

Can Market Integration Reduce Corporate Misconduct? Evidence from the Pilot Implementation of the Fair Competition Review System

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Abstract: Maintaining fair competition is the core of guaranteeing the effective operation of the market economy. Using the Fair Competition Review System introduced in 2016 as a quasi-natural experiment, this study explores the impact of the system on corporate misconduct. The study finds that the Fair Competition Review System is negatively associated with corporate misconduct. This effect operates by increasing firms' internal controls and mitigating the short-sightedness of the firms' management. It is more pronounced at firms located in regions with poorer business environments and among firms with lower information transparency. Finally, the Fair Competition Review System effectively reduces business and bankruptcy risks. Overall, the study provides micro-level empirical evidence for the governance effects of the Fair Competition Review System and valuable references for corporate governance practices.

Keywords: Market integration; Administrative monopoly regulation; Corporate misconduct; Internal controls

Online publication: September 17, 2025

1. Introduction

The prevalence of local protectionism has undermined the sustainability of economic development. For example, local protectionism restricts the free flow of production resources, leading to market segmentation and a series of negative impacts, such as increased enterprise marginal costs^[1]. Moreover, it contributes to higher regional carbon emission intensity and severe regional haze pollution^[2-3]. In China, local protectionism has become a significant constraint on economic development. Fiscal decentralization, a key feature of China's development model, can incentivize local governments to rapidly develop the economy, but it also encourages protectionism. This results in market fragmentation, hindering further high-quality development. Under fiscal decentralization, local governments have strong incentives to use administrative measures to protect local businesses, offering them favorable conditions while restricting fair market access for non-local enterprises.

In response, the Chinese government has initiated market integration to foster high-quality economic

development. For instance, Shanghai, Jiangsu, Zhejiang, and Anhui have signed a cooperation agreement under the central government's guidance. The agreement aims to dismantle administrative barriers caused by local protectionism, promote the free flow of resources, and enable the integrated development of regional markets. Research has shown that market integration benefits urban air quality, enhances economic resilience, and reduces corporate tax evasion^[4-6]. However, little is known about its relationship with corporate misconduct. To address this gap, this article investigates how the process of market integration influences corporate misconduct. A key milestone in China's market integration is the implementation of the fair competition review system. This system shifts regulatory focus from enterprises to the government, explicitly prohibiting local governments from setting unequal market access and exit conditions, as well as banning unfair preferential policies. By curbing local protectionism, it has significantly promoted market integration in China. Extensive research on the fair competition review system has demonstrated its positive impact on corporate green innovation, innovation in state-owned enterprises, and the ESG performance of firms^[7-9]. However, the relationship between the fair competition review system and corporate misconduct remains unclear. This study, therefore, investigates the role of market integration, focusing specifically on the implementation of the fair competition review system.

Corporate misconduct refers to unethical or illegal behaviors, such as fraud or improper disclosure, aimed at advancing a company's interests. These actions can damage a company's reputation and, in severe cases, lead to a loss of legitimacy, thereby increasing various costs. As a result, scholars have examined various ways to prevent corporate misconduct. From a supervisory perspective, mechanisms like director and officer liability insurance, non-controlling shareholder governance, and judicial digitalization have been found to reduce misconduct^[10-12]. Additionally, informal institutional factors such as Confucian culture and increased local happiness can suppress corporate misconduct^[13-14]. Executive characteristics, including higher female representation on boards and founder CEOs, have also been linked to a reduction in misconduct^[15-16]. Moreover, market factors such as reducing government subsidies and increasing competition in the banking sector can lower the likelihood of corporate misconduct^[17-18]. However, little attention has been paid to the influence of market integration on corporate misconduct. This article aims to explore whether market integration can act as a governance mechanism for corporate misconduct and to uncover the underlying mechanisms.

This article contributes to enriching research on the economic consequences of the fair competition review system. While existing studies have largely focused on how the system enhances positive outcomes like innovation, green initiatives, and ESG performance, less attention has been paid to its role in reducing negative factors, such as corporate misconduct. By exploring this issue, the article provides valuable insights into how the fair competition review system can address corporate misconduct, deepening understanding of the system's role and offering guidance for policymakers.

