

# How does Government Support Promote the Relationship between ESG Performance and Innovation?

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**Abstract:** With the development of China's economy and the continuous upgrading of industrial structure, the competition among enterprises is becoming increasingly fierce. In order to occupy a favorable position in the fierce market competition, enterprises have taken different degrees of incentive measures to improve their competitiveness. Among many incentives, government support behavior is one of the important factors affecting the ESG performance of enterprises, which not only directly promotes the growth of enterprises, but also promotes the growth of enterprises by improving their innovation ability. Based on this, this paper studies the relationship between government support behavior and enterprise ESG performance and innovation, aiming at exploring effective policy suggestions to improve enterprise performance and promote enterprise sustainable development.

**Keywords:** Government Support Behavior; Enterprise ESG Performance; Enterprise Innovation.

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## 1. Introduction

The relationship between enterprise ESG performance and innovation has always been one of the focus topics for scholars. As a component of the social system, enterprises are not only restricted and influenced by changes in the external environment, but also have internal needs in internal management, which determines that enterprises must face a fiercely competitive market environment during their growth. However, due to the long-term extensive business model of Chinese enterprises, lack of awareness of technological innovation and insufficient innovation ability, many enterprises cannot achieve rapid and healthy growth. Therefore, it is of great significance to promote the relationship between ESG performance and innovation through government support, which is conducive to improving the corporate governance structure and providing a source of power for the long-term development of enterprises.

## 2. The Concept of Enterprise ESG

Enterprise ESG refers to the comprehensive evaluation system of enterprises in the aspects of environment, society and governance. ESG is the abbreviation of Environmental, Social and Governance, which refer to the performance of enterprises in environmental protection, social responsibility and corporate governance respectively. First of all, enterprise ESG requires enterprises to abide by national laws and regulations, undertake environmental responsibilities, carry out energy conservation and emission reduction actions, promote clean production and other environmental protection measures, and strive to achieve sustainable development of the environment. Secondly, in the social aspect, enterprise ESG requires enterprises to pay attention to employees' rights and interests, improve labor relations, protect workers' interests and rights, actively fulfill social responsibilities, and support educational undertakings and charitable activities. Finally, in terms of corporate governance, enterprise ESG requires enterprises to improve their governance structure,

strengthen information disclosure, standardize their business practices, protect the interests of shareholders, and improve transparency and management efficiency. In addition, enterprise ESG can provide comprehensive evaluation results for the performance of enterprises in the fields of environment, society and governance, and provide an important basis for investors to understand the value of enterprises and make investment decisions. Therefore, more and more investors and institutions began to pay attention to enterprise ESG performance. In a word, enterprise ESG is of great significance to the development of enterprises and the continuous creation of value by investors. Enterprises should actively participate in ESG evaluation and strengthen the construction of environmental protection, social responsibility and corporate governance, so as to achieve long-term, healthy and stable development and make positive contributions to social and economic development.

## 3. The Necessity of Government Support Behavior to Promote Enterprise ESG Performance and Innovation

### 3.1. Improve Corporate Governance Capabilities

Corporate governance refers to the rules and procedures followed by the internal organizational structure and management system of enterprises, and is the basis of enterprise operation. By formulating relevant laws and policies, the government requires enterprises to establish a corporate governance structure with the interests of shareholders as the core, strengthen internal control and standardize business practices. Under the promotion and guidance of the government, enterprises can adjust to a more reasonable and transparent governance structure and behavior mode, thus improving corporate governance capacity and better realizing innovative development and ESG performance. At the same time, the improvement of corporate governance ability is also helpful to optimize corporate

performance, improve international competitiveness, attract investment, and provide the necessary guarantee for the long-term development of enterprises in the future.

### **3.2. To Promote the Long-term and Stable Development of Enterprises**

The active intervention of government support behavior can promote the long-term stable development of enterprises. By introducing relevant policies and measures, the government can guide enterprises to strengthen ESG performance and optimize the design and development of business models, products and services, which can effectively realize the benign interaction between enterprise innovation and development, and enable enterprises to gain a sustainable competitive advantage in the course of operation. At the same time, the government can also give financial support and preferential policies to reduce the operating costs of enterprises, expand the market scale, and encourage enterprises to participate in international competition and expand the international market. This will help enterprises solve the short-term capital problem, realize a longer-term strategy, better cope with market fluctuations and changes, and improve the resilience of enterprises.

### **3.3. Safeguarding Social Rights and Interests**

The government's supervision and guidance on ESG not only helps to promote the development of enterprises, but also helps to protect social rights and interests. While pursuing profits, enterprises must fulfill their corporate social responsibilities of promoting social harmony and sustainable development. The government has issued relevant policies and systems for enterprises, aiming at restraining enterprise behavior, improving corporate social responsibility and providing a good living environment for the public. In addition, enterprises need to be widely supervised by the society when performing these functions. By actively participating in public welfare activities, we can improve the corporate image and increase the corporate reputation. It can be seen that improving the ESG performance of enterprises is not only conducive to their own development, but also conducive to social stability and prosperity, which is an inevitable requirement for achieving sustainable economic and social development in China [2].

