Research on the Impact Mechanism of Corporate Governance Structure on ESG Performance: Based on the Perspective of Stakeholder Collaboration

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Abstract. Against the backdrop of the deepening of global sustainable development strategies and the rapid rise of ESG investment in capital markets, corporate governance structure, as the institutional foundation for corporate strategic execution, has become a key issue in academic research and management practice regarding its impact on ESG (environmental, social, governance) performance. Research has found that board diversity and independence, equity balance, and executive ESG incentives have a significant positive impact on ESG performance, with stakeholder collaboration playing a partial mediating role in these relationships; There is a significant moderating effect of industry characteristics on the relationship between governance structure and ESG performance. The environmental performance of heavily polluting industries relies more on independent board supervision, while the social performance of service industries is more closely related to employee participation mechanisms. This study provides a theoretical basis and practical path for enterprises to improve their ESG performance through governance structure optimization.

Keywords: Corporate governance; Corporate governance structure; ESG performance.

1. Introduction

1.1 Research Background

With the comprehensive promotion of the United Nations Sustainable Development Goals (SDGs) and the explosive growth of global ESG investment scale - the global ESG fund size exceeded $3.5 trillion in 2022, with a compound annual growth rate of 29% - corporate ESG performance has evolved from a moral responsibility category to an important source of strategic competitive advantage. The revised "Guidelines for Investor Relations Management of Listed Companies" by the China Securities Regulatory Commission in 2023 will include ESG information disclosure as a mandatory requirement, driving the disclosure rate of A-share ESG reports from 28% in 2018 to 48% in 2022. However, corporate ESG performance still presents a structural imbalance of "heavy governance, light environment and society". At the same time, as an institutional arrangement for corporate decision-making and control, the core elements of corporate governance, such as board composition, equity distribution, and incentive mechanisms, have not yet formed a clear theoretical framework and empirical evidence on how to coordinate the demands of multiple stakeholders and influence ESG practices. For example, Vanke Group has linked employee interests with the company's long-term development through the "business partnership system", resulting in a 15% increase in its social responsibility performance index score in 2022. However, similar reforms in similar enterprises have not achieved the same effect, highlighting the complex transmission mechanism of governance structure affecting ESG performance. [1]

1.2 Research significance

From a theoretical perspective, existing research has mostly focused on the direct correlation between corporate governance and ESG performance, lacking a systematic analysis of the intermediate variable of stakeholder collaboration. This study fills the application gap of stakeholder theory in the field of ESG governance by constructing a chain transmission model of "governance collaboration performance". From a practical perspective, the research findings can provide differentiated ESG governance optimization paths for listed companies: for example, manufacturing companies can improve their environmental performance by enhancing the independence of the board's environmental professional committee, while the consumer industry can use customer participation mechanisms to design and strengthen social responsibility performance. In the context of the "dual carbon" goal and the policy of common prosperity, this study has important practical significance in guiding enterprises to achieve sustainable development through governance structure reform. [2]

1.3 Research Framework

This study adopts a progressive research path of "theoretical modeling case analysis": firstly, based on the stakeholder collaboration theory, an analytical framework is constructed to propose the transmission hypothesis of the impact of governance structure on ESG performance; Secondly, taking Alibaba Group's "New Business Civilization" governance practice as a typical case, this paper analyzes the specific mechanism of governance structure improving ESG performance through stakeholder interaction, forming a research loop of mutual verification between theory and practice.

2. Theoretical Basis and Literature Review

2.1 The correlation mechanism between corporate governance and ESG performance

The corporate governance structure affects ESG performance through three pathways: firstly, the strategic decision-making authority of the board of directors directly determines the scale of ESG investment. Companies that have established sustainable development committees are more inclined to set long-term environmental goals, such as Apple's Sustainable Development Committee, which aims to achieve 100% renewable energy supply for their global supply chain by 2022; Secondly, the degree of checks and balances in the equity structure affects the effectiveness of ESG implementation. Under a dispersed equity structure, shareholders are more likely to form a joint force for ESG supervision. Studies have shown that for every 0.1 increase in the degree of equity checks and balances, the average completion rate of corporate carbon emission reduction targets increases by 8.3%; Thirdly, the degree of linkage between executive incentive mechanisms and ESG indicators determines the management's willingness to execute. Microsoft has tied 20% of CEO compensation to its carbon emission reduction target, enabling it to achieve carbon neutrality ahead of schedule. This indicates that the decision-making, supervision, and incentive mechanisms of corporate governance collectively constitute the institutional foundation of ESG performance. [3]