2. Theoretical analysis and research hypothesis

The fair competition review system implemented by the Chinese government has rigorously cracked down on market segmentation behaviors that undermine market competition, effectively promoting market integration development and ensuring market competition's adequacy and fairness. This legislation prohibits local governments from implementing policies restricting competition, such as setting unequal market access and exit conditions, and providing unequal preferential policies to local businesses. Between 2016 and 2021, under the influence of this system, 1.89 million market-distorting policies were abolished nationwide, effectively preventing

administrative monopolistic behaviors from harming the Chinese market. This crackdown on market segmentation behaviors has promoted market integration and ensured the adequacy and effectiveness of market competition.

When market competition is sufficient and effective, companies are not incentivized to engage in misconduct, as the costs of violating regulations or industry rules may outweigh the benefits gained from such misconduct. Specifically, when market competition reaches a certain level, if a company loses public trust due to misconduct, it may lose a significant number of customers, weaken its market position, and even pose a serious threat to the enterprise's survival. In conclusion, market competition, as a stringent punishment mechanism, can reduce the monitoring costs of stakeholders for listed companies, amplify the costs of corporate misconduct, create a strong deterrent effect on companies, and make them dare not engage in illegal or irregular operations^[19].

On the contrary, a competitive environment brings external pressure to companies, motivating management to consciously comply with various regulations and actively fulfill their managerial responsibilities. Due to the enhanced "elimination effect" of market competition, any company deviating from cost minimization and profit maximization will ultimately be driven out by the market. In order to reduce the risk of bankruptcy faced by companies in market competition and the threats to job security and income levels faced by executives, the company's management will take proactive measures to increase competitiveness, such as improving corporate governance and reducing misstatements of financial information. In general, market competition will incentivize enterprises to operate in compliance, encourage them to comply with regulations, and actively reduce violations. This study thus proposes the following hypothesis:

H₁: The fair competition review system is conducive to reducing corporate misconduct.

3. Research design

3.1. Data and sample selection

The present study uses data from listed companies on the Shanghai and Shenzhen stock exchanges between 2012 and 2022 as the initial sample. Financial and insurance firms, ST, *ST, PT companies, and those with missing data were excluded, resulting in 24,168 annual observations. To mitigate the impact of outliers, Winsorization was applied, trimming the upper and lower 1% of the continuous variables. The financial data of the listed companies were sourced from the CSMAR and Wind databases.

3.2. Models and variables

To assess the relationship between the fair competition review system and corporate misconduct, the study constructs the following regression model:

$$VioNum = \alpha_0 + \alpha_1 Treat_i \times Post_i + \alpha_2 Controls_{i,t} + \sum Year + \sum Firm + \varepsilon_{i,t} \quad (1)$$

In the model, *VioNum* represents corporate misconduct frequency, which is defined as the number of corporate misconducts committed by a firm during a calendar year. The study followed Luo et al., corporate misconduct includes information disclosure misconduct, business misconduct, leaders' illegal transactions, and so on^[20].

No natural experimental and control groups existed because the fair competition review system was not piloted. To ensure that the control group of companies was as unaffected as possible by the fair competition review system, this study categorized companies in industries with low levels of administrative monopoly as the

control group ($Treat=0$) and those in sectors with high levels of administrative monopoly as the experimental group ($Treat=1$). The Chinese government's implementation of the fair competition review system in June 2016 was defined as an exogenous event. The period from 2012 to 2015 was considered the pre-policy impact period ($Post=0$), and the period from 2016 to 2022 was considered the post-policy impact period ($Post=1$). $Treat*Post$ represented the net impact effect of the policy implementation on corporate misconduct in industries with high administrative monopolies. If α_1 is significantly negative, then Hypothesis H_1 is supported, suggesting that the fair competition review policy can reduce corporate misconduct. Controls refer to a set of variables related to corporate misconduct, including "Size", "LEV", and "Board", among others, whose definitions are provided in **Table 1**. $\sum Firm$ and $\sum Year$ correspond to individual and time-fixed effects, respectively. The error term is denoted by ε .

