

Does Non-Punitive Regulation Affect Corporate ESG Performance? Evidence from Inquiry Letter Regulation

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ABSTRACT As an important means of non-punitive regulation in the capital market, does inquiry letter regulation affect corporate ESG performance under the strategic backdrop of carbon peaking and carbon neutrality? The study finds that inquiry letter regulation significantly suppresses corporate ESG performance, and this conclusion remains valid after a series of endogeneity and robustness tests. Further analysis of the internal mechanism shows that inquiry letter regulation significantly suppresses corporate ESG performance by increasing agency costs and financing constraints. Heterogeneity analysis shows that the inhibitory effect is more pronounced among listed companies with lower audit quality and weaker internal control quality. Based on these findings, this paper proposes that stock exchanges should enhance their authority, broaden the scope of inquiry letter regulation, strengthen its regulatory effectiveness, and strictly guard against insider trading; firms should standardize their operations, proactively disclose information, and adhere to long-term ESG investment.

INDEX TERMS inquiry letter regulation; corporate ESG performance; financing constraints; agency costs

I. INTRODUCTION

In recent years, stock exchanges have mainly exercised their supervisory functions through two major channels: disciplinary sanctions and regulatory measures. The effective fulfillment of front-line regulatory functions has become one of the most central tasks for exchanges at present and in the foreseeable future. Since the proposal to deepen reform of the regulatory system, the Shanghai and Shenzhen stock exchanges have increasingly become the core force behind regulatory innovation in China's stock market [1]. Exchanges mainly supervise listed firms by issuing inquiry letters. Inquiry letter regulation is an important method of supervising corporate information disclosure in the new era in China, and it has gradually become an important regulatory model in the capital market. Through intervention and correction, inquiry letter regulation urges listed firms to disclose information and comply with relevant rules [2]. The contents of these letters usually highlight risks, require listed firms to provide further solutions, or request additional disclosure, and the issues involved are generally not yet severe [3].

The academic literature has already examined the effects of inquiry letter regulation, with most studies focusing on its financial consequences for firms [4-7], including effects on auditing, stock prices, finance, market reactions to inquiry letters, and their determinants [8-9]. Some studies have pointed out that inquiry letters can also improve non-financial areas such as internal control quality [10] and corporate governance [11].

Overall, inquiry letters can effectively regulate firms, and their role in the financial domain appears relatively evident. However, few studies have explored whether inquiry letter regulation is effective in the domain of corporate sustainability. ESG is an emerging concept in the field of sustainable development. It focuses on the coordinated development of environmental, social, and corporate governance dimensions, and has become an important international standard for measuring firms' sustainable development [12]. China has gradually begun ESG-related disclosure, and common ESG rating systems include those developed by Huazheng, Hexun, SynTao Green Finance, and Bloomberg. Whether this kind of non-punitive "soft constraint" can promote firms' sustainable development is a question worth examining. China is committed to achieving its "dual carbon" goals, and ESG, as an important evaluation standard in green, low-carbon, and environmentally friendly development, can facilitate firms' green transformation. Whether inquiry letter regulation in the capital market can regulate corporate ESG performance is therefore the central question of this study.

Using inquiry letter data for Shanghai and Shenzhen A-share listed firms from 2014 to 2021, this paper examines the effectiveness of inquiry letter regulation from the perspective of corporate ESG performance. The study finds that inquiry letter regulation significantly suppresses corporate ESG performance. This conclusion remains valid after a series of endogeneity and robustness tests. Further analysis of the internal mechanism shows that inquiry letter regulation suppresses ESG performance by

increasing agency costs and financing constraints. Heterogeneity analysis indicates that the inhibitory effect is more pronounced in firms with lower audit quality and weaker internal control quality.

The potential contribution of this paper is that, although research on inquiry letter regulation has become increasingly active in recent years, few studies have focused on firms' sustainable development and tested the impact of inquiry letter regulation on ESG performance. This study broadens the scope of research on non-punitive regulation in China and provides empirical evidence for it.

