

Research on the Impact of ESG Performance on the Export of Listed Companies

Linghui Gu

Department of Nanjing University of science and technology, Nanjing, China

1441179338@qq.com

Abstract. The ESG concept is highly compatible with China's new development concept, but there is no definitive conclusion on whether ESG performance has a positive impact on a company's exports. This article uses A-share listed companies in Shanghai and Shenzhen from 2015 to 2022 as research samples to empirically examine the impact of ESG performance on corporate exports. Research has found that a company's good ESG performance has a significant positive impact on exports. The better the company's ESG performance, the larger its export scale. This article has certain enlightening significance for enterprises and investors to attach importance to ESG performance, and for government departments to improve ESG information disclosure systems.

Keywords: ESG, export, sustainable development.

1. Introduction

In recent years, sustainable development issues such as extreme weather changes, weak economic recovery, infectious diseases, environmental pollution, and intensified contradictions between strategic resources and energy supply and demand have become increasingly prominent. ESG (Environment, Social and Government) is gradually becoming a widely recognized concept for promoting sustainable development. Against the backdrop of China's "dual carbon" goals, the continuous promotion of ESG concepts is an inherent requirement for sustainable development and an external manifestation of a responsible major country. In this context