A Study on the Impact of the Investor Service Center's Shareholding-Based Exercise of Rights on Dividend Smoothing

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Abstract. The shareholding-based exercise of rights by the Investor Service Center is an innovative practice for protecting the rights and interests of minority investors. Using A-share listed companies in Shanghai and Shenzhen from 2011 to 2024 as the research sample, this paper treats the 2016 policy of shareholding-based exercise of rights by the China Securities Investor Services Center as a quasi-natural experiment and constructs a multi-period difference-in-differences model to examine the impact of the Investor Service Center's exercise of rights on dividend smoothing. The results show that the Investor Service Center's exercise of rights imposes external regulatory pressure and raises dividend payouts, thereby exerting a negative effect on corporate dividend smoothing. Further analysis indicates that the Investor Service Center's exercise of rights reduces Type II agency costs and triggers short-term dividend increases, which in turn affect dividend smoothing. This paper enriches the literature on how the Investor Service Center's protection of minority investors influences dividend smoothing, and provides empirical evidence for the evaluation system and expected effects of subsequent rights-exercising activities.

Keywords: Investor Service Center's exercise of rights, dividend smoothing, agency problems.

1. Introduction

Stable dividend payments help enhance investor confidence and corporate image, and support the stable operation of the capital market (Yang Bao, 2019) [13]. They are also regarded as a signaling mechanism that alleviates information asymmetry (Lintner, 1956) [6]. However, China's capital market has long faced problems such as low dividend payout ratios and large fluctuations (Ren Youquan, 2006; Li Maoliang et al., 2014) [14]], which constrain the effectiveness of dividends. In October 2023, General Secretary Xi Jinping explicitly proposed, for the first time, the goal of accelerating the building of a financial powerhouse (Zhang Xiaojing, 2024) [12]. Under this strategic guidance, the Fourth Plenary Session of the 20th CPC Central Committee further made arrangements for accelerating the building of a financial powerhouse during the 15th Five-Year Plan period.

Existing studies on dividend smoothing mainly focus on corporate governance, financial consequences, and market reactions. In terms of corporate governance, the higher the shareholding ratio of non-state-owned shareholders and the higher the proportion of directors they appoint, the stronger the dividend smoothing (Chen Yanli et al., 2020) [18]. In terms of financial consequences, the more stable the dividend level, the lower the firm's debt default risk (Zhang Qingjun et al., 2022) [20]. In terms of market reactions, the implementation of a stable dividend policy helps improve the firm's equity financing environment (Brav et al., 2005) [2]. These studies provide support for understanding the logic behind dividend policy stability. However, there is still a lack of systematic research on how emerging external governance mechanisms, especially institutional innovations represented by the Investor Service Center, affect dividend smoothing.

Minority investors are an important force in China's capital market. Although this group is large in number, their rights and interests are difficult to protect effectively because of weak information access and dispersed ownership. To strengthen the protection of minority investors, the China Securities Regulatory Commission approved the establishment of the China Securities Investor Services Center in 2014 (hereinafter referred to as the"Investor Service Center"). Since 2016, it has implemented a"shareholding-based exercise of rights"policy. Since its implementation, the policy has

generated notable market responses, social reactions, and economic consequences (Wang Xue et al., 2022) [21]. Existing literature confirms that the Investor Service Center can constrain controlling shareholders' equity pledges (Yu Nutao et al., 2024) [22] and regulate M&A performance commitments (Luo Jinhui et al., 2025) [23]. These studies explain the effectiveness of the Investor Service Center's exercise of rights from the perspectives of internal governance and business conduct. However, few studies have extended the analysis to corporate dividend decisions, especially dividend smoothing, which is an important signal. Starting from the external governance mechanism of the Investor Service Center's exercise of rights, this paper explores its potential impact on dividend smoothing.

It is worth noting that dividend smoothing, as one of the evaluation indicators of dividends, does not necessarily have a simple positive or negative relationship with dividend quality. It should be viewed dialectically. Existing studies find that Chinese listed companies generally have not formed stable dividend payment policies (Chen Xueying et al., 2024) [15], and the signaling function of such policies is limited in China's capital market. Some studies even show that maintaining dividend smoothing cannot reduce equity agency costs at the aggregate level, and its governance effect is limited (Han Yun et al., 2020) [16].