II. THEORETICAL ANALYSIS AND RESEARCH HYPOTHESES

On the one hand, the more inquiry letter regulation a firm receives, the more likely it is to attract external attention [7]. Media, analysts, market intermediaries, and other external institutions will continue to track the firm's subsequent developments. At that point, the supervision provided by the media and analysts places greater external market pressure on the listed company, prompting further information disclosure and improving transparency. Information asymmetry between the firm and its stakeholders is alleviated, and agency problems may also be mitigated. In addition, inquiry letters themselves have regulatory power [3] and can urge firms to make internal adjustments. As the number of inquiries increases, the spillover effect of inquiry letter regulation also grows, and other firms may be deterred into standardizing their own behavior [13]. Under pressure from both internal and external supervision, listed companies may revise and disclose information in a timely manner according to the inquiry letter's requirements, thereby reducing information asymmetry with stakeholders and further improving corporate transparency. Under the dual pressure of market attention and supervisory institutions, listed firms may gradually standardize their disclosure practices, strengthen internal control, and place greater emphasis on corporate reputation. According to stakeholder theory, good performance in environmental, social, and governance dimensions helps safeguard stakeholders' interests [14]. To maintain or even enhance firm reputation, management may be more inclined to take a long-term development perspective, assume more social responsibility, increase environmental investment, and strengthen environmental protection, thereby improving corporate ESG performance.

On the other hand, the more inquiry letter regulation a listed company receives, the more the market may interpret this as indicating insufficient disclosure or substantial defects in disclosure. Analysts and media may transmit more negative information to stakeholders through reports and news coverage, increasing the perceived risk faced by creditors and shareholders, who may believe that the firm will not meet their expectations [3]. As a result, creditors and shareholders may reduce their trust in management, management's reputation may be damaged, and investors may substantially reduce the scale and frequency of investment in the firm. To compensate for potential risk losses, shareholders and creditors may demand higher returns, thereby aggravating financing constraints [7]. Once financing constraints intensify, funds originally used for environmental, social, and governance activities may be reduced.

Moreover, inquiry letters issued by stock exchanges are intended to standardize listed firms' information disclosure through non-punitive means. However, the deterrent effect of such non-punitive measures remains limited, and the cost of violations is relatively low, making it easy for recipient firms to engage only in superficial compliance rather than solving substantive problems [2]. According to deterrence theory in criminological psychology, management's self-interested behavior is a rational choice after weighing the costs and benefits of misconduct [15]. If the cost imposed by the exposure of problems through inquiry letter regulation is lower than the benefits that management gains from self-interested behavior, then management is more likely to engage in irregular conduct, appropriate corporate funds, maximize private benefits, and ignore value maximization for the firm [7]. Because information asymmetry exists between managers and shareholders, shareholders often cannot promptly obtain complete and effective information about business operations, which creates opportunities for self-serving behavior and increases agency costs. Higher agency costs and managerial appropriation of firm resources reduce the funds originally allocated to environmental, social responsibility, and corporate governance activities. Therefore, under high financing constraints and high agency costs, inquiry letter regulation may not improve ESG performance and may even have a negative effect on it.

In sum, the effect of inquiry letter regulation on corporate ESG performance is ultimately an empirical question. Based on the above analysis, this paper proposes the following competing hypotheses:

H1a: Inquiry letter regulation significantly promotes corporate ESG performance.

H1b: Inquiry letter regulation significantly suppresses corporate ESG performance.

III. RESEARCH DESIGN

A. SAMPLE SELECTION AND DATA SOURCES

This paper takes Shanghai and Shenzhen A-share listed firms from 2014 to 2021 as the research sample and empirically tests the impact of inquiry letter regulation on corporate ESG performance and its internal mechanisms. The inquiry letter regulation data come from the CNRDS database. Replacement variables and other financial data come from the CSMAR database. Huazheng ESG ratings come from the WIND database.

The sample is filtered as follows: firms in the financial and insurance industries are excluded; ST, *ST, and PT firms are excluded; and firms that experienced trading suspension are excluded. The final sample contains 5,146 firm-year observations.

All continuous variables are winsorized at the top and bottom 1% to reduce the influence of outliers, and standard errors are estimated using firm-level robust clustered standard errors.

B. VARIABLE DEFINITIONS AND MODEL SPECIFICATION

Corporate ESG performance is measured using the Huazheng ESG rating. A higher rating represents better ESG performance. Ratings from C to AAA are assigned scores from 1 to 9. To more accurately reflect annual ESG performance, the average of the four quarterly ratings is used. The Huazheng ESG rating system covers three pillars, sixteen themes, and forty-four key indicators, offering broader coverage and stronger Chinese characteristics. Its quarterly rating frequency gives it strong timeliness [16], and its results are quantitative and continuous, making it suitable for empirical analysis [17].