Table 1. Variable measurement

Variable	Definition
Dependent variable	
<i>VioNum</i>	The number of violations that occurred in the enterprise that year
Independent variable	
<i>Treat</i>	Firms in administrative monopolistic industries take the value of 1, otherwise 0
Post	The value of 1 in the year 2016 and after that, and 0 otherwise
Control variable	
Size	Ln (total assets)
Lev	Total debt / Total assets
Board	Ln (the number of board directors)
Indep	The number of independent directors / the number of all board directors
Dual	The value of 1 if the CEO is also the chairman of the board of directors, and 0 otherwise
SOE	The value is 1 for state-owned enterprises and 0 otherwise
Big4	Whether audited by a Big Four accounting firm
Growth	Increase in operating income for the year/opening operating income
cash	(Monetary funds + trading financial assets)/ Total assets

4. Empirical analysis

4.1. Descriptive statistical analysis

Table 2 shows that the mean value of Misconduct frequency is 0.283, with a standard deviation of 0.7513; this measure ranges from 0 to 9. These statistics suggest that the frequency of corporate misconduct varies considerably across firms. The mean value of the dummy variable ($Treat$) in the experimental group is 0.1345, indicating that the sample of enterprises in the administrative monopoly area is about 13.45%. The descriptive statistical results of other variables are similar to existing studies (e.g., Li et al.), within reasonable ranges, and will not be elaborated here ^[12].

Table 2. Descriptive statistics of the variables

Variable	N	Mean	SD	Min	Max
Treat	24182	0.1345	0.3412	0	1
post	24182	0.7236	0.4472	0	1
Treat* post	24182	0.0895	0.2855	0	1
VioNum	24182	0.2830	0.7513	0	9
Size	24182	22.418	1.2616	19.585	26.452
Lev	24182	0.4371	0.1977	0.03490	0.9079
Board	24182	2.1221	0.1970	1.6094	2.7081
Indep	24182	37.644	5.3923	28.570	60
Dual	24182	0.2702	0.4441	0	1
SOE	24182	0.3596	0.4799	0	1
Big4	24182	0.06140	0.2401	0	1
Growth	24182	0.9818	60.258	-11.925	9290.9
cash	24182	0.1870	0.1277	0.0008	0.9359

4.2. Results of the main regression test

The results of the baseline model are displayed in **Table 3**. In column (1), only individual and year fixed effects are controlled, and the results show that the regression coefficient of Treat×Post is -0.119, significant at the 1 % level. Column (2) presents the regression results after controlling for a series of control variables, indicating that the estimated coefficient of Treat×Post remains significant at the 1 % level. This shows that compared with the control group, the violation behavior of the experimental group after the implementation of market integration reform is significantly reduced. This confirms our hypothesis.

Table 3. Baseline regression results.

Variable	(1) VioNum	(2) VioNum
Treat* post	-0.119*** (-4.46)	-0.106*** (-3.95)
Size		0.076*** (5.88)
Lev		0.381*** (7.48)
Board		-0.077 (-1.45)
Indep		-0.002 (-1.43)
Dual		-0.032* (-2.08)
SOE		0.005 (0.16)

Table 1 (Continued)

Variable	(1) VioNum	(2) VioNum
Big4		-0.039 (-0.90)
Growth		-0.000 (-0.085)
cash		-0.199*** (-3.53)
Firm FE	YES	YES
Year FE	YES	YES
Observations	24168	24168
R-squared	0.0217	0.0293

Note: Standard errors in parentheses are clustered by firm: *** $P < 0.001$, ** $P < 0.01$, * $P < 0.05$, + $P < 0.10$.

4.3. Robustness tests

Parallel trend testing is essential before implementing DID. The study examined trend similarity between treatment and control groups. The research results are shown in **Figure 1**. Before the implementation of FCRS, there was no significant difference in the enterprises' violations. In 2016, when FCRS was introduced, treatment group violations decreased significantly compared to controls, with this trend persisting in subsequent years, satisfying parallel trend requirements.