Based on this, this paper takes the establishment of the Investor Service Center as the entry point, selects Shanghai and Shenzhen A-share listed companies from 2011 to 2024 as the sample, and employs a multi-period DID model to test the impact of the Investor Service Center's shareholding-based exercise of rights on listed companies' dividend smoothing. The results show that the Investor Service Center's exercise of rights significantly reduces dividend smoothing among listed companies. Mechanism analysis suggests that the exercise of rights may induce firms to raise dividend payouts by imposing regulatory pressure. Further robustness tests support the reliability of the above conclusion.

This paper may make the following marginal contributions. First, existing studies on dividend smoothing mainly focus on the influence of internal governance mechanisms. This paper examines the external governance mechanism of minority investor protection and expands the theoretical framework of the determinants of dividend smoothing. Second, existing literature mainly focuses on the impact of the Investor Service Center's exercise of rights on audit quality (Ma Chen et al., 2025) [32], capital market pricing (Ren He et al., 2023) [17], corporate risk (Song Yu et al., 2025), and earnings management (Ge et al., 2022) [4]. There is still a lack of systematic examination of the mechanisms and effects related to indicators of minority shareholder protection. This paper starts from the Investor Service Center's exercise of rights and provides empirical evidence and references for regulators in implementing investor-rights protection actions. Third, this paper adopts a multi-period DID approach and treats the Investor Service Center's shareholding-based exercise of rights as a policy shock. By constructing a treatment group and a control group, it effectively alleviates endogeneity concerns and enhances the reliability of the findings.

2. Institutional Background and Theoretical Analysis

2.1. Institutional Background

China's listed companies are characterized by highly concentrated ownership. Controlling shareholders and managers may infringe upon minority investors' rights and interests through tunneling and overinvestment (Shleifer and Vishny, 1997) [1]. The high cost, high difficulty, and low return of rights protection constrain minority investors from actively exercising their lawful rights (Yao, 2019; Zeng Aimin et al., 2021) [10][27]. To guide listed companies to establish a sustained and stable cash dividend mechanism, regulators have made a series of explorations. Since 2001, the China Securities Regulatory Commission has successively introduced policies to encourage firms to improve dividend distribution. In 2008, it issued the"semi-mandatory dividend"policy, which linked refinancing eligibility to the level of cash dividends. Although these policies increased the willingness of some listed companies to pay dividends, they still did not enable investors to form sustained and stable expectations of returns. Faced with the natural disadvantages of minority investors in

information, expertise, and rights-exercising capacity, the China Securities Regulatory Commission approved the establishment of the China Securities Investor Services Center in 2014. By holding 100 shares in listed companies, the Center participates in corporate governance as an ordinary shareholder.

With"shareholding-based exercise of rights"as its core mechanism, the Investor Service Center strengthens external supervision over corporate dividend behavior and effectively protects investors' legitimate rights and interests. Since its establishment, it has handled more than 30,000 disputes and participated in more than 1,000 annual general meetings through special rights-exercising actions. This helps reduce abnormal dividend distribution by firms and thus provides the market with more stable expected returns. The implementation of this policy provides an ideal quasi-natural experimental setting for examining how minority shareholder protection affects corporate dividend smoothing. Source: China Securities Journal / China Securities Network.

2.2. Theoretical Analysis and Research Hypotheses

2.2.1. Baseline Analysis

As an important topic in dividend distribution, dividend smoothing is the outcome of firms' financial decisions formed through dynamic bargaining among stakeholders (Xie Zhifei, 2019) [24]. From the perspective of stakeholder theory, dividend policy is not the expression of a single party's will, but the result of a game among multiple stakeholders. Managers tend to retain profits to expand business scale, which causes the firm's dividend policy to fluctuate with managers' short-term goals (Brochet et al., 2015)[3]. Different shareholder groups also have markedly different dividend demands. With their control advantage, large shareholders may use dividend policy to transfer benefits, so their dividend decisions serve their own interests more than others (Thanatawee, 2013)[11]. In situations with insufficient investor protection, the demand of minority shareholders for predictable and stable returns is often ignored (La Porta et al., 2000) [7-9], making them passive bearers of dividend policy fluctuations.