The explanatory variable *Supervise* captures inquiry letter regulation and is measured by the manually compiled annual number of inquiry letters received, transformed by the natural logarithm. This variable includes all categories of inquiry letters, including annual and semi-annual report inquiry letters, inquiry letters, and letters of concern.

Following prior studies [18,6,19-20], the control variables are firm size (*Size*), firm age (*Age*), shareholding ratio of the largest shareholder (*Ownership*), growth (*Growth*), equity balance (*Balance*), CEO-chair duality (*Dual*), property rights nature (*Property*), and the proportion of independent directors (*DirRatio*). Model (1) is constructed to test hypotheses H1a and H1b:

$$\begin{aligned}
 ESG = & a_0 + a_1Supervise + a_2Size + a_3Age + a_4Ownership + a_5Growth \\
 & + a_6Balance + a_7Dual + a_8Property + a_9DirRatio \\
 & + \sum Year + \sum Industry + \varepsilon
 \end{aligned}$$

In the model, ESG is the dependent variable for corporate ESG performance, *Supervise* is the explanatory variable for inquiry letter regulation, *Year* and *Industry* denote year and industry fixed effects, respectively, and ε is the error term.

Table 1. Main Variable Definitions

Variable	Symbol	Description
Inquiry letter regulation	<i>Supervise</i>	Natural logarithm of the number of inquiry letters issued
Corporate ESG performance	<i>ESG</i>	Natural logarithm of the average Huazheng ESG rating across the four quarters of the current year
Firm size	<i>Size</i>	Natural logarithm of total assets at year-end
Firm age	<i>Age</i>	Natural logarithm of years since listing
Shareholding ratio of the largest shareholder	<i>Ownership</i>	Shares held by the largest shareholder divided by total shares outstanding
Growth	<i>Growth</i>	Total asset growth rate
Equity balance	<i>Balance</i>	Shareholding ratio of the 2nd to 5th largest shareholders divided by the shareholding ratio of the largest shareholder
CEO-chair duality	<i>Dual</i>	Equals 1 if the chairman and general manager are the same person, and 0 otherwise
Property rights nature	<i>Property</i>	Equals 1 for state-owned enterprises, and 0 otherwise
Proportion of independent directors	<i>DirRatio</i>	Number of independent directors divided by total number of board directors
Year dummy	<i>Year</i>	Year fixed effects
Industry dummy	<i>Industry</i>	Industry fixed effects based on the 2012 CSRC industry classification standard

IV. EMPIRICAL RESULTS AND ANALYSIS

A. DESCRIPTIVE STATISTICS

The descriptive statistics of the main variables are shown below.

Table 2. Descriptive Statistics of Main Variables

Variable	N	Mean	SD	Min	P25	Median	P75	Max
Supervise	5146	0.888	0.320	0.693	0.693	0.693	1.099	2.079
ESG	5146	1.224	0.391	0.000	1.099	1.322	1.504	1.833
Size	5146	22.148	1.201	1.000	21.314	22.005	22.836	41.660
Age	5146	2.135	0.831	0.000	1.609	2.197	2.890	3.258
Ownership	5146	0.298	0.134	0.089	0.198	0.279	0.375	0.755
Growth	5146	0.001	0.003	-0.003	-0.000	0.001	0.002	0.016
Balance	5146	0.008	0.006	0.000	0.004	0.007	0.012	0.028
Dual	5146	0.321	0.467	0.000	0.000	0.000	1.000	1.000
Property	5146	0.228	0.419	0.000	0.000	0.000	0.000	1.000
DirRatio	5146	0.380	0.054	0.200	0.333	0.364	0.429	0.571

Table 2 shows that the minimum value of Supervise is 0.693, indicating that all sample firms received more than one inquiry letter, which suggests the presence of sample self-selection that will later be corrected. The median ESG value is 1.322 and the mean is 1.224, indicating that more than half of the sample firms have relatively low annual ESG scores and that there remains substantial room for improvement in ESG performance among Chinese firms. The standard deviation of ESG is 0.391, indicating large differences in ESG performance across A-share listed companies. During 2014-2021, the standard deviation of firm size is 1.201, showing significant heterogeneity in firm size; the average firm age is about 11.519 years, with a minimum of 1 year and a maximum of approximately 41.660 years; the mean shareholding ratio of the largest shareholder is 29.8%; the mean growth rate is 0.1%, fluctuating between -0.3% and 1.6%; the standard deviation of equity balance is 0.006, indicating only small fluctuations; 32.1% of firms combine the chairman and general manager roles; 22.8% are state-owned enterprises; and the average proportion of independent directors is 38.0%.

