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Exit for Entry? The Impact of Institutional Investors' Exit Threats on Green Development in Heavily Polluting Enterprises

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Abstract

The 20th National Congress of the Communist Party of China emphasized the need to firmly establish and practice the concept of "lucid waters and lush mountains are invaluable assets." In March 2025, the Ministry of Ecology and Environment of China officially included heavily polluting industries in the nationwide carbon emission trading system, marking the formal entry of heavy polluting enterprises into a path of green transformation under stringent national supervision. Green investments, which can substantially reduce emissions and drive the green upgrade of industrial chains, have long-term value. Existing research has mainly explored the differences in green investments from the macro perspectives of environmental regulation and green finance, but insufficient attention has been paid to the green effectiveness of institutional investors as a key governance body. Compared to "voicing" and "actual exit", institutional investors can create more sustainable external governance forces by signaling a "potential exit", leading to market repricing and capital cost pressure. This method is more feasible in the context of high shareholding concentration in China. Based on exit threat theory, we expand the concept of exit threat from traditional corporate governance to the scenario of green transformation in heavily polluting enterprises. It proposes and demonstrates that the exit threat of institutional investors positively promotes green investments in heavy-polluting enterprises, thus showing the green governance effectiveness of "exit for entry." This conclusion not only responds to the debate on the effectiveness of exit-based governance but also provides support for guiding institutional investors toward "long-term money and long-term investment". It also provides a reference for enhancing the targeted nature of green transformation in heavy-polluting enterprises under the background of expanding the carbon market.

Keywords

Institutional Investors, Exit Threat, Green Investment, Heavily Polluting Enterprises, Corporate Governance

1. Introduction

Since the implementation of the 14th Five-Year Plan, China has incorporated the "dual carbon" goals into its top-level design. In March 2025, the "National Carbon Emission Trading Market Plan for the Steel, Cement, and Aluminum Smelting Industries" included heavily polluting industries into the unified national carbon trading system. In January 2026, the "Guidelines for the Construction of Zero-Carbon Factories" clearly proposed that by 2030, the construction of zero-carbon factories should gradually be extended to traditional high-energy-consuming industries. Against this backdrop, heavily polluting enterprises face unprecedented transformation pressures [1]. However, traditional environmental compliance upgrades or incremental investments are often inadequate to meet the requirements for systemic transformation [2]. Green investment refers to investments aimed at mitigating environmental problems through research and development activities and budgeting for green and environmental protection technologies [3]. It includes capital investments related to pollution control and energy-saving carbon reduction, such as environmental protection equipment updates, energy-saving technological upgrades, and clean production transformations. It also encompasses green research and development, low-carbon technology reserves, and systemic transformations for green supply chains. For example, research expenditures [4], renewable energy research and development investments [5] [6], and environmental research and technology investments [7] are part of this concept. Existing studies on green investment have focused on macro-level institutional environments such as environmental regulations [8] [9] and green finance policies [10], as well as micro-level governance such as control rights allocation [11] and CEO green experience [12]. However, discussions on the role of institutional investors, a key stakeholder, remain relatively underdeveloped.

Institutional investors are specialized legal entities that manage their own or raise funds to conduct securities trading and other investment activities [13]. They hold significant influence over corporate decision-making, including CSR policies [14], and participate in corporate governance primarily through three methods: voicing, exit, and exit threats. Specifically, institutional investors actively "voice" their concerns through methods such as competing for board seats and voting at shareholder meetings [15]. This voice-based participation mechanism grants them the right to intervene in the governance of collectively owned organizations, providing a check on management's discretionary power [16]. However, in the context of highly concentrated ownership in China, the implementation of "voicing" is significantly more challenging [17]. As China has undergone shareholding

structure reforms and increased share liquidity, Ren *et al.* (2025) [14] point out that the "exit" mechanism is more influential than the "voicing" mechanism, but "exit" is often accompanied by high costs, irreversible consequences, and short-lived governance effects [18] [19]. In this context, institutional investors, with their ability to exit at any time [20] and the high cost of exit [21], can generate a "threat" effect by signaling a "potential exit". This effect can pressure companies, guiding them to improve their decision-making or governance behavior [19] [22]. The governance costs and influence are more controllable, and the governance effect is more sustainable [23]. However, scholars still hold inconsistent conclusions regarding its role in corporate environmental governance and green development. Some scholars argue that institutional investors, by signaling an exit, can effectively encourage companies to pursue green innovation [21], having a robust positive impact on the company's future ESG performance [22]. However, other scholars have raised objections, pointing out that this exit threat may not necessarily lead to significant improvements in corporate ESG performance and could become merely symbolic, potentially even amplifying company risks by causing short-term market volatility [24]. But can institutional investors use exit threats to promote green investment in heavily polluting enterprises? Based on exit threat theory, we delve into how the exit threat of institutional investors can influence green investment in heavily polluting enterprises.