Improving dividend smoothing in China's capital market requires an effective external investor-protection mechanism to overcome the weakness of minority shareholders' own monitoring capacity, and the Investor Service Center is a core practice of this mechanism. If empirical tests show that the exercise of rights reduces dividend smoothing, then there may be an impact mechanism related to higher dividend payouts. The Investor Service Center's exercise of rights often focuses on firms that have not paid dividends for consecutive years or whose payout ratios are significantly below the industry average. To respond to regulatory pressure and maintain their image, firms tend to raise dividend levels in the short term. Such decisions often break the matching relationship between dividend payments and earnings growth, may increase fluctuations in the dividend payout ratio, and eventually reduce dividend smoothing. Based on this, Hypothesis H1 is proposed:

H1: The Investor Service Center's shareholding-based exercise of rights reduces the dividend smoothing of listed companies.

2.2.2. Mechanism Analysis

According to dividend smoothing theory, managers maintain stable dividends in order to send a positive signal to the market that the firm's prospects are stable (Lintner, 1956) [6]. However, this motivation is often constrained by agency costs in the Chinese market. Controlling shareholders and managers may form an alliance of interests and collude in manipulating dividend policy (Chen Xiao et al., 2005) [25]. Because minority shareholders are insufficiently protected, they cannot supervise managers or check controlling shareholders. As a result, dividend payments reflect the demands of controlling shareholders more than the firm's actual payout capacity. These factors interact and jointly affect corporate dividend smoothing.

Through universal shareholding, the Investor Service Center obtains shareholder rights and directly supervises and constrains controlling shareholders, thereby reducing Type II agency costs. Under external pressure, controlling shareholders may respond by increasing short-term dividends. Therefore, a reduction in agency costs does not necessarily improve dividend smoothing. While

effectively reducing Type II agency costs, the Investor Service Center's exercise of rights may trigger such short-term accommodative behavior, which is ultimately manifested as higher dividend levels and lower dividend smoothing.

Taken together, the impact of the Investor Service Center's exercise of rights on dividend smoothing may operate through the reduction of Type II agency costs, which raises dividend levels in the short run. However, because such dividends may depart from profitability and payout capacity and are therefore unsustainable, dividend volatility may intensify, which eventually appears as a decline in dividend smoothing. On this basis, the mechanism hypothesis H2 is proposed:

H2: The Investor Service Center's exercise of rights can reduce Type II agency costs and promote dividend distribution, thereby reducing dividend smoothing.

3. Research Design

3.1. Model Specification and Variable Definitions

To effectively identify the causal effect of the Investor Service Center's exercise of rights on listed companies' dividend smoothing, this study adopts a multi-period DID model for empirical testing. The shareholding-based exercise of rights policy was implemented in batches across different regions and at different times, creating a quasi-natural experimental setting that is well suited for the use of a multi-period DID model. Based on this, the following multi-period DID model is constructed.

In the model, the subscripts i and t denote firm and year, respectively. The dependent variable dps_vol represents dividend smoothing. A smaller value indicates a smoother dividend policy. Considering that the Investor Service Center's shareholding-based exercise of rights may affect listed companies' dividend policies with some lag, the dependent variable is lagged by one period in the model; that is, the explanatory variables in period t are linked to dividend smoothing in period t+1. Following Xie Zhifei (2019) [24], the ratio of the standard deviation of the firm's dividends per share over the past three years to the standard deviation of earnings per share over the past three years is denoted as dps, and the following transformation is applied to alleviate skewness:

$$\mathrm{dps_vol}_{i,t+1} = \beta_0 + \beta_1 \mathrm{LOR}_{i,t} + \beta_2 \mathrm{Controls}_{i,t} + \mathrm{Firm} + \mathrm{Year} + \mathrm{Industry} + \varepsilon_{i,t}$$

