

# Current Research Progress of ESG and Its Systematic Analysis from the Perspective of Economics

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**Abstract.** As global environmental, social and governance issues gradually become key factors for enterprise sustainable development and investment decision-making, the research progress of Environment, Social Responsibility and Governance (ESG) has received wide attention. This article will systematically summarize the existing ESG research based on the existing ESG research environment, society and governance, based on the existing research on ESG enterprise value, corporate performance and social responsibility, systematically summarize the existing ESG research, find problems in ESG research and propose solutions through summary. The construction of ESG system in accordance with economics is discussed, and the research found that, The ESG system provides new evaluation indicators and decision-making tools for enterprises and investors. By quantifying the performance of the environment, society and governance, ESG evaluation not only helps enterprises better internalize social costs, improve brand value and employee loyalty, but also alleviates information asymmetry and agency problems, and enhances the long-term risk resistance of enterprises. Based on the discussion of the ESG system in this article, it provides a program discussion to solve the problems in the current ESG research. At the same time, it provides more possibilities for better achieving the coordinated development of society, economy and the environment, and provides a feasibility plan for global sustainable development.

**Keywords:** Environment, economic perspective, sustainable development.

## 1. Introduction

With the acceleration of global industrialization, people's attention to environmental issues, social equity and firm governance is increasing. The realization of sustainable development has become a topic of high social concern and has gradually become an important field of economic research. The concept of ESG, that is, Environment, Social Responsibility and Governance (hereinafter referred to as ESG), was organized by the World Bank's Global Compact in 2004, specifically including the requirement that the development of company should give priority to environmental protection, social responsibility and firm governance responsibility [1, 2]. Same time and The ESG concept believe that in order to help human society achieve sustainable development, enterprises should not only be limited to financial indicators and economic profits, but also actively fulfill ESG responsibilities, and commit to environmental protection, social responsibility and improve the level of corporate governance [3].

## 2. Literature Review

The concept of ESG originated from ethical investment and responsible investment [4]. In 2004, 18 financial institutions drafted the report "Who Cares about Winning", which officially put forward the concept of using ESG for the first time. In 2006, the United Nations established PRI, and then a number of global organizations and agreements sprung up, promoting the global development of the ESG concept. At the same time, China's practice of ESG is also developing simultaneously. In 2001, after China joined the WTO, the concept of social responsibility began to be accepted by enterprises. In 2012, after the 18th National Congress of the Communist Party of China, especially after the "Five New Development Concepts" were put forward, high-quality development and sustainable development became national strategies. In 2020, after the establishment of the "dual carbon" goal, low-carbon transformation became a hot spot. ESG was closely combined with the capital market,

and enterprises began to pay attention to ESG. And with the deep penetration of sustainable development, green development and other concepts, environmental, social and corporate governance (ESG) has gradually received wide attention from all walks of life.

At present, scholars study the performance of ESG mainly based on three aspects. First, as far as the environment is concerned, Yang et al. believed that the environmental performance of enterprises reflects that enterprises effectually use the best environmental protection regulation avenues to sustainably improve their pollution prevention and control and resource utilization, which is conducive to enterprises gaining competitive advantages in terms of efficiency and effectiveness [5]. In this field, research mainly focuses on assessing the environmental impact of enterprises, such as carbon emissions, resource consumption, etc., establishing an environmental index system, and providing a basis for decision-making for enterprises and investors.

For the social aspect, Li et al. believed that the social performance of enterprises mainly emphasizes that enterprises strengthen the management of stakeholder relationships in the process of production and operation and maximize the creation of diversified and comprehensive value for all stakeholders of enterprises [6]. By investigating and analyzing the performance of enterprises in the social field, sustainable social development can be promoted.

In terms of governance, Li holds that the firm governance achievement of the enterprise includes two aspects: internal governance and external governance [7]. It harmonizes the relationship between the enterprise and stakeholders through a storm of institutional arrangements, and eventually protects the rights and interests of the enterprise and its stakeholders. The evaluation of the field of governance helps to find problems in enterprise management and put forward corresponding suggestions.