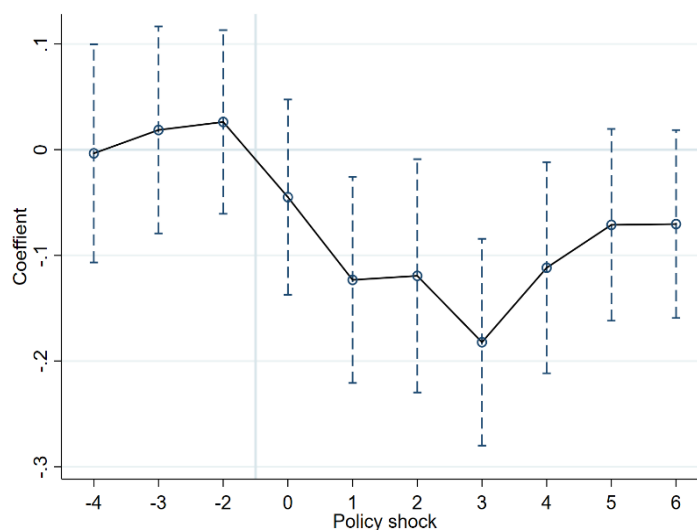


Figure 1. Parallel trend test

Second, Placebo testing addresses potential interference from unobservable factors. We randomly assigned policy shock variables to samples and performed re-regression, repeating this process 500 times. **Figure 2** shows that estimated coefficients follow a normal distribution with a mean of zero, indicating a minimal possibility of results being affected by other macro policies or random factors.

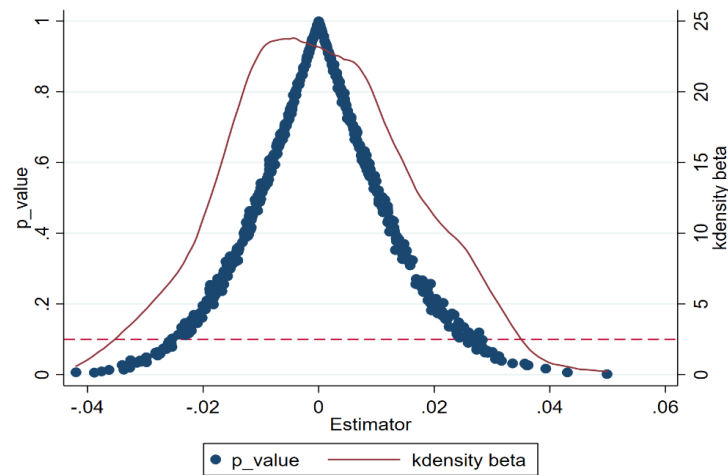


Figure 2. Placebo test

Third, Propensity score matching (PSM) addresses sample selection bias. Using all control variables as covariates, the study conducted 1:1 nearest-neighbor matching to control for sample heterogeneity between treatment and control groups. Results using matched samples (**Table 4**, column 1) remain consistent with baseline regression, confirming robustness.

Finally, alternative measurements and samples test robustness. First, following Chen et al., the study measured misconduct using a dummy variable (VioDum), with consistent results (**Table 4**, column 2)^[15]. Second, the study reselected the experimental group by calculating each region's average marketization index (2012–2015), excluding companies from the top one-third high-marketization regions, and selecting administrative monopoly industry companies as the treatment group. Results are shown in **Table 4** (column 3).

Table 4. Robustness tests

Variable	(1) VioNum	(2) VioDum	(3) VioNum
Treat* post	-0.106*** (-2.98)	-0.040*** (-2.97)	-0.027*** (-2.82)
Year FE	YES	YES	YES
Firm FE	YES	YES	YES
N	3259	24168	24023
Adj-R ²	0.0091	0.0195	0.0177

4.4. Mechanism test

In the mechanism test, the study examined the impact of the fair competition review system on internal control quality and short-sightedness in management. The regression analysis results are shown in **Table 5**. It can be observed that internal control quality is positively correlated with the fair competition review system, and it is significant at the 1% confidence interval level. The second column of **Table 5** shows that management short-sightedness is significantly negatively correlated with the fair competition review system. Thus, the proposed mechanism is validated.

Table 5. Mechanisms test

Variable	(1) ICQ	(2) Myopia
Treat* post	14.99*** (4.78)	-0.0034*** (-5.59)
Controls	Yes	Yes
Year FE	Yes	Yes
Firm FE	Yes	Yes
Observations	24168	24168
Adj-R ²	0.0449	0.0366

4.5. Cross-sectional analysis

4.5.1. Business environment

A favorable business environment reduces enterprise misconduct incentives through fair competition and free resource flow, while a poor environments obstruct factor mobility and encourages short-term behavior to meet financial goals. As a fundamental reform for unified market construction, FCRS reduces administrative barriers, improves market conditions, and strengthens external governance. Therefore, the study expects FCRS to have stronger effects on non-compliance in regions with poor business environments.