The core explanatory variable LOR is a dummy variable for the implementation of the shareholding-based exercise of rights policy. Based on its gradual rollout, firms registered in Shanghai, Guangdong (excluding Shenzhen), and Hunan after 2016, as well as firms in other provinces after 2017, are defined as the treatment group, while the rest are defined as the control group. Following prior studies such as Larkin (2016) [5] and Han Yun et al. (2020) [28], the model includes a set of firm-level control variables, including firm size (ln size), leverage (Lev), return on assets (ROA), growth (Growth), equity multiplier (EM), cash level (Cash), and ownership concentration (Top1), to control for other potential influencing factors. These control variables help reduce the influence of firms' financial characteristics on dividend smoothing, thereby allowing more accurate identification of the policy effect of the Investor Service Center's shareholding-based exercise of rights. At the same time, the model controls for firm, year, and industry fixed effects to alleviate the interference of individual heterogeneity and macro time trends. Standard errors are clustered at the firm level. The specific definitions of all variables are shown in Table 1.

Table 1. Variable Definitions

Variable Type	Variable Name	Symbol	Definition
Dependent variable	Dividend smoothing indicator	dps_vol	dps_vol = ln(1 + dps)
Explanatory variable	Dummy variable for implementation of the shareholding-based exercise of rights policy	LOR	For firms in Shanghai, Guangdong (excluding Shenzhen), and Hunan, LOR equals 1 in 2016 and subsequent years, and 0 otherwise; for firms in other provinces, LOR equals 1 in 2017 and subsequent years, and 0 otherwise.
Control variable	Firm size	Size	Natural logarithm of total assets
	Leverage	Lev	Total liabilities divided by total assets
	Return on assets	ROA	Net profit / average total assets
	Growth	Growth	Increase in current-year operating revenue / previous-year operating revenue
	Equity multiplier	EM	Total assets / total shareholders' equity
	Cash ratio	Cash Ratio	Total cash / total assets
	Ownership concentration	Top10	Sum of the shareholding ratios of the top ten shareholders
	Dividend per share	Dividend	Cash dividend per share

3.2. Sample Selection and Data Sources

This paper selects Shanghai and Shenzhen A-share listed companies from 2011 to 2024 as the research sample. Referring to prior studies (Wang Bo et al., 2022) [26], the sample is processed as follows: (1) listed companies in the financial industry are excluded; (2) observations with ST, *ST, and similar statuses are excluded; (3) samples with missing values are excluded; and (4) all continuous variables are winsorized at the top and bottom 1%. Data on the Investor Service Center's exercise of rights are obtained from the official website of the China Securities Investor Services Center and collected manually. The remaining data are obtained from the CSMAR and WIND databases. After these treatments, a total of 10,695 firm-year observations remain.

The descriptive statistics of the main variables are reported in Table 2. The mean of the log-transformed dependent variable, dividend smoothing, is 0.334, which is higher than the median of 0.279, with a standard deviation of 0.329. The core explanatory variable LOR is a policy dummy variable with a mean of 0.548, which is consistent with the temporal distribution characteristics of the treatment and control groups in a multi-period DID model. The mean dividend per share of the sample firms is 0.191 and the standard deviation is 0.344, indicating substantial differences in dividend payout levels across firms. The remaining financial indicators are all within a reasonable range, and the statistics also show clear variation across firms, satisfying the basic requirements for empirical analysis.

Table 2. Descriptive Statistics of Main Variables

Variable	Observations	Mean	Std. Dev.	Median	Min	Max
dps_vol	10695	0.334	0.329	0.279	0	1.722
LOR	10695	0.548	0.498	1	0	1
Size	10695	22.080	1.224	21.890	20.051	26.098
Lev	10695	0.317	0.196	0.305	0.002	0.778
ROA	10695	0.073	0.054	0.644	0.001	0.266
Growth	10695	0.182	0.272	0.126	0.3133	1.371
EM	10695	1.862	0.964	1.569	1.055	7.023
Cash Ratio	10695	1.371	2.031	0.689	0.001	12.793
Top10	10695	0.598	0.138	0.623	0.005	0.903
Dividend	10695	0.191	0.213	0.1	0	1.25

4. Regression Results

4.1. Baseline Regression Results

Table 3 reports the baseline regression results based on the model. In column (1), firm and year fixed effects are controlled for, and the coefficient of LOR is significantly positive at the 10% level. Column (2) further adds control variables related to firm characteristics, and column (3) additionally controls for industry fixed effects. The coefficient of LOR remains significantly positive at the 1%

level. This result indicates that the Investor Service Center's shareholding-based exercise of rights policy significantly reduces the dividend smoothing of listed companies, providing preliminary support for Hypothesis H1.