2. Theoretical Analysis

Exit Threat Theory originates from the threat theory of negotiation within the framework of game theory. This theory suggests that when an actor has the ability to exit a relationship, and such an exit would impose significant costs or losses on the other party, even if the actor does not actually exit, they can exert pressure on the other party by signaling a "potential exit". This results in behavioral intervention or the redistribution of benefits. The theory highlights two key conditions: first, the feasibility of exit, meaning one party has sufficient liquidity, share, and position to create a feasible threat; second, the cost of exit, where one party realizes that the other's exit would incur high costs, thus making them more inclined to compromise. Unlike traditional actual actions, Exit Threat Theory emphasizes that the "intention to exit" itself carries strategic value [25]. Its core function is to stimulate the self-adjustment of the other party's behavior through potential risks, thereby creating a "soft constraint" in institutional, organizational, or market interactions. This theory has become an increasingly recognized external governance mechanism in recent corporate governance research.

Institutional investors don't need to directly intervene in governance through methods like voting or proposals (voicing); instead, they can create a "threat" effect by releasing signals of a "potential exit", which imposes governance constraints on the company [25]. Unlike actual exit, the exit threat emphasizes a constraint mechanism based on expectations; in contexts where shareholding is concentrated and the cost of voicing is high, exit threats become a more feasible and

sustainable governance method for institutional investors.

3. Research Hypotheses

In the capital market, the governance role of institutional investors doesn't always manifest through "voting and voicing" or public pressure. A more common and market-oriented pathway is through portfolio adjustments, signaling to the market and triggering price mechanisms to impose constraints on the company [26]. In scenarios where shareholding is concentrated and the control structure is stable, the governance effect of institutional investors' "voicing" may be limited, while the governance implications of the exit mechanism are more likely to be amplified by the market [27]. Exit Threat Theory emphasizes this "exit for entry" constraint approach: institutional investors do not necessarily need to actually reduce their holdings, but by fully releasing a "potential exit" attitude, they can be identified and interpreted by the capital market as a negative signal, triggering a repricing of the company's value and risk [28]. This pricing response is not merely an "emotional" reaction but alters the company's position in the capital market through price discovery mechanisms: on the one hand, negative signals tend to lead to an increase in risk premiums and valuation discounts, worsening the market conditions for equity financing, debt financing, and refinancing tools; on the other hand, increased stock price volatility raises the market's assessment of the company's uncertainty, causing external investors to be more cautious in their capital allocation, which in turn increases the financing constraints faced by the company [29]. For heavily polluting enterprises, this signal is more likely to be amplified in terms of price, as their environmental risk exposure is higher, and their sensitivity to negative information is greater. Environmental incidents or inadequate governance are more likely to trigger the capital market to reassess the future cash flows and compliance costs of these heavily polluting enterprises, which then manifest as abnormal fluctuations in stock prices and rising risk premiums [28]. When the exit signal accumulates price pressure, the constraints the company faces no longer remain at the abstract compliance level but turn into more visible valuation discounts and capital market uncertainties. The weakening stock price and amplified volatility not only reduce the company's financing conditions and refinancing space in the capital market but also form negative expectations for external stakeholders, further solidifying the market's impression of the company [29].

Under these external constraints, if a company wants to alleviate the pricing pressure caused by exit signals, it needs to take actions that are identifiable to the market and capable of changing risk expectations, thereby repairing the market image and stabilizing investor confidence. Existing research suggests that companies can enhance transparency and credibility by improving the quality of environmental information disclosure, thus improving external evaluations and reducing information asymmetry [30]; they can also mitigate reputation penalties caused by symbolic actions being recognized by constraining social responsibility