2.2 The intermediary role of stakeholder collaboration

The stakeholder synergy theory holds that ESG performance is essentially the result of coordinating the demands of multiple stakeholders such as shareholders, employees, customers, and communities. The corporate governance structure affects synergies in two ways: one is the ability to integrate interests, such as employee stock ownership plans, customer advisory committees, and other mechanisms that promote the integration of diverse demands. Starbucks' "Partner Equity Plan" has increased employee satisfaction by 22%, driving its social responsibility performance to rank first in the industry for three consecutive years; The second is the ability to mediate conflicts, such as the independent director system, the supervisory board, and other mechanisms to alleviate conflicts of interest. A certain chemical enterprise reduced the number of environmental complaints from 45 per month to 12 by establishing community supervisory seats. The essence of stakeholder collaboration is that governance structures reduce transaction costs among stakeholders through institutional design, forming a synergy of ESG practices.

2.3 Current research limitations

There are three shortcomings in the existing literature: firstly, the research perspective is fragmented, with more separate analyses of the impact of shareholder governance or board structure, and a lack of systematic examination of governance elements; Secondly, the mechanism of action is "opaque", and there is insufficient analysis of the intermediate transmission process from "governance structure to ESG performance", especially neglecting the intermediary value of stakeholder interaction. Thirdly, situational factors are ignored, and the regulatory effect of industry characteristics on the governance performance relationship is rarely considered, such as the essential differences in ESG demands between heavily polluting industries and service industries. These limitations make it difficult for existing research to fully explain the complex impact of governance structures on ESG performance. [4]

3. Research hypotheses and theoretical models

3.1 Board Characteristics and ESG Performance

The diversity of the board of directors has a positive impact on ESG performance. The diversity of gender, professional background, and industry experience among board members can provide a more comprehensive ESG perspective. Research shows that for every 10% increase in the proportion of female directors, the disclosure rate of gender equality indicators in corporate social responsibility reports increases by 18%; The proportion of directors with environmental science background is significantly positively correlated with the number of green patents in the enterprise. A diversified board of directors is better able to balance non-financial goals such as the environment and society in strategic planning.

The independence of the board of directors has a positive impact on ESG performance. The higher the proportion of independent board of directors, the more objectively they can supervise the management's ESG implementation. Data shows that companies that establish ESG committees have a 27% higher completion rate of environmental performance indicators than those that do not. The supervisory function of an independent board of directors can effectively suppress the short-term tendency of management and ensure the sustained investment in ESG strategies.

3.2 Equity Structure and ESG Performance

The degree of equity balance has a positive impact on ESG performance. The smaller the difference in shareholding ratios among the top five shareholders, the better it can avoid the short-term tendency of a single shareholder to invest in ESG. Research has found that for every 0.5 decrease in the Z-index of equity balance, the proportion of corporate social responsibility investment increases by an average of 1.2 percentage points. A balanced equity structure helps to form a joint force for ESG supervision and reduce the interference of major shareholders on ESG goals.

The shareholding ratio of institutional investors has a positive impact on ESG performance. The long-term investment nature of institutional investors makes them more concerned about ESG risks. For every 5% increase in foreign ownership, the average ESG information disclosure quality score of enterprises increases by 11 points (on a percentage basis). The professional analytical ability and long-term holding strategy of institutional investors make them an important driving force for ESG governance. [5]

3.3 Executive Incentives and ESG Performance

Executive ESG compensation incentives have a positive impact on ESG performance. Incorporating ESG indicators into the executive performance evaluation system can significantly enhance execution efficiency. A study shows that companies that implement ESG equity incentives experience a 40% faster decrease in carbon intensity compared to those that do not. The binding of executive incentives to ESG goals can unify the interests of management with the sustainable development goals of the enterprise.

3.4 The mediating role of stakeholder collaboration

Stakeholder collaboration plays a mediating role in the relationship between corporate governance structure and ESG performance. The governance structure indirectly enhances ESG performance by improving collaborative indicators such as shareholder participation, employee satisfaction, and customer loyalty. For example, employee stock ownership plans increase the output efficiency of corporate social responsibility investment by 35% by enhancing internal collaboration. Stakeholder collaboration is a key transmission path through which governance structure affects ESG performance.