Following Li et al., the study constructs a provincial business environment evaluation system using the entropy method and divides samples into high and low groups based on the mean value (high = 1, low = 0) ^[9]. Regression analysis using Model (1) shows that the interaction term Treat × Post is significantly negative only in the poor business environment sample (Table 6, columns 1–2), confirming that FCRS more effectively inhibits enterprise violations in regions with poor business environments.

4.5.2. Information transparency

Information transparency reflects external parties' access to the company's internal information. Higher transparency increases the marginal cost of management misconduct, while lower transparency creates information asymmetry that may exacerbate violations ^[21].

FCRS strengthens external supervision and reduces opportunities for opportunistic behavior, particularly benefiting companies with poor information transparency. The study expects FCRS to have stronger inhibitory effects on misconduct in less transparent companies. Following Lang et al., the study uses analyst forecast accuracy (Trans) as a proxy for corporate information transparency ^[22]. Group regression results in **Table 6** (columns 3–4) show that FCRS significantly reduces enterprise violations at the 1% level in the poor information transparency group.

Table 6. Mechanisms test

Variable	(1) High-BE	(2) Low-BE	(3) High-Trans	(4) Low-Trans
Treat* post	-0.065 (-1.44)	-0.160*** (-4.30)	-0.105 (-1.21)	-0.110*** (-3.81)
Controls	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes
Observations	12917	11110	4661	15528
Adj-R ²	0.0283	0.0317	0.0284	0.0274

4.6. Further research based on enterprise risk

Compliance laws are essential for businesses, as violations can seriously impact the company. Enterprise violations will not only damage the enterprise's reputation but also exacerbate the risks faced by the enterprise. This manifests as increased business operation risk and a higher probability of financial distress. Therefore, the impact of FCRS on business risk and bankruptcy risk needs to be further explored.

First, referring to Ohlson's (1980) measurement of corporate financial distress, the study uses O_Adj calculated by the O-Score model to measure bankruptcy risk ^[23]. Secondly, referring to the studies of John et al., the volatility of corporate earnings (O_Risk) is used to measure operational risk ^[24]. The correlation regression results are shown in **Table 7**. The estimated coefficients of Treat*Post are all significantly negative, which indicates that implementing FCRS significantly reduces enterprises' financial and operational risks and further supports the positive governance role of implementing FCRS.

Table 7. Additional analysis

Variable	(1) Bankruptcy risk	(2) Operational risk
Treat* post	-0.184*** (-3.43)	-0.006** (-2.49)
Controls	Yes	Yes
Year FE	Yes	Yes
Firm FE	Yes	Yes
Observations	24168	19972
Adj-R ²	0.0283	0.011

5. Conclusion

Using Chinese A-share listed companies, this study investigates FCRS effects on corporate misconduct and analyzes underlying mechanisms and heterogeneous influences. Results show that FCRS, as a key market integration mechanism, effectively curbs corporate misconduct through robustness tests. Mechanism analysis reveals FCRS operates as external governance, reducing misconduct by strengthening internal controls and decreasing managerial short-termism. Heterogeneity analysis indicates stronger effects in regions with poor business environments and companies with low information transparency.

Based on these findings, the study proposes three policy implications: First, strengthen FCRS implementation. The government should refine institutional design, ensure consistent nationwide implementation, and establish supervision mechanisms for regular effectiveness assessment and timely optimization. Second, prioritize business environment improvement. Given stronger FCRS effects in poor business environments, the government should streamline procedures, enhance service efficiency, eliminate local protectionism, and remove market barriers to create transparent, predictable conditions that fundamentally reduce misconduct incentives. Third, promote corporate governance and transparency standards. Since FCRS works through internal controls with stronger effects in low-transparency companies, the government should enforce stricter disclosure requirements, enhance governance frameworks, and implement stronger managerial oversight to foster long-term thinking and discourage opportunistic behaviors.

Disclosure statement

The author declares no conflict of interest.

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