B. CORRELATION ANALYSIS

Pearson correlation analysis is used to test multicollinearity among the main variables. The results are as follows:

Table 3. Correlation Analysis of Main Variables

Variable	Supervise	ESG	Size	Age	Ownership	Growth	Balance	Dual	Property	DirRatio
Supervise	1									
ESG	-0.239	1								
Size	-0.071	0.175	1							
Age	0.074	-0.167	0.349	1						
Ownership	-0.159	0.116	0.171	-0.078	1					
Growth	-0.133	0.160	0.087	-0.225	0.029	1				
Balance	0.102	-0.041	-0.067	-0.115	-0.682	0.062	1			
Dual	0.006	-0.023	-0.134	-0.187	-0.041	0.043	0.029	1		
Property	-0.116	0.066	0.278	0.329	0.171	-0.103	-0.177	-0.249	1	
DirRatio	0.035	0.030	-0.074	-0.029	0.001	-0.015	-0.041	0.135	-0.081	1

Table 3 shows that the pairwise correlation coefficients among the dependent variable, explanatory variable, and control variables are all below 0.4, indicating that the sample variables do not suffer from serious multicollinearity and can be used for further analysis.

C. BASELINE REGRESSION

To test the impact of inquiry letter regulation on corporate ESG performance, this paper estimates Model (1) using linear regression. The baseline regression results are shown in Table 4.

Table 4. Regression Results for the Effect of Inquiry Letter Regulation on Corporate ESG Performance

Variable	(1) ESG	(2) ESG	(3) ESG
Supervise	-0.292*** (-13.696)	-0.230*** (-11.131)	-0.227*** (-11.441)
Size		0.072*** (11.132)	0.074*** (11.231)
Age		-0.114*** (-12.094)	-0.121*** (-13.342)
Ownership		-0.010 (-0.128)	-0.005 (-0.069)
Growth		8.159*** (5.451)	7.708*** (4.844)
Balance		-1.699 (-1.062)	-1.522 (-0.984)
Dual		-0.026* (-1.908)	-0.030** (-2.284)
Property		0.058*** (2.857)	0.068*** (3.365)
DirRatio		0.396*** (3.261)	0.411*** (3.438)
Year/Industry	No	No	No
Cons	1.484*** (80.434)	-0.072 (-0.513)	1.484*** (80.434)
N	5146	5146	5146
Adj. R ²	0.057	0.141	0.057

In Table 4, column (1) reports that without any control variables, the regression coefficient of inquiry letter regulation on ESG performance is significantly negative at the 1% level. Columns (2) and (3) show that the conclusion remains unchanged after adding control variables and after further considering fixed effects. The coefficient of *Supervise* in column (3) is -0.227, significant at the 1% level. These results indicate that inquiry letter regulation significantly reduces corporate ESG performance, supporting H1b.

Since the baseline regression shows that inquiry letter regulation significantly suppresses corporate ESG performance, the paper further explores its internal mechanisms. Following Huang Zhizhong et al. (2022) and Li Shigang et al. (2022) [21-22], agency cost is measured by the ratio of administrative expenses to operating revenue. Financing constraints are commonly measured by either single indicators or composite indices. Single indicators cannot fully capture financing constraints [23]. Composite indices such as the SA index and the WW index are commonly used [24], and the WW index has broader economic meaning than other measures [25]. Therefore, this paper uses the WW index to measure financing constraints [26-27].