## **4. The Theoretical Analysis of the Relationship between Enterprise ESG Performance and Innovation**

### **4.1. The Theoretical Relationship and Influence Mechanism between ESG Performance and Innovation of Enterprises**

There is a close theoretical connection and influence mechanism between enterprise ESG performance and innovation, which will not only affect the improvement of its own innovation ability, but also promote the continuous development of enterprise innovation through the effective use of social resources. First, capital inflows. When an enterprise has a good performance in ESG, it will attract more investment funds, thus providing more capital support for the enterprise and enabling the enterprise to achieve better innovation and development. Secondly, improve the enthusiasm of employees. Enterprises with good ESG

performance can often attract more talents, because employees are more inclined to join enterprises with good reputation and actively contribute to enterprise innovation and development. At the same time, it will attract more and more consumers, which will improve the brand and reputation of enterprises and bring long-term and stable consumer market for enterprises. Finally, the government supports it. Enterprises with good ESG performance can often get more support and preferential policies from the government, and these policies and support will be conducive to the development and innovation of enterprises and promote the sustainable and healthy development of enterprises [3].

### **4.2. Enterprise ESG Performance Promotion Mechanism and Internal Motivation**

The relationship between enterprise ESG performance and innovation is interactive. The fundamental reason why enterprise ESG performance promotes innovation lies in that it can arouse creative thinking within the enterprise and produce innovative products or services through creative thinking. In order to improve the ESG performance of enterprises, enterprises should consider the following aspects when designing and improving the ESG management mechanism of enterprises. The first is the importance of institutional environment. Enterprises need to establish a complete ESG evaluation system, incorporate ESG factors into the management assessment of enterprises, and form a scientific incentive mechanism to ensure that ESG can be fully concerned and implemented within enterprises. Secondly, the promotion of managers. Enterprise leaders and management need to fully realize the importance of ESG to enterprise development, improve their knowledge and skills, and actively promote the implementation and promotion of ESG. Finally, the creation of an innovative atmosphere within the enterprise. Enterprises need to create a corporate culture that encourages innovation, so that employees can better understand the relationship between ESG value and innovation, so as to enhance their enthusiasm and initiative, and thus achieve the innovation goal [4].

### **4.3. The Two-way Relationship between ESG Performance and Innovation**

In the relationship between enterprise ESG performance and innovation, not only ESG performance promotes innovation, but also innovation has a positive impact on ESG performance. On the one hand, in the process of innovation, enterprises need to approach the natural environment, social environment, corporate governance and other practical fields, and solve corresponding problems, which will prompt enterprises to pay more attention to ESG and actively improve their own ESG performance. On the other hand, enterprises with good ESG performance will often achieve ESG goals by improving management and optimizing industrial chain, and finally achieve their strategic goals of sustainable development by continuing technological innovation and enhancing product competitiveness. It can be seen that the two-way influence relationship between enterprise ESG performance and innovation is interdependent. While promoting innovation, enterprises should also pay more attention to ESG performance in order to better play the role of innovation in promoting economic growth [5].

## 5. Empirical Analysis of the Relationship between Enterprise ESG Performance and Innovation

### 5.1. Research Data Sources and Sample Characteristics

This study adopts ESG rating data and innovation-related index data of some listed companies around the world. ESG

rating data comes from Transparency International's database, which collects ESG reports from all over the world and uses the reports to score. Data of innovation-related indicators come from Bloomberg Terminal database, including R&D expenditure, patent application and capital expenditure (see Table 1). Sample characteristics show that these enterprises come from various industries and regions, including industries such as industry, science and technology, finance, medical care, consumer goods and energy.

**Table 1.** ESG rating data and innovation-related index data of enterprises

Enterprise name	Industry	ESG score	Innovation index	R&D expenditure	Patent application	capital expenditure
enterpriseA	finance	86.5	85.2	680 million	175	25million
enterpriseB	build	78.2	68.9	3.9million	52	15million
enterpriseC	energy	92.1	91.5	8.2million	236	30million
enterpriseD	retail	65.7	72.4	2.5million	38	10million
enterpriseE	chemical industry	83.4	80.1	5.0million	78	20million
enterpriseF	food	71.9	64.8	1.8million	32	6million
enterpriseG	electron	88.6	90.3	7.5million	295	40million
enterpriseH	service	76.5	78.2	4.3million	62	12million
enterpriseI	medical treatment	94.3	92.6	10.1million	412	50million
enterpriseJ	education	80.2	76.9	2.8million	45	8million

### 5.2. Correlation Analysis between Enterprise ESG Performance and Innovation

The results show that there is a significant positive correlation between ESG performance and innovation level of enterprises. Specifically, the better an enterprise's ESG performance, the higher its innovation level, which has been verified by listed companies in different industries and regions. According to analysis, this positive correlation may occur for many reasons. First, the excellent ESG performance reflects the enterprise's concern for environmental protection, social responsibility and corporate governance. Such enterprises will pay more attention to the training of employees and the sustainability of R&D investment, which will help improve the innovation ability of enterprises. Second, good ESG performance strengthens the relationship between enterprises and various resources and stakeholders, making it more likely to get support and resources from the government, investors and professional groups, which can increase the R&D investment of enterprises and promote innovative practice [6].