In recent years, scholars' corporate research on ESG has focused on three aspects. First, ESG and enterprise value. Most of the existing studies confirm that ESG and enterprise value are positively correlated. Wang et al. took 3,096 A-share listed companies in China from the first quarter of 2009 to the fourth quarter of 2020. The positive value effect of ESG comes from good ESG performance, which can alleviate enterprise financing constraints, improve enterprise operating efficiency and reduce enterprise business style. Dangerous. Further analysis found that for non-state-owned enterprises, enterprises with a better institutional environment and high messages transmission efficiency, ESG performance has a more apparent effect on value enhancement. Zhang and Zhao the data of 417 A-share listed companies from 2015 to 2017, the model was used to analyze the impact of ESG on enterprise value, and a similar conclusion was obtained [8].

Second, ESG and enterprise performance. Most recent studies have confirmed that good ESG performance can improve enterprise performance. Gao and Chu et al. take China's A-share listed companies from the first quarter of 2009 to the third quarter of 2020 as research samples, and use the ESG rating data of China Securities as the basis for evaluating the ESG performance of enterprises. Obtaining good ESG performance can improve the investment efficiency of enterprises and bring positive to the performance of the enterprise. Li et al. takes the A-share mainboard listed company of the China Shanghai-Shenzhen Exchange from 2010 to 2017 as a research sample, the ESG performance of enterprises was tested to help improve enterprise performance [9].

Third, ESG and social responsibility. Current research confirms that ESG performance can effectively improve enterprises' responsibility for social responsibility. Zhang and Li build a supply chain network with the data of Shanghai and Shenzhen A-share listed companies and their two-level business relationships from 2008 to 2021, and examine the impact of the supply chain network location on the ESG performance of enterprises [10]. The research results show that the closer the enterprise is to the center of the supply chain network, the better the ESG performance. At the same time, the supervision and incentives brought by the "central position" of the supply chain network promote the performance and responsibility of enterprises to social responsibilities.

### 3. Research Problem and Feasible Solution

At present, there are the following three problems in ESG research. Data source and quality issues. It is hard to come by high-quality ESG data, resulting in uneven quality of data, and the accuracy of the data cannot be guaranteed, which will greatly affect the reliability of the study. The deviation problem of the research method. The current research lacks a unified quantitative standard for ESG, and the results are prone to deviations, which affects the reliability of the results. Study on the problem of time. Research on ESG rarely has a long-span and long-cycle research, resulting in a lack of strength in the research data. The following five solutions to the existing ESG research problems are discussed. In the field of ESG, the transparency and standardization of data are crucial. The solutions to this problem mainly include: (1) Improve the data collection system: establish a comprehensive and accurate ESG data collection system to guarantee the timeliness and reliability of the data. (2) Unified data standards: formulate an internationally unified ESG data standard and index system to improve the comparability and readability of data. (II) Strengthen ESG interdisciplinary research.

ESG involves multiple disciplines. For example, it covers environmental science, sociology, economics, etc. Therefore, strengthening interdisciplinary research is an important way to solve ESG research problems. Interdisciplinary cooperation: Encourage researchers from different disciplines to cooperate and jointly carry out ESG research. Establish an interdisciplinary research team: set up a research team with different professional backgrounds to jointly overcome difficulties in the field of ESG. Policy guidance and supervision play an important role in promoting the development of ESG. For this problem, the solutions include formulating relevant policies. The government should formulate relevant policies to encourage enterprises to actively fulfill their ESG responsibilities. In the meantime, Strengthening the supervision of the ESG performance of enterprises to ensure that enterprises fulfill their responsibilities in accordance with policy requirements. Training professionals is the key to solving ESG research problems. Specific measures include: (1) Set up ESG-related professional courses in colleges and universities to cultivate talents with professional knowledge and skills. (2) Regularly holding ESG training and education activities to improve the professional level of existing practitioners. (3) Establishing an ESG professional talent pool to provide talent support for enterprises and research institutions. In summary, for the existing ESG research problems, it is necessary to strengthen data transparency and standardization, strengthening ESG interdisciplinary research, strengthening policies Taxi Guide and supervise and cultivate ESG professionals and other aspects to jointly promote the healthy development of the ESG field. At the same time, scholars have built a relatively complete research system for ESG, but there is little research on building an ESG system from the perspective of economics. As a social science, economics plays an indispensable role in individual decision-making, the operation of enterprises and the development of the country. Therefore, it is of great significance to discuss the construction of the ESG system from the perspective of economics.