Table 5. Effect of Inquiry Letter Regulation on Agency Costs and Financing Constraints

Variable	(1) Cost	(2) WW
Supervise	0.026*** (3.868)	0.017*** (8.286)
Size	-0.033*** (-12.541)	-0.050*** (-62.845)
Age	0.009** (2.475)	0.009*** (8.649)
Ownership	-0.018 (-0.726)	-0.051*** (-5.754)
Growth	-2.533*** (-4.194)	-4.035*** (-14.195)
Balance	0.131 (0.250)	-0.650*** (-3.801)
Dual	0.006 (1.193)	0.000 (0.140)
Property	-0.012** (-2.071)	0.001 (0.659)
DirRatio	0.059 (1.405)	0.005 (0.366)
Year/Industry	Yes	Yes
Cons	0.879*** (9.972)	0.052** (2.312)
N	5284	4299
Adj. R ²	0.325	0.706

Columns (1) and (2) of Table 5 report the effects of inquiry letter regulation on agency costs and financing constraints, respectively. The results show that inquiry letter regulation is significantly positively associated with both agency costs and financing constraints at the 1% level, thereby validating the theoretical logic behind H1b.

D. ROBUSTNESS TESTS

The paper manually compiles the annual number of inquiry letters received by each firm from the CSMAR inquiry letter information table for listed firms, then uses the natural logarithm of that number as the replacement variable for *Supervise*. The regression results are shown in Table 6.

Following prior studies [18,28], the paper also measures corporate ESG performance using the total social responsibility score published by Hexun and multiplies it by 0.01 to avoid the influence of a large range [29]. The results in column (2) remain robust. In addition, because inquiry letter regulation may not affect current-period ESG performance immediately and to avoid simultaneity bias between variables [30], the control variables and the core explanatory variable are lagged by one period. Column (3) shows that the coefficient of *Supervise* is -0.285 , still significant at the 1% level.

Table 6. Robustness Test Results

Variable	(1) ESG	(2) ESG	(3) ESG _{t+1}
<i>Supervise</i>	-0.154*** (-10.808)	-0.049*** (-8.424)	-0.285*** (-11.406)
<i>Size</i>	0.069*** (9.416)	0.024*** (10.272)	0.063*** (8.662)
<i>Age</i>	-0.124*** (-12.290)	-0.015*** (-5.408)	-0.093*** (-9.042)
<i>Ownership</i>	-0.003 (-0.035)	0.149*** (6.674)	-0.026 (-0.324)
<i>Growth</i>	10.564*** (4.493)	5.677*** (9.546)	15.494*** (8.580)
<i>Balance</i>	-2.036 (-1.172)	1.538*** (3.346)	-3.025* (-1.687)
<i>Dual</i>	-0.034** (-2.289)	-0.002 (-0.580)	-0.011 (-0.720)
<i>Property</i>	0.058*** (2.628)	0.003 (0.601)	0.095*** (4.403)
<i>DirRatio</i>	0.391*** (2.930)	0.025 (0.673)	0.377*** (2.844)
<i>Year/Industry</i>	Yes	Yes	Yes
<i>Cons</i>	-0.364* (-1.927)	-0.305*** (-3.847)	0.291 (1.363)
<i>N</i>	4140	4477	4115
<i>Adj. R²</i>	0.198	0.216	0.210

E. ENDOGENEITY TESTS

There may be reverse causality between the frequency of inquiry letter regulation and corporate ESG performance. Firms with poor ESG performance may attract more attention from regulators and therefore receive more inquiry letters. In addition, only firms that have already received inquiry letters have data on the frequency of such regulation, and unobservable factors may jointly affect inquiry letter frequency and ESG performance, creating endogeneity problems. To mitigate endogeneity caused by reverse causality and sample self-selection, this paper uses an instrumental variable approach, the Heckman two-stage method, and propensity score matching (PSM).

The mean level of inquiry letter regulation within the same year and industry (*Tool*) is used as the instrumental variable [31]. Since listed companies in the same year and industry face similar market environments, industry risks, and regulatory conditions, the instrument satisfies the relevance condition. At the same time, corporate ESG performance is mainly determined by firm-specific factors, and the influence of the external environment is relatively limited, so the instrument is also argued to satisfy exogeneity. *Tool* passes the over-identification and weak-instrument tests, and column (1) of Table 7 shows that inquiry letter regulation remains significantly negatively associated with ESG performance at the 5% level.

The paper further uses the Heckman two-stage approach. In the first stage, a binary variable *Virtual* is constructed based on whether a listed firm is subject to inquiry letter regulation, and *Tool* is added to estimate a Probit model to obtain the inverse Mills ratio (IMR). In the second stage, IMR is added to Model (1) as a control variable. Columns (2) and (3) of Table 7 show results consistent with the main conclusion.