communication, preventing further deepening of market distrust [31]; simultaneously, by promoting green innovation and other more substantive and verifiable green actions, companies can signal the market that their "transformation capacity has improved", thus offsetting the negative pricing pressure [32]. Furthermore, among these market-recognizable green actions, green investment carries a more direct resource allocation implication and stronger observability. Whether it is updating environmental protection equipment, energy-saving technological upgrades, or green research and development and low-carbon technology investments, they are more likely to be used by the capital market to assess changes in the company's environmental risk and transformation capabilities [3]. Compared to "soft signals" like textual descriptions or stage-based information disclosures, green investments correspond to real financial inputs and project implementations, making them more valuable to the market in judging whether a company possesses the capacity and willingness to continue its transformation, and thereby has stronger "pricing restoration" potential. Related research also provides evidence from the capital market's response angle, indicating that green investments can, to some extent, reduce stock price volatility, stabilize market expectations, and have a positive effect on restoring risk profiles and alleviating uncertainty [33]. This means that green investment is not only an environmental governance measure but may also become a tool for hedging risks in the capital market—when institutional investors' exit signals cause risk premiums to rise and volatility to increase, it will successfully threaten enterprises to increase green investment and improve verifiable transformation actions [29]. Based on this, we argue that the stronger the exit threat of institutional investors, the stronger the motivation for heavily polluting enterprises to increase green investment.

4. Conclusions and Implications

We approach the issue from the perspective of "exit-based governance" in the capital market and explore how institutional investors' exit threats can drive green investment in heavily polluting enterprises. We argue that institutional investors' exit threats are not merely an expression of investors' attitudes, but rather an external governance force that can be quickly recognized by the market and translated into price constraints. When institutional investors release the signal of a "potential exit", the market often reprices the company's value and risk, which manifests as capital market consequences such as valuation discounts, increased stock price volatility, and higher risk premiums. For heavily polluting enterprises, which are more exposed to environmental risks and more sensitive to negative information, the price response is more likely to be amplified and form sustained pressure, compelling the companies to take actions that are recognizable by the market and have verifiable characteristics to restore expectations and stabilize pricing. Among a series of green actions available, green investment, due to its direct resource allocation implications, strong observability, and high verifiability, is more likely to become a key strategy for enterprises to hedge against negative

pricing pressure, improve their risk profile, and rebuild capital market confidence. Thus, the stronger the exit threat, the stronger the motivation for heavily polluting enterprises to increase their green investments.

The main contributions of our work are as follows. First, we extend the concept of institutional investors' exit threats from traditional corporate governance issues to the context of green transformation in heavily polluting enterprises, focusing on their impact on green investment in these enterprises, thus enriching the micro-foundations and governance explanation framework for green investment research. Second, we emphasize the uniqueness of exit threats, highlighting the "exit for entry" governance approach. This approach does not require actual exit but, by signaling a "potential exit", triggers market repricing, transforming price consequences such as stock price volatility, risk premiums, and valuation discounts into external constraints, which further drive enterprises to respond with more observable and verifiable green investments. Third, we focus on heavily polluting enterprises, which have higher environmental risk exposure and greater sensitivity to negative information, and reveal that exit threats are more likely to transform into explicit price pressure and transformation constraints in these enterprises, thus highlighting the practical applicability of their green governance effectiveness and providing a reference for improving the targeting of green transformation in heavily polluting enterprises.

Based on the above conclusions, we draw the following policy recommendations and managerial insights. First, the government should continue to improve the foundation for green information disclosure and environmental risk pricing. The more transparent the information environment and measurable the green investments, the easier it will be for exit threats to form effective constraints and guide capital towards enterprises that are genuinely undergoing transformation, thus strengthening the resource allocation function of the capital market in green transformation. At the same time, the government should encourage the entry of medium- and long-term funds into the market and enable institutional investors to play the role of a "stabilizer", making exit-based governance more sustainable and positive in the context of green transformation. Second, for heavily polluting enterprises, green investment should be redefined from a "cost item" to a "market credit and risk management tool," enhancing the foresight and sustainability of green investment and reducing the risks brought about by symbolic actions. At the same time, enterprises should strengthen the verifiability and disclosability of green investments, managing external expectations through project progress, energy-saving and carbon-reduction effects, and the results of technological upgrades, thereby mitigating the repricing shock caused by exit signals. Third, institutional investors themselves should more fully leverage the advantages of long-term funds and professional pricing in adjusting holdings, communication, interaction, and disclosure evaluations, forming clearer and more stable green expectations and constraints to enhance the credibility of the signals and more effectively drive substantial green transformation in heavily polluting enterprises.

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Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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