The path implied by Hypothesis H1 provides a dialectical perspective for understanding how the Investor Service Center's exercise of rights affects dividend smoothing. The exercise of rights increases listed companies' dividend payout levels and reduces dividend smoothing, suggesting that active rights exercise aimed at protecting minority investors' current returns may also bring potential costs. This does not negate the positive significance of rights exercise and higher dividend payouts. Rather, it reveals a practical issue: external governance intervention may find it difficult to simultaneously achieve the goal of internal stability.

Regarding the control variables, firm size (Size) is significantly negative in some models, indicating that larger firms are more inclined to maintain stable dividend payments. The regression coefficient on ownership concentration (Top10) is significantly positive, suggesting that ownership concentration may intensify dividend fluctuations, which is consistent with agency theory that controlling shareholders may use dividend policy to transfer benefits.

Existing studies have extensively examined the determinants of dividend smoothing. For example, the implementation of the state-owned capital operating budget system (An Ling et al., 2025) [29] and internal control reducing managerial overconfidence (Yang Cuicui et al., 2024) [30] are generally found to improve dividend smoothing. In contrast, this paper reaches a different conclusion based on the quasi-natural experiment of the Investor Service Center's shareholding-based exercise of rights. The main reason for this divergence is that the existing literature has not fully considered the effect of these factors on raising dividend levels, and therefore has failed to identify the negative influence of the relevant mechanisms on dividend smoothing.

Table 3. Investor Service Center's Exercise of Rights and Dividend Smoothing

Variables	(1) dps_vol	(2) dps_vol	(3) dps_vol
LOR	0.069* (1.72)	0.174*** (3.02)	0.183*** (3.14)
Size		-0.348** (-2.00)	-0.030* (-1.92)
Lev		-0.001 (-1.24)	-0.001 (-1.24)
ROA		-0.001 (-0.75)	-0.001 (-0.76)
Growth		0.000 (0.42)	0.000 (0.42)
EM		-0.004 (-0.44)	-0.003 (-0.34)
Cash Ratio		-0.001 (-0.62)	-0.001 (-0.66)
Top10		0.002** (2.08)	0.002** (2.03)
Firm fixed effects	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes
Industry fixed effects	No	No	Yes
Sample size	10695	10695	10695

Note: *, **, and *** denote significance at the 10%, 5%, and 1% levels, respectively. t-values are reported in parentheses. The same applies below.

5. Robustness Tests

To verify the reliability of the above conclusions, the following robustness tests are conducted.

5.1. Controlling for the Economic Impact of COVID-19

Considering that the capital market was heavily affected by the COVID-19 pandemic after 2020, the sample window is reset to 2015-2019 for regression analysis, so as to remove the interference of exogenous events to the greatest extent possible. As shown in Table 4, the coefficients of LOR in the three models are 0.142, 0.199, and 0.207, respectively, all significantly positive at the 1% level and highly consistent with the main regression results. In addition, the signs and significance of the control

variables do not change substantially, indicating that the negative impact of the shareholding-based exercise of rights policy on dividend smoothing holds across different time windows.