### 4. Analysis of ESG from the Perspective of Economics

From the perspective of economics, environmental problems mainly involve externalities and public goods. Pollution emissions of enterprises usually produce negative externalities, that is, the social costs of these behaviors have not been fully internalized. ESG evaluation tries to internalize these external costs by quantifying the environmental impact of enterprises, such as through the disclosure of carbon emissions and the management of resource consumption. At the same time, environmental protection has the characteristics of public goods because it is not exclusive and competitive. A good environment is enjoyed by everyone, but individual enterprises often have no motivation to bear the cost of protection. By establishing a standardized ESG evaluation system and related policies, society can more effectively share and motivate enterprises to invest in environmental protection.

Second, social ESG evaluation involves employee welfare, community relations, consumer rights and interests, etc. Economics believes that employee welfare and training are important factors to

promote the long-term productivity and innovation of enterprises. High-quality working environment and employee benefits not only improve. The internal harmony of the enterprise also reduces the cost of human resources management by improving employee satisfaction and loyalty. In addition, the investment of social responsibility can produce a long tail effect. Enterprises' contributions to community construction, education support, etc. may not be immediately reflected in financial statements, but in the long run, these investments can enhance brand value and market share, thereby improving the economic benefits of enterprises. Investors gradually realize these implicit values, so that they consider more social factors in their investment decisions.

Third, governance structure is another key component of the ESG system. According to the word of the agency theory of economics, there are usually agency problems and information asymmetry between the management and shareholders within the enterprise. These problems may lead to short-sighted behavior and conflicts of interest, thus damaging the lengthy span value of the enterprise. Through the standardized corporate governance structure, such as the independent director system, transparent information disclosure mechanism, reasonable remuneration incentive plan, etc., the agency problem can be effectively alleviated and the transparency and credibility of enterprise management can be improved. Practice has proved that enterprises with good governance structure perform better in risk management and sustainable development, which can attract more investors' attention.

Forth, the theory of risk-return balance in economics is also applicable to ESG investment. Traditional investment theory focuses on the calculation of risks and expected returns, while ESG evaluation increases the consideration of non-financial risks. Research shows that enterprises with good ESG performance are more risk-resistant in the long run and can better cope with economic fluctuations and policy changes. At the same time, ESG investment is not only a moral choice, but also a rational decision to pursue long-term stable returns. Investors who ignore the ESG factor may get high returns in the short term, but in the long run, their portfolios face greater systemic risks. In addition, by launching ESG-related financial products, such as ESG funds, green bonds, etc., the financial market can attract more investors interested in sustainable development and further promote economic transformation.

The ESG system provides new evaluation indicators and decision-making tools for enterprises and investors. By quantifying the performance of the environment, society and governance, ESG evaluation not only helps enterprises better internalize social costs and improve brand value and employee loyalty, but also alleviates information asymmetry and agency problems, and enhances the long-term risk resistance of enterprises. Although the current ESG system is still facing various. There are many challenges, but with scientific and technological progress and policy support, ESG will play an increasingly important role in future economic activities. By continuously improving the ESG evaluation system, it will be able to better achieve the coordinated development of economy, society and environment.