The paper also uses PSM to further reduce endogeneity concerns. According to the value of *Virtual*, the sample is divided into a regulated group (*Virtual* = 1) and a non-regulated group (*Virtual* = 0), and 1:1 nearest-neighbor matching is conducted using all control variables. The estimated average treatment effect on the treated (ATT) is -0.157 , with a *t* value of -21.3 , whose absolute value exceeds 1.96 . A balance test shows that the standardized errors of all matched variables are below 5%. Regression on the matched sample, reported in column (4), still shows that *Supervise* significantly suppresses ESG performance at the 1% level, further supporting the reliability of the conclusion.

Table 7. Endogeneity Test Results

Variable	(1) ESG	(2) Virtual	(3) ESG	(4) ESG
<i>Tool</i>		-0.232** (-2.055)		
<i>Supervise</i>	-0.153** (-2.237)		-0.231*** (-11.346)	-0.109*** (-4.985)

Variable	(1) ESG	(2) Virtual	(3) ESG	(4) ESG
IMR			0.326 (1.015)	
Size	0.075*** (15.218)	-0.102*** (-10.346)	0.050** (2.014)	0.146*** (6.753)
Age	-0.124*** (-16.851)	0.238*** (16.413)	-0.064 (-1.105)	-0.030 (-1.029)
Ownership	0.009 (0.162)	-1.039*** (-9.345)	-0.260 (-0.968)	0.032 (0.210)
Growth	8.346*** (5.216)	7.467* (1.823)	9.580*** (3.841)	2.231 (1.190)
Balance	-1.606 (-1.367)	-0.528 (-0.222)	-1.724 (-1.110)	-0.712 (-0.240)
Dual	-0.029*** (-2.670)	0.018 (0.793)	-0.026* (-1.838)	-0.035* (-1.650)
Property	0.075*** (4.707)	-0.435*** (-15.837)	-0.038 (-0.348)	-0.029 (-0.684)
DirRatio	0.400*** (4.337)	0.627*** (3.431)	0.557*** (2.870)	0.612*** (3.099)
Year/Industry	Yes	Yes	Yes	Yes
Cons	-0.129 (-0.676)	0.471 (1.272)	-0.268 (-0.938)	-1.685*** (-3.347)
N	5146	20476	5137	4171
Adj. R ²	0.193	-	0.197	0.195

F. FURTHER ANALYSIS

The regression results of inquiry letter regulation on corporate ESG performance under different firm heterogeneity characteristics are reported in Table 8.

Research shows that the internal control index is positively related to internal control quality: the larger the internal control index, the higher the firm's internal control quality and the better its internal governance environment [32]. Better internal control quality helps managers reduce self-interest, seize investment opportunities, and make sound investment decisions [33]. Therefore, after a listed firm receives inquiry letter regulation, a sound internal governance environment should facilitate timely internal rectification, encourage management to focus on long-term investment, and weaken the inhibitory effect of inquiry letter regulation on ESG performance. The sample is divided into a high internal control quality group and a low internal control quality group according to whether the internal control index is greater than or equal to the median internal control index for firms in the same year and industry. The internal control index comes from the DIB database.

The results in columns (1) and (2) show that in the high internal control quality group, the coefficient of *Supervise* is -0.139, significant at the 1% level, whereas in the low internal control quality group, the coefficient is -0.207, also significant at the 1% level. The *suest* test shows that the difference in coefficients between the two subsamples is 0.047, significant at the 5% level. This indicates that the inhibitory effect of inquiry letter regulation on ESG performance is stronger among firms with poorer internal governance environments.

Audit quality also affects the effectiveness of firms' internal and external governance. From the perspective of external governance, high-quality auditing reduces information asymmetry in financial reporting and lowers the cost of equity capital; from the perspective of internal governance, high-quality auditing reduces the likelihood of managerial opportunism [34]. Audit quality influences firms' internal and external supervisory environment and may therefore affect the probability that firms are subject to inquiry letter regulation. After receiving an inquiry letter, audit quality may also influence a firm's rectification decisions, and firms may pay more attention to internal and external governance in order to reduce the likelihood of similar events recurring. Based on this logic, the inhibitory effect of inquiry letter regulation on ESG performance is expected to be weaker in firms with higher audit quality.