Table 4. Robustness Test

Variables	(1) dps_vol	(2) dps_vol	(3) dps_vol
LOR	0.142*** (3.62)	0.199*** (3.66)	0.207*** (3.77)
Size		-0.203 (-0.82)	-0.34 (-1.37)
Lev		-0.003* (-2.74)	-0.002* (-2.58)
ROA		-0.001 (-0.94)	-0.001 (-0.93)
Growth		0.000 (0.45)	0.000 (0.67)
EM		-0.006 (-0.46)	-0.001 (-0.09)
Cash Ratio		-0.002 (-0.37)	-0.003 (-0.40)
Top10		0.001 (1.24)	0.001 (0.96)
Firm fixed effects	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes
Industry fixed effects	No	No	Yes
Sample size	4849	4849	4849

5.2. Placebo Test

To further rule out the interference of unobservable factors or time trends, this paper conducts a placebo test. Following Liu Xinming et al. (2021) [34], a fictitious policy implementation date is assigned by assuming that the shareholding-based exercise of rights policy was fully implemented in 2013, and the sample from 2010 to 2015 is selected for regression. As shown in Table 5, the coefficient of LOR is not significant at the 10% level. This result indicates that the significant change in dividend smoothing is indeed caused by the implementation of the shareholding-based exercise of rights policy, rather than by other random factors or potential trends.

Table 5. Placebo Test

Variables	(1) dps_vol	(2) dps_vol
LOR	0.010 (0.29)	0.017 (0.47)
Size	-0.104** (-2.23)	-0.090 (-1.89)
Lev	-0.000 (-0.25)	-0.000 (-0.32)
ROA	0.002 (0.56)	0.002 (0.75)
Growth	0.000 (1.29)	0.000 (1.12)
EM	0.001 (0.34)	0.010 (0.38)
Cash Ratio	-0.002 (-1.29)	-0.002 (-1.35)
Top10	0.003 (0.99)	0.003 (0.90)
Firm fixed effects	Yes	Yes
Year fixed effects	Yes	Yes
Industry fixed effects	No	Yes
Sample size	3374	3374

5.3. Robustness Test Based on PSM-DID

To further alleviate sample selection bias, the PSM-DID method is adopted for robustness testing. All firm-level control variables are used as covariates, and 1:1 nearest-neighbor matching is employed to match the treatment group with a control group of firms with similar characteristics. After matching, the policy effect of the Investor Service Center's exercise of rights is re-estimated. As shown in Table 6, after adding control variables as well as firm and year fixed effects, the core explanatory variable LOR remains significantly positive at the 5% level. This further verifies the robustness of the conclusion that the Investor Service Center's exercise of rights significantly reduces dividend smoothing.

Table 6. Multi-Period DID Regression Results after Matching

Variables	(1) dps_vol
LOR	0.141** (1.97)
Size	-0.04* (-1.63)
Lev	-0.001* (-1.57)
ROA	-0.000 (-0.04)
Growth	-0.8.13e-06 (-0.11)
EM	-0.013 (-1.07)
Cash Ratio	-0.001 (-0.63)
Top10	0.002 (1.21)
Firm fixed effects	Yes
Year fixed effects	Yes
Sample size	5235

5.4. Mechanism Test

The baseline regression shows that the shareholding-based exercise of rights policy has a significant negative effect on dividend smoothing. To explore its internal mechanism, this paper takes dividend per share (Dividend) as the dependent variable and further tests its impact on the level of dividend payout. The results are shown in Table 7. In the regression of the exercise of rights on dividend growth, the coefficient of LOR is significantly positive at the 5% level, indicating that the Investor Service Center's exercise of rights significantly increases dividend levels. After gradually introducing control variables and fixed effects, the coefficient remains significantly positive. Firm growth (Growth) does not show a significant effect, suggesting that the increase in dividend payout in this study is not significantly associated with the growth of firms' operating revenue. This further supports the view that dividend growth may stem from passive adjustment under external regulation.

This result reveals the intermediate link through which the Investor Service Center's exercise of rights affects dividend smoothing. Specifically, the Center exerts regulatory pressure and prompts firms to raise dividend payouts. However, this increase is not based on improved profitability. As a result, it can easily break the balance between dividend levels and profitability, thereby intensifying fluctuations in dividend levels.