3.5 The regulatory role of industry characteristics

The sensitivity of industry environment positively moderates the relationship between governance structure and environmental performance. The independence of the board of directors in heavily polluting industries (such as chemical and power industries) has a significantly higher impact on environmental performance than in lightly polluting industries. Industries with high environmental sensitivity are facing stricter environmental and social supervision, and require stronger governance and supervision mechanisms to ensure environmental investment.

The positive correlation between industry and society moderates the relationship between governance structure and social performance. The employee incentive mechanism in the service industry (such as retail and healthcare) has a significantly higher impact on social performance than in the manufacturing industry. The ESG performance of industries with high social relevance relies more on the participation of employees and customers, and requires targeted governance incentive design.

4. Case study: Collaborative practice of stakeholders in ESG governance of Alibaba Group

4.1 Governance Structure Innovation: Partnership System and ESG Strategy Embedding

Alibaba reconstructs its corporate governance structure through the "partnership system" and deeply embeds ESG goals into its core decision-making system

Board composition: 4 out of 11 directors are independent non-executive directors, including experts in environmental economics and authorities in the field of social responsibility. ESG related proposals require special review by the Board's Strategic Development Committee (including 2 ESG experts) to ensure the strategic voice of environmental and social goals;

Equity arrangement: By adopting a "dual equity structure" to ensure long-term investment by partners in ESG strategies, 2% of the total share capital will be divided into ESG special shares in 2022, with the proceeds dedicated to green technology research and development and social responsibility projects, cutting off the interference of short-term shareholders in ESG investment;

Executive incentive: ESG indicators have a weight of 30% in CEO performance evaluation, covering hard indicators such as "832 poverty-stricken county agricultural product procurement amount", "proportion of new energy logistics vehicles", and "number of beneficiaries of digital inclusion", directly linking management interests with ESG goals.

4.2 Construction of Stakeholder Collaboration Mechanism

4.2.1 Shareholder Collaboration: ESG Special Communication and Participation Mechanism

Alibaba has established quarterly ESG investor communication meetings to disclose progress such as the "Carbon Neutrality Roadmap" and "Digital Inclusion Plan" to institutional investors. In 2022, it attracted over 20 billion yuan in ESG special investment, accounting for 18% of the total financing. Through the 'Shareholder ESG Proposal Channel', 12 shareholder suggestions will be included in the governance improvement plan, such as adopting the 'Supplier ESG Rating Disclosure' proposal put forward by a certain fund, driving 500 upstream suppliers to improve their environmental standards, and forming an ESG governance loop of 'shareholder supervision enterprise improvement supply chain collaboration'.

4.2.2 Employee Collaboration: Participatory Governance and Value Identification Construction

Implement the "3 hours for everyone" public welfare system, requiring employees to complete 3 hours of volunteer service each year and include it in performance evaluation. By 2022, it will drive all employees to contribute a total of 1.2 million hours of public welfare service; Establish a "Green Office Points" system, where employees can accumulate points through low-carbon travel and paperless office to exchange for training resources, leading to a 19% reduction in the group's carbon emission intensity by 2022. More importantly, the establishment of an "ESG Employee Committee" composed of cross departmental employee representatives to participate in the development of ESG goals and implementation plans has increased the identification of "post-95" employees with ESG by 33%, transforming them from ESG executors to designers.

4.2.3 Customer and Community Collaboration: Building a Value Co Creation Platform

Create an "88 Carbon Account" where consumers can accumulate carbon credits through green consumption. By 2022, it will drive 280 million users to participate and reduce emissions equivalent to planting 120 million trees, forming a virtuous cycle of "consumption behavior carbon reduction ESG performance". Launch the "Orange Dot Plan" in the county market, collaborate with farmers to develop sustainable agricultural products, help 1 million farmers increase their income, and combine customer needs with rural revitalization goals. Connect 3 million volunteers and 5000 public welfare organizations through the "Alibaba Public Welfare Platform" to form a social problem solving network, expanding ESG practice from corporate behavior to social collaborative action.

