: When firms face higher financing constraints, the deterrent effect of short-selling mechanisms on violations is weakened.

2.3 The Moderating Role of Market Cycles (Robustness Test)

Market cycle fluctuations driven by investor sentiment modulate the relationship between short selling and corporate misconduct by altering short sellers' incentives and stock price reaction sensitivity. During market booms, excessive investor optimism fuels increased noise trading, where negative information conveyed by short sellers is easily offset by euphoric market sentiment, reducing stock price sensitivity to misconduct (Qiu, 2024[7]). Consequently, market capitalization losses from detected management misconduct significantly decrease, diluting the deterrent effect of short selling. Even with increased short activity, firms retain strong incentives for misconduct.

During market downturns, pessimistic investor sentiment heightens sensitivity to negative information. Violations exposed by short sellers trigger sharp stock price declines, amplifying wealth losses for management and major shareholders. Consequently, the deterrent effect of short selling significantly strengthens, prompting management to proactively restrain violations to avoid extreme losses. Based on this analysis, we propose the following robustness test hypotheses:

RH1: During market booms, the impact of short-selling mechanisms on violations is weaker.

2.4 Moderating Role of Industry Characteristics (Robustness Test)

The technology-intensive and high-growth characteristics of the high-tech sector cause its response to short-selling mechanisms to differ from traditional industries. As specialized information miners, short sellers can better leverage their information discovery advantages in such sectors. The violations they expose (e.g., R&D expense manipulation) exert greater impacts on stock prices, thereby exerting

stronger deterrence on management. (Fang, Xiao Yu et al., 2022[8])

Based on the above analysis, we propose the following robustness test hypotheses:

RH2: In the high-tech industry, the deterrent effect of short-selling mechanisms on misconduct is more pronounced.

3. Research Design

This study examines China's 2010 regulatory reforms on short selling, using A-share listed companies from 2010 to 2021 as the initial sample. Data sources include: listed company misconduct data from the CSMAR database and margin trading records from the Wind database. To ensure sample validity, the following criteria were applied: (1) Exclusion of companies under special treatment (ST/PT);(2) Financial and insurance sector companies were excluded; (3) Firms with dual listings in overseas markets were removed; (4) Observations with missing financial data were deleted; (5) Companies removed from the margin trading list during the study period were excluded.

To test H1, we adopted the methodology of Lei Xiao, Tang Xuesong, and Zheng Yuxin

$$\text{Pro}(\text{Vio}) = \beta_0\text{Vio_Disc} + \beta_1\text{Vio_Run} + \beta_2\text{Short} + \beta_3\text{Short_ratio} + \beta_4\text{Size} + \beta_5\text{ROA} + \beta_6\text{Lev} + \beta_7\text{Opinion} + \beta_8\text{Big4} + \beta_9\text{Hold} + \beta_{10}\text{Dual} + \beta_{11}\text{Loss}$$

Building upon Model 1, introduce margin constraints (SA_Index), market cycles (cycle), and high-tech industries (High_Tech) to validate H2, RH1, and RH2.

$$\text{Pro}(\text{Vio}) = \beta_0\text{Vio_Disc} + \beta_1\text{Vio_Run} + \beta_2\text{Short} + \beta_3\text{Short_ratio} + \beta_4\text{Size} + \beta_5\text{ROA} + \beta_6\text{Lev} + \beta_7\text{Opinion} + \beta_8\text{Big4} + \beta_9\text{Hold} + \beta_{10}\text{Dual} + \beta_{11}\text{Loss} + \beta_{12}\text{SA_Index}$$

$$\text{Pro}(\text{Vio}) = \beta_0\text{Vio_Disc} + \beta_1\text{Vio_Run} + \beta_2\text{Short} + \beta_3\text{Short_ratio} + \beta_4\text{Size} + \beta_5\text{ROA} + \beta_6\text{Lev} + \beta_7\text{Opinion} + \beta_8\text{Big4} + \beta_9\text{Hold} + \beta_{10}\text{Dual} + \beta_{11}\text{Loss} + \beta_{12}\text{cycle}$$

$$\text{Pro}(\text{Vio}) = \beta_0\text{Vio_Disc} + \beta_1\text{Vio_Run} + \beta_2\text{Short} + \beta_3\text{Short_ratio} + \beta_4\text{Size} + \beta_5\text{ROA} + \beta_6\text{Lev} + \beta_7\text{Opinion} + \beta_8\text{Big4} + \beta_9\text{Hold} + \beta_{10}\text{Dual} + \beta_{11}\text{Loss} + \beta_{12}\text{High_Tech}$$