Table 7. Exercise of Rights and Dividend Growth

Variables	(1) Dividend	(2) Dividend	(3) Dividend
LOR	0.088** (2.44)	0.122*** (2.96)	0.124*** (2.91)
Size		0.045*** (3.74)	0.047*** (3.84)
Lev		-0.002*** (-4.29)	-0.002 (-4.25)***
ROA		0.014*** (7.63)	0.014*** (7.61)
Growth		-2.50e-0.6 (-0.04)	-6.89e-0.6 (-0.10)
EM		-0.004 (-0.61)	-0.004 (-0.63)
Cash Ratio		0.003*** (3.93)	0.002*** (3.92)
Top10		0.002*** (2.94)	0.002*** (2.99)
Firm fixed effects	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes
Industry fixed effects	No	No	Yes
Sample size	10695	10695	10695

Based on the results of the baseline regression and the mechanism test, this paper further explains the path that "the increase in dividends induced by the exercise of rights departs from the foundation of profitability and ultimately leads to lower dividend smoothing." In this mechanism, the negative effect of the exercise of rights on dividend smoothing is partly transmitted through the channel of higher dividend payouts. The mechanism test results for the mechanism variable Dividend and the outcome variable dps_vol are shown in Table 8.

Table 8. Dividends and Dividend Smoothing

Variables	(1) dps_vol	(2) dps_vol	(3) dps_vol
Dividend	0.131** (2.20)	0.147** (2.08)	0.146*** (6.93)
Size		-0.063*** (-4.03)	-0.060*** (-3.74)
Lev		0.001 (1.2)	0.001 (1.10)
ROA		-0.002 (-1.32)	-0.002 (-1.33)
Growth		-0.000 (-0.30)	-0.000 (-0.37)
EM		0.005 (0.08)	0.0051 (0.12)
Cash Ratio		-0.001 (-0.55)	-0.001 (-0.64)
Top10		0.001* (1.90)	0.001* (1.76)
Firm fixed effects	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes
Industry fixed effects	No	No	Yes
Sample size	10695	10695	10695

The coefficient of dividend per share (Dividend) is significantly positive at the 1% level, indicating that it reduces dividend smoothing. Combined with the conclusion that the policy dummy variable (LOR) has a significant effect on both the dividend smoothing indicator and dividend per share, this shows that the Investor Service Center's exercise of rights imposes a clear pressure on target firms to increase dividends, thereby significantly raising their dividend payout levels. As confirmed by the preceding mechanism test, such an externally pressured increase in dividend payouts often departs from the firm's sustainable profitability base and reduces the funds available for future operations. This is the direct reason why dividend smoothing declines.

5.5. Impact Through Minority Investor Protection

To further examine the underlying mechanism, this paper tests the Type II agency cost channel proposed in H2. Through shareholding-based exercise of rights, the Investor Service Center constrains the behavior of controlling shareholders and prompts firms to adjust dividends to minority investors. The study uses the controlling shareholders' tunneling indicator (TUNNEL) to measure Type II agency costs (Li Minghui et al., 2025) [33]. The larger this indicator is, the more serious the expropriation of minority shareholders by controlling shareholders. Table 9 reports the fixed-effects regression results of the Investor Service Center's exercise of rights on controlling shareholders' tunneling.

Table 9. Investor Service Center's Exercise of Rights and Type II Agency Costs

Variables	(1) TUNNEL	(2) TUNNEL	(3) TUNNEL
LOR	-0.007*** (-3.09)	-0.007*** (-3.20)	-0.008*** (-3.30)
Top1		-0.008 (-0.95)	-0.008 (-0.90)
Separation rate of control and ownership rights		-0.027* (-1.69)	-0.027* (-1.72)
Firm fixed effects	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes
Industry fixed effects	No	No	Yes
Sample size	10695	10695	10695

After gradually controlling for year fixed effects, firm-level control variables, and industry fixed effects, the coefficient of the core explanatory variable LOR remains significantly negative at the 1% level. This indicates that the Investor Service Center's shareholding-based exercise of rights can effectively restrain controlling shareholders' tunneling behavior and significantly reduce Type II agency costs. In light of its practical meaning, once the Investor Service Center weakens the absolute control of controlling shareholders over the firm, controlling shareholders may raise dividend payouts to appease minority shareholders and transmit positive signals. Such adjustments in dividend policy are often strategic and short-term in nature. Therefore, the reduction in agency costs first triggers a

temporary increase in dividend payouts and is ultimately manifested as intensified fluctuations in dividend policy, that is, a decline in dividend smoothing.