Audit quality is measured by whether the listed firm hires one of the international Big Four accounting firms [31]. Firms hiring a Big Four auditor are classified as having high audit quality; otherwise, they are classified as having low audit quality. The corresponding regressions are reported in columns (3) and (4) of Table 8. The results show that the inhibitory effect of inquiry letter regulation on ESG performance is concentrated mainly in listed firms with poor audit quality. Such firms may mitigate the negative effect of inquiry letter regulation on ESG performance by hiring auditors from the international Big Four and thereby improving audit quality.

Table 8. Inquiry Letter Regulation, Firm Heterogeneity, and Corporate ESG Performance

Variable	(1) High internal control quality	(2) Low internal control quality	(3) High audit quality	(4) Low audit quality
<i>Supervise</i>	-0.139*** (-5.267)	-0.207*** (-9.014)	0.106 (1.171)	-0.235*** (-14.405)
Size	0.065*** (10.553)	0.071*** (9.009)	0.050** (2.143)	0.075*** (14.259)
Age	-0.095*** (-10.649)	-0.124*** (-9.871)	-0.066* (-1.970)	-0.123*** (-15.810)

Variable	(1) High internal control quality	(2) Low internal control quality	(3) High audit quality	(4) Low audit quality
Ownership	-0.104 (-1.501)	0.005 (0.051)	0.583** (2.292)	-0.034 (-0.581)
Growth	0.784 (0.435)	10.804*** (3.903)	2.849 (0.413)	7.712*** (4.755)
Balance	-2.323 (-1.603)	-1.236 (-0.694)	17.579*** (2.636)	-1.905 (-1.630)
Dual	-0.036*** (-2.619)	-0.038** (-2.194)	-0.001 (-0.018)	-0.030*** (-2.647)
Property	0.067*** (3.902)	0.048** (2.264)	0.172*** (2.934)	0.064*** (4.529)
DirRatio	0.515*** (4.386)	0.351** (2.455)	0.279 (0.605)	0.421*** (4.405)
Year/Industry	Yes	Yes	Yes	Yes
Cons	0.061 (0.233)	-0.366 (-0.864)	-0.940 (-1.618)	-0.036 (-0.148)
N	2238	2528	176	4970
Adj. R ²	0.173	0.184	0.412	0.192

Between-group coefficient difference test: 0.047** for the internal control quality split.

V. CONCLUSIONS AND RECOMMENDATIONS

A. CONCLUSIONS

Using panel data on Shanghai and Shenzhen A-share listed firms from 2014 to 2021, this paper examines whether inquiry letter regulation affects corporate ESG performance and further studies the underlying mechanisms, thereby providing empirical evidence for subsequent research. The main conclusions are as follows.

Inquiry letter regulation significantly suppresses corporate ESG performance, and this finding remains valid after multiple robustness and endogeneity tests. Further analysis of the mechanism shows that inquiry letter regulation mainly reduces corporate ESG performance by increasing financing constraints and agency costs. Heterogeneity analysis indicates that the lower the audit quality and the weaker the internal control quality, the stronger the inhibitory effect of inquiry letter regulation on corporate ESG performance.

B. RECOMMENDATIONS

In light of the above conclusions, this paper proposes the following recommendations.

Regulatory authorities should further raise the cost of corporate violations. Stock exchanges should enhance their authority, broaden the scope of non-punitive regulation such as inquiry letters, and strengthen regulatory effectiveness [3]. For example, penalty measures could be introduced for delayed responses, and close attention should be paid to various trading activities before and after firms receive inquiry letters so as to strictly prevent insider trading.

Firms that receive inquiry letters should strengthen risk awareness, improve internal governance mechanisms, disclose relevant information in a timely and adequate manner, clarify management responsibilities and legal liabilities, and increase the penalties imposed on managerial misconduct and violations. In addition, recipient firms should proactively standardize their operations and conduct both regular and irregular internal self-inspections.

Firms should also recognize the importance of sustainable development and maintain long-term, effective investment in environmental, social, and corporate governance dimensions. ESG should be incorporated into firms' long-term development planning and target management, and supporting rules and institutions should be improved so as to enhance ESG performance. Moreover, firms should proactively engage in full information disclosure while adhering to corporate self-governance.

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