Key Variable Definitions

1. Dependent Variable: Corporate Violations

(Vio). Following the methodology of Qu Xiaofeng et al. (2016), we utilize listed company violation data from the CSMAR database. If a sample company was penalized by the China Securities Regulatory Commission, stock exchange, or other regulatory body in the previous year (including reprimands, warnings, public censure, or fines), the value of corporate violations (Vio) for the following year is set to 1; otherwise, it is 0. To clarify the different types of violations by listed companies, we categorize them into two types based on the preceding analysis: one is information disclosure violations by listed companies (Vio_Disc); the other is operational violations (Vio_Run).

2. Explanatory Variable: Short Selling Mechanism (Short). Following the methodology of Jin Qinglu et al. (2015) and Hou Qingchuan et al. (2016), the short-selling target company is coded as a dummy variable. As a dummy variable. Short is set to 1 in the year following the inclusion of the short-selling target company in the margin trading list, and 0 otherwise.

3. Control variables. Drawing on the studies by Quan Xiaofeng et al. (2016) and Xu Yao et al. (2017), the following variables are selected as control variables:

Debt-to-Asset Ratio (Lev), Return on Assets (ROA), Loss Status (Loss), Logarithm of Total Assets (Size), Dual Executive Positioning (Dual), Independent Director Proportion (IND), Shareholding Concentration (Hold), Big Four Auditor (Big4), Audit Opinion Type (Opinion).

(Dual), Independent Director Proportion (IND), Shareholding Concentration (Hold), Auditor (Big4), Audit Opinion Type (Opinion)

4. Moderator Variable

Market Cycle (Cycle): Grouped by quarterly returns of the CSI 300 Index. The top 30% return interval is defined as a market boom period, with Cycle valued as 1; otherwise, it is 0.

High-Tech Industry (High_Tech): Following the CSRC industry classification standards, technology-intensive sectors such as information technology and biopharmaceuticals are defined as high-tech industries, with High_Tech valued at 1; all other industries are valued at 0, as shown in table 1.

Table 1. Variable Names, Symbols, and Definitions

Variable Symbol	Variable Name	Variable Definition
Vio	Enterprise Violation	Regulatory Penalty in Previous Year = 1, otherwise = 0
Vio_Disc	Disclosure Violation	Penalized for information disclosure issues in the previous year = 1, otherwise = 0

Vio_Run	Operational Violations	Penalized for operational violations in the previous year = 1, otherwise = 0
Short	Short Selling Mechanism	Year after inclusion in margin trading list = 1, otherwise = 0
Short_ratio	Short Selling Intensity	Annual short selling volume divided by annual A-share float
Size	Enterprise Size	Logarithm of total assets
ROA	Return on Assets	Net profit divided by average total assets
Lev	Debt-to-Asset Ratio	Liabilities divided by assets
Opinion	Audit Opinion	Standard unqualified opinion = 1, otherwise = 0
Big Four	Audit Qualification	Big Four International Audit Firms = 1, otherwise = 0
Hold	Shareholding Concentration System	Largest Shareholder's Holding Ratio
Dual	Dual role	Chairman and CEO held by one individual = 1, otherwise = 0
Loss	Loss status	Net profit < 0 = 1, otherwise = 0
SA_Index	Financing Constraint	The SA Index measures the degree of financing constraints on enterprises; a higher SA Index value indicates stronger constraints
Cycle	Market Cycle	Grouped by quarterly returns of the CSI 300 Index, the top 30% return interval is defined as a market boom period, with Cycle set to 1; otherwise, it is 0.
High_Tech	High-Tech Industries	Following the CSRC industry classification standards, technology-intensive sectors such as information technology and biopharmaceuticals are defined as high-tech industries, with High_Tech valued at 1; all other industries are valued at 0.