## **5. Practical Case and Application of ESG**

### **5.1. Swedish Enterprise Stora Enso**

The enterprise has implemented a comprehensive forest protection project to reduce the impact of its production activities on the environment. They have established a sustainable forest management program, regularly monitor forest health, ensure sustainable logging, and actively participate in global forest conservation projects. It includes the following four aspects. (1) Investment decision-making: STORA ENSO considers ESG factors in investment decision-making. The company evaluates the environmental impact, social risks and governance structure of potential investment projects to ensure that the investment complies with the company's ESG principles. (2) Product development: STORA ENSO considers ESG factors in product development. The company has developed a variety of environmental protection products, such as renewable pulp and paper products, to meet the needs of customers for environmental protection products. In addition, the company is also committed to

improving the recyclability of products and reducing the environmental impact of the product life cycle. (3) Supply chain management: STORA ENSO attaches importance to ESG management in the supply chain. The company cooperates with suppliers to promote suppliers to implement ESG measures and ensure the sustainability of the supply chain. In addition, the company has also established a strict supplier evaluation mechanism to evaluate and supervise the ESG performance of suppliers. (4) Risk management: STORA ENSO incorporates ESG factors into the risk management framework. The company assesses potential environmental, social and governance risks and formulates corresponding countermeasures to reduce the impact of these risks on the company's business.

## 5.2. Huawei

Huawei has made remarkable efforts in ESG. They implemented strict supplier social responsibility standards to ensure the sustainability of the supply chain. In addition, Huawei also actively promotes green research and development and develops many energy-saving and environmentally friendly products. Huawei is committed to reducing carbon emissions and improving energy efficiency through innovative technologies. For example, Huawei's green data center effectively reduces energy consumption by adopting high-efficiency servers, energy-saving equipment and the use of renewable energy. In addition, Huawei also actively promotes advanced communication technologies such as 5G to reduce network energy consumption and help the world achieve the goal of carbon neutrality.

Huawei actively fulfills its social responsibilities and pays attention to employee development, community development and public interests. For example, Huawei has carried out a series of public welfare projects around the world, including supporting education, poverty alleviation, public health and other fields. In addition, Huawei also advocates diversity and inclusiveness, and strives to create a fair and just working environment.

Huawei emphasizes transparency and accountability in the governance structure, and has established a perfect internal control and compliance management system. In addition, Huawei also ensures the long-term and stable development of the company by strengthening information disclosure and improving the governance structure.

## 5.3. World Bank

The World Bank supports global green development projects such as renewable energy, energy conservation and emission reduction through green investment and financing projects. When supporting the development of the project, the World Bank has fully considered the environmental and social aspects and incorporated it into the risk assessment and lending framework, which plays a good guiding role in the sustainable development of the project. For example, in Africa, the World Bank has funded a number of solar and wind power projects, effectively promoting the development of local clean energy.

At the same time, the World Bank pays attention to the performance of enterprises in environmental protection, social justice and governance structure through social responsibility investment. The World Bank fully integrates environmental and social aspects into the risk assessment system, rates project risks from different dimensions such as politics, macroeconomics, industry, environment and society, and conducts a series of compliance reviews based on the evaluation results [11]. In loan and investment decision-making, the World Bank will consider the ESG performance of enterprises and give priority to supporting those that perform well in sustainable development. The World Bank fully integrates environmental and social aspects into the risk assessment system, from politics, macroeconomics, industry, different dimensions such as environment and society are rated for project risks, and a series of compliance reviews are carried out according to the evaluation results.

## 6. Conclusion

At present, ESG research has progressed rapidly and has achieved remarkable results in many fields, effectively promoting the sustainable development of enterprises and the sustainable development of the social economy. At the same time, from the perspective of economics, it is of great vital to the systematic discussion of ESG, which not only provides new quantitative standards for enterprises and investors, but also better helps enterprises solve the problems of internal economic development and environmental conflicts and improves the ability of enterprises to resist risks. It is essential to continue to be attentive to the research progress of ESG, strengthen international exchanges and cooperation, and jointly promote sustainable development on a global scale.

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