In sum, this study identifies the transmission path that"the Investor Service Center's exercise of rights reduces Type II agency costs, promotes higher corporate dividends, and causes dividends to become detached from profitability, thereby ultimately weakening dividend smoothing."This mechanism works together with the path revealed by H1 and jointly explains the overall negative effect of the Investor Service Center's exercise of rights on dividend smoothing. This suggests that if improvements in corporate governance do not focus on a long-term and stable decision-making framework, the positive effects of external governance may generate unintended financial consequences during the transmission process.

6. Research Conclusions and Implications

6.1. Research Conclusions

Using Shanghai and Shenzhen A-share listed companies from 2011 to 2024 as the research sample, this paper conducts a quasi-natural experiment under the policy background of the Investor Service Center's shareholding-based exercise of rights and employs a multi-period DID model to empirically test the impact of minority investor protection on listed companies' dividend smoothing and its underlying mechanism. The main conclusions are as follows.

Overall, the Investor Service Center's shareholding-based exercise of rights has a significant negative effect on the dividend smoothing of listed companies, and this conclusion remains valid after a series of robustness tests. Although the exercise of rights is intended to supervise firms to increase cash dividends and protect minority shareholders, firms may adopt accommodative measures under external pressure, leading to a mismatch between dividend payouts and profitability. Mechanism tests show that the Investor Service Center raises dividend payouts in the short term through two channels-imposing dividend pressure on firms and reducing agency costs. However, because dividends become detached from profitability, their sustainability is weak, and dividend volatility intensifies. The findings have policy implications for improving minority investor protection and the regulation of listed companies' dividends. When exercising regulatory functions, external governance mechanisms such as the Investor Service Center should avoid overemphasizing short-term performance and should instead guide firms to establish dividend policies that match profitability.

In fact, although some existing studies on dividend smoothing link a decline in smoothing to higher operating risk and regard such a decline as a sign of the failure of external governance mechanisms or lower dividend quality, this paper shows that the decline in corporate dividend smoothing may stem from an increase in dividend payout ratios and may therefore have positive implications. Analysis of corporate dividend smoothing should be carried out in the context of China's capital market, which has long emphasized financing over investor returns, and in the context of the lack of a mature system for protecting minority investors' rights and interests. Future studies may build on this line of inquiry and further explore the economic mechanisms behind changes in dividend smoothing.

6.2. Policy Implications

Based on the above findings, the following policy implications are obtained.

First, for the Investor Service Center, the exercise of rights should promote dividends while also stabilizing them. This study finds that the Investor Service Center's exercise of rights raises dividend levels while also affecting dividend smoothing. The Investor Service Center should incorporate the stability and sustainability of long-term dividend policies into its evaluation system and promote the establishment of a long-term dividend mechanism consistent with the profitability trend of listed companies. Regulators should also further improve disclosure rules and require listed companies to explain in detail the relationship between dividend policy and long-term strategy, so as to effectively curb short-term manipulation.

Second, for listed companies, dividend distribution should be based on actual operating capacity and corporate development plans. The empirical results show that the increase in dividend payout triggered by the Investor Service Center's exercise of rights is not significantly associated with the firm's revenue growth rate, indicating that the rise in dividends may be detached from actual profitability. Controlling shareholders and managers should re-examine the motives behind their decisions and recognize that unsustainable dividends paid merely to respond to external pressure will affect the firm's operations and long-term development.

Third, for investors, actively exercising rights is not only a way to protect their own interests, but also a practical contribution to building a financial powerhouse. Minority investors can make full use of the existing institutional framework, actively exercise their statutory rights, and work together with external institutions such as the Investor Service Center to improve corporate governance. The development of a high-quality capital market depends on rational investors. By actively expressing their demands through lawful channels, minority investors can encourage firms to formulate higher-quality dividend policies and also contribute to the development of the capital market.

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