4. Empirical Analysis

4.1 Descriptive Statistics

Descriptive statistics for key variables reveal that the mean values for corporate violations (Vio), disclosure violations (Vio_Disc), and operational violations (Vio_Run) are 0.573, 0.107, and 0.115, respectively. This indicates that among the 2,483 sample companies in this study, 57.3% exhibited violations.

Table 2 Column (1) shows that the regression coefficient for the short-selling mechanism (Short) is -0.172 and significant at the 1% level, indicating that short-selling reduces corporate

violations; Column (2) shows a regression coefficient of -0.138 for the short selling mechanism (Short), significant at the 5% level, indicating that short selling restrains corporate information disclosure violations; Column (3) shows a regression coefficient of -0.305 for the short selling mechanism (Short), significant at the 1% level, indicating that short selling significantly suppresses corporate operational violations. In summary, the short-selling mechanism suppresses both information disclosure violations and operational violations, thereby reducing overall corporate misconduct. Hypothesis H1 is confirmed.

Table 2. Regression Results of Short Selling Mechanism and Corporate Violations

Variable	Vio (short)	Vio (Short_ratio)	Vio_Disc (short)	Vio_Disc (Short_ratio)	Vio_Run (short)	Vio_Run (Short_ratio)
Short	-0.172*** (0.052)		-0.138** (0.061)		-0.305*** (0.089)	
Short_ratio		-0.143** (0.068)		-0.187* (0.098)		-0.221*** (0.075)
Size	-0.047* (0.027)	-0.047* (0.027)	0.052* (0.031)	0.052* (0.031)	0.041 (0.029)	0.041 (0.029)
ROA	-1.380 (1.360)	-1.380 (1.360)	1.746 (2.101)	1.746 (2.101)	-1.475 (2.103)	-1.475 (2.103)
Lev	-0.034 (0.284)	-0.034 (0.284)	-0.725* (0.414)	-0.725* (0.414)	-1.339*** (0.437)	-1.339*** (0.437)
Opinion	-0.062 (0.102)	-0.062 (0.102)	0.009 (0.153)	0.009 (0.153)	-0.100 (0.158)	-0.100 (0.158)
Big4	-0.155 (0.100)	-0.155 (0.100)	0.112 (0.148)	0.112 (0.148)	0.037 (0.158)	0.037 (0.158)
Hold	0.275 (0.395)	0.275 (0.395)	-0.562 (0.597)	-0.562 (0.597)	0.107 (0.637)	0.107 (0.637)

Dual	0.007 (0.083)	0.007 (0.083)	-0.104 (0.125)	-0.104 (0.125)	-0.033 (0.132)	-0.033 (0.132)
Loss	-0.007 (0.134)	-0.007 (0.134)	0.149 (0.194)	0.149 (0.194)	0.013 (0.213)	0.013 (0.213)
Constant term	0.496 (0.613)	0.496 (0.613)	-2.081** (0.951)	-2.081** (0.951)	-1.797* (1.017)	-1.797* (1.017)
Company / Year/Industry	Control	Control	Control	Control	Control	Control
Sample Size	2485	2485	2485	2485	2485	2485
Pseudo R ²	0.012	0.012	0.0021	0.0021	0.0032	0.0032

Note: Robust standard errors are shown in parentheses; ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

In Table 3 Column (1), the regression coefficient for the short-selling mechanism (Short) is -0.098 (significant only at the 10% level), while the coefficient for financing constraints (SA_Index) is 0.085 (significant at the 10% level). This indicates that introducing financing constraints weakens the overall regulatory effect of the short-selling mechanism on corporate

violations. By violation category, the coefficient for the short-selling mechanism (Short) becomes insignificant in Column (2) (-0.072) and fails the significance test in Column (3) (-0.125). Meanwhile, the financing constraint (SA_Index) is significantly positive in Column (3) (0.136, 5% level).