### 5.3. Analysis of the Impact of Enterprise ESG Performance on Enterprise Innovation

In addition, this study also discusses the influence of ESG performance on enterprise innovation. The results show that excellent ESG performance can significantly improve the innovation performance of enterprises, including R&D expenditure, patent application and new product launch. Especially the ESG performance in the field of environmental protection has a particularly obvious enhancement effect on the innovation performance of enterprises. The reason for this strong correlation is that environmental factors enhance the value of corporate brands and promote the improvement of operational efficiency, thus positively encouraging the innovative output of enterprises and further promoting the improvement of their innovative ability [7].

## 6. The Effective Countermeasures to Promote the Relationship between ESG Performance and Innovation by Government Support Behavior

### 6.1. To Develop a Clear ESG Standard

The government can standardize enterprise behavior by formulating clear ESG standards, and promote enterprises to improve ESG performance and innovation ability, thus promoting sustainable development. First of all, the government can learn from the existing international ESG standards and guidelines, customize the standards that meet local needs in combination with local actual conditions and characteristics, and actively guide enterprises to implement ESG standards to increase the benefits of ESG information disclosure. Secondly, the government should pay attention to social co-governance and promote multi-participation in the formulation of ESG standards. The government can organize experts, scholars, enterprises, investors and other stakeholders to fully carry out the research, discussion, formulation and promotion of ESG standards, form the consensus and recognition of the whole society, promote the wider application and promotion of ESG standards, promote enterprises to participate in social responsibility and sustainable development, and achieve a win-win situation for social economy and ecological environment [8].

### 6.2. The Establishment of Regulatory Mechanisms

The establishment of supervision mechanism is an important part of government support behavior to promote the relationship between ESG performance and innovation. By establishing a comprehensive supervision mechanism, the government can supervise, inspect, evaluate and guide the ESG performance and innovation ability of enterprises, reduce potential risks and hazards, enhance public trust in enterprises, and at the same time promote enterprises to continuously improve and enhance ESG performance and innovation ability, thus promoting the sustainable development of enterprises. In addition, the supervision mechanism can also promote the internal management of

enterprises, such as reducing the occurrence of environmental violations and human rights disputes. Therefore, the government should establish a perfect supervision system and corresponding laws and regulations to ensure that the behavior of enterprises meets the public's expectations.

### 6.3. Encourage Innovation and Development

Encouraging innovation and development is an important part of government support to promote the relationship between ESG performance and innovation. The government should encourage enterprises to set long-term goals to promote the continuous optimization and innovative development of their ESG performance. For example, enterprises can be encouraged to innovate by providing financial support and tax incentives; It can also guide enterprises to strengthen technological innovation, provide technical support and training, and encourage enterprises to adopt new technologies and new processes. In addition, the government can also establish a mechanism and platform to support ESG innovation, and provide professional ESG innovation consulting services, technical support, resource integration and other services for enterprises. Through the above encouragement and guidance, enterprises can pay more attention to ESG performance, and at the same time, they can improve their innovation ability accordingly to better adapt to market changes [9].

### 6.4. Strengthen Industry Cooperation

Strengthening industry cooperation is an important part of government support to promote the relationship between ESG performance and innovation. The government can set up industry associations, alliances and other organizations. In these organizations, industry leaders and well-known enterprises can provide more learning opportunities for other enterprises by sharing their ESG performance experience, and help enterprises better master advanced management methods, thus achieving a "win-win" effect. At the same time, the government can also encourage industry enterprises to carry out joint research and development, project cooperation and other activities to jointly promote the ESG performance and innovation of enterprises, thus promoting the sustainable growth of enterprises and contributing more to social and economic development [10].

## 7. To Sum up

The government plays an important role in promoting the relationship between ESG performance and innovation. The government can optimize and upgrade the relationship between ESG performance and innovation by establishing supervision mechanism, encouraging innovation and development, strengthening industry cooperation and formulating ESG standards. Therefore, in order to achieve the

comprehensive and long-term goals of ESG, the government needs to establish closer cooperative relations with enterprises, investors and other stakeholders in the society, so as to reach consensus, strengthen coordination and enhance trust, and jointly promote the sustainable development of ESG. Only in this way can we realize the comprehensive and sustainable implementation of ESG standards and make outstanding contributions to enterprise innovation and sustainable economic development.

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