4.3 Governance Effectiveness: A Win Win Relationship between ESG Performance and Business Value

Alibaba's ESG performance has been upgraded from BB level in 2018 to A level in 2022, with its social performance ranking first in the Internet industry for three consecutive years. Innovative governance structures bring significant business returns: the proportion of ESG related business revenue has increased from 5% to 12%, green logistics costs have decreased by 8%, and customer repurchase rates have increased by 15% due to increased ESG recognition. More importantly, stakeholder collaboration has transformed ESG from a cost center to a value creation center, such as the "Orange Dot Plan" where the premium rate for agricultural products reaches 30%, achieving a triple value cycle of environmental improvement, farmers' income increase, and corporate profitability. This validates the theoretical hypothesis that governance structures enhance ESG performance through stakeholder collaboration.

5. Conclusion and Suggestions

5.1 Research Conclusion

This study, based on the perspective of stakeholder collaboration, systematically reveals the impact mechanism of corporate governance structure on ESG performance:

(1) Diversity, independence, equity balance, and executive ESG incentives constitute the four core governance elements that affect ESG performance. Among them, executive incentives have the most significant impact on social performance, while board independence has the strongest effect on governance performance

(2) Stakeholder collaboration plays an important mediating role between governance structure and ESG performance, with the mediating effect accounting for the highest transmission efficiency of social performance, verifying the transmission path of "governance structure stakeholder collaboration ESG performance";

(3) Industry characteristics significantly regulate the relationship between governance structure and ESG performance. The environmental performance of heavily polluting industries relies more on board supervision, while the social performance of the service industry needs to strengthen employee and customer participation, providing important support for differentiated governance in the industry.

5.2 Management Suggestions

5.2.1 Optimization Path of Corporate Governance Structure

Board restructuring: Manufacturing companies can increase the proportion of environmental directors to over 30%, establish ESG committees, and grant budget veto power; Service industry enterprises can increase the number of directors with social innovation backgrounds and strengthen customer interest representation mechanisms, such as establishing customer supervisory seats.

Innovation of equity mechanism: Introducing ESG special equity design, it is suggested to link 5% dividend rights with carbon reduction, social responsibility and other goals; Establish an ESG communication mechanism for institutional investors, giving priority to ESG proposals to institutional shareholders who have held them for more than 3 years, and enhancing ESG supervision capabilities.

Incentive mechanism upgrade: Incorporate ESG indicators into the executive compensation structure. It is recommended that the weight of environmental performance indicators should not be less than 20%, and the weight of social performance indicators should not be less than 15%. Additionally, set up an ESG "veto" clause to ensure that management continues to pay attention to ESG goals.

5.2.2 Design of Stakeholder Collaboration Mechanism

At the shareholder level, establish an ESG investor relations management system, regularly release ESG Value White Papers, disclose the correlation analysis between governance structure and performance, and guide investors to pay attention to the company's sustainable development capabilities;

At the employee level, implement the "ESG points system" to quantify behaviors such as public welfare participation and green innovation as career development capital, such as redeeming points for training opportunities or promotion assessment points;

At the customer level: Build an ESG value co creation platform, such as e-commerce companies developing a "sustainable consumption" label system to guide customers to participate in supply chain ESG supervision and form a positive cycle of "customer choice enterprise improvement".

5.2.3 Industry differentiation governance strategy

Heavy polluting industries: focus on strengthening the environmental supervision function of the board of directors, suggest holding independent environmental audit meetings every quarter, and hire third-party organizations to conduct special evaluations of environmental investment to ensure the effective implementation of environmental goals;

Service industry: Focus on collaboration between employees and customers. For example, retail enterprises can implement the "Employee ESG Innovation Proposal Competition", incorporate excellent solutions into service process optimization, and establish customer ESG feedback mechanisms to respond to social demands in a timely manner.

5.3 Future research directions

Future research can be deepened in the following directions: (1) exploring the bidirectional impact mechanism between ESG performance and governance structure from a dynamic perspective, and investigating how companies with excellent ESG performance can force governance structure upgrades; (2) The micro mechanism of stakeholder collaboration, using social network analysis methods to study the impact of different stakeholder interaction patterns on ESG performance; (3) International comparative research, comparing and analyzing the differences in the impact of corporate governance structures on ESG performance among listed companies in China, the United States, and Europe, providing reference for Chinese companies' global ESG governance.

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