In summary, when firms face higher financing constraints, the deterrent effect of short-selling mechanisms on corporate misconduct is weakened, confirming Hypothesis H2.

Table 3. Regression Results for Financing Constraints, Short Selling Mechanism, and Corporate Violations (Model 2)

Variable	Vio(Short)	Vio(Short_ratio)	Vio_Disc(Short)	Vio_Disc(Short_ratio)	Vio_Run(Short)	Vio_Run(Short_ratio)
Short	-0.098*(0.051)		-0.072 (0.063)		-0.125 (0.082)	
Short ratio		-0.103 (0.072)		-0.135 (0.091)		-0.152 (0.098)
Control variables	Control	Control	Control	Control	Control	Control
SA_Index	0.085* (0.045)	0.085*(0.045)	0.112 (0.071)	0.112 (0.071)	0.136**(0.058)	0.136**(0.058)
Constant term	0.496 (0.613)	0.496 (0.613)	-2.081** (0.951)	-2.081** (0.951)	-1.797* (1.017)	-1.797*(1.017)
Company/Year/Industry	Control	Control	Control	Control	Control	Control
Sample Size	2485	2485	2485	2485	2485	2485
Pseudo R ²	0.015	0.015	0.0075	0.0075	0.0082	0.0082

Note: Robust standard errors are shown in parentheses; ***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively.

5. Robustness Tests

To enhance the reliability of the findings, the following robustness tests were conducted

5.1 Market Cycle-Based Grouping Test

To examine the impact of market conditions on the governance effects of short-selling mechanisms, this study grouped the sample into "market boom periods (top 30%)" and "market downturn periods (bottom 30%)" based on the quarterly returns of the CSI 300 Index and conducted grouped regression analyses.

Table 4. Robustness Test of Short-Selling Mechanisms During Market Boom Periods (Grouped by CSI 300 Returns)

Variable	Market Boom Period (Short)	Market Boom Period (Short_ratio)	Market Downturn Period (Short)	Market Downturn Period (Short_ratio)
Short	-0.061 (0.041)		-0.187*** (0.059)	
Short_ratio		-0.083 (0.072)		-0.215** (0.088)
Control variables	Control	Control	Control	Control
Company / Year / Industry	Control	Control	Control	Control
Sample Size	746	746	745	745
Pseudo R ²	0.0042	0.0042	0.0105	0.0105

Note: Robust standard errors are shown in parentheses; ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

Table 4 shows that in the market boom group, the coefficient for the short-selling mechanism (Short) is -0.052 and fails the significance test,

indicating that the short-selling mechanism has a weak deterrent effect on violations during boom periods. In contrast, during the market downturn period, the coefficient for Short is -0.187 and significant at the 1% level, while the coefficient for short selling intensity (Short_ratio) is also significantly negative (-0.215, 5% level). This result validates Hypothesis RH1: the short selling mechanism exhibits a weaker response to violations during market booms, consistent with previous conclusions.

5.2 Industry Heterogeneity Test

Table 5. Robustness Test of the High-Tech Industry and Short-Selling Mechanism (High-Tech Industry Sample)

Variable	High-Tech Industry Sample(Short)	All Industries Sample(Short ratio)	All Industries Sample(Short)	All Industries Sample(Short ratio)
Short	-0.232*** (0.067)		-0.172***(0.052)	
Short_ratio		-0.285** (0.113)		-0.143** (0.068)
Control variables	Control	Control	Control	Control
Company/Year/Industry	Control	Control	Control	Control
Sample Size	994	994	2485	2485
Pseudo R ²	0.0121	0.0121	0.012	0.012

Note: Robust standard errors are shown in parentheses; ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

Table 5 shows that in the high-tech industry sample, the coefficient for the short-selling mechanism (Short) is -0.232 (significant at the 1% level), with an absolute value greater than the -0.172 observed in the full industry sample. While the coefficient for short selling intensity (Short_ratio) is -0.285 (significant at the 5% level), also exceeding the -0.143 observed in the overall industry sample. This result validates Hypothesis RH2: the short selling mechanism exerts a more pronounced deterrent effect on misconduct in the high-tech sector, further supporting the preceding conclusions.

6. Conclusions and Implications

This study examines the impact of short-selling mechanisms on corporate misconduct, using the implementation of margin trading as a natural experiment to analyze the role of short-selling in curbing misconduct from 2010 to 2021. Empirical results indicate that short-selling mechanisms effectively suppress corporate misconduct. Further analysis reveals that financing constraints weaken this deterrent effect; compared to market booms, the governance effect of short-selling mechanisms is more

To examine the impact of industry characteristics on the governance effect of short-selling mechanisms, this study restricts the sample to the high-tech sector for re-regression. The high-tech industry is characterized by high information asymmetry, substantial innovation investments, and strong concealment of misconduct. Short sellers in this sector have greater incentives to uncover corporate misconduct to achieve excess returns, suggesting that the deterrent effect of short-selling mechanisms on misconduct may be more pronounced in the high-tech industry.

pronounced during market downturns; and within the high-tech sector, short-selling mechanisms exert a stronger deterrent effect on violations.

Key implications include: First, regulators should expand the scope of margin trading securities to fully leverage the external governance function of short-selling mechanisms and reduce corporate non-compliance risks. Second, firms should monitor the impact of financing constraints on compliance management, strengthen internal risk controls, and prevent financial pressures from triggering violations. Third, differentiated regulatory strategies tailored to varying market conditions and industry characteristics can enhance the governance efficiency of short-selling mechanisms.

References

- [1] Meng Qingbin, Zou Yang, Hou Deshuai. Can Short Selling Mechanisms Curb Listed Companies' Violations? [J]. Economic Research Journal, 2019(06): 89-105.
- [2] Lei Xiao, Tang Xuesong, Zheng Yuxin. Can Relaxing Short Selling Restrictions Curb Listed Companies' Violations? [J]. Contemporary Finance and Economics, 2019, (04): 119-130.
- [3] Huang Shunwu, Li Xue. Securities Lending

- Short Selling and Disclosure Violations: Evidence from a Quasi-Natural Experiment [J]. *Journal of Nanjing Audit University*, 2022, 19(03):72-81.
- [4] Zhou Kaiguo, Ying Qianwei, Zhong Chang. Can Media Oversight Serve as External Governance? Evidence from Violations by Chinese Listed Companies [J]. *Journal of Finance and Banking*, 2016, (6): 193-206.
- [5] Lennox C., Pittman J. A.. Big Five Audits and Accounting Fraud[J]. *Contemporary Accounting Research*, 2010, 27(1): 209- 247
- [6] Baker M, Wurgler J. Investor sentiment and the cross-section of stock returns[J]. *The journal of Finance*,2006,61(4):1645-1680.
- [7] Qiu Shixun. A Study on the Mechanism of Securities and Futures Market Sentiment Influencing Spot Market Sentiment [D]. Xi'an University of Technology, 2024.
- [8] Fang Xiaoyu. An Empirical Study on the Relaxation of Short Selling Regulations and the Debt Financing Costs of Chinese Enterprises [D]. Southwestern University of Finance and Economics, 2022. DOI:10.27412/d.cnki.gxncu.2022.002437.
- [9] Massa M., Zhang B., Zhang H.. The Invisible and of Short Selling: Does Short Selling Discipline Earnings Management?[J]. *The Review of Financial Studies*, 2015, 28(6): 1701- 1736.
- [10] Xu, Xixiong; Zhan, Heng; Li, Wanli. Short Selling Mechanisms, Dual Governance, and Corporate Violations: An Empirical Test from a Market-Based Governance Perspective [J]. *Research Journal of Finance*, 2021, (10): 190-206.
- [11] Yang Jiefei, Xue Yi. Short Selling Threat, Corporate Financing Expansion Strategy, and Violations [J]. *Securities Market Herald*, 2020, (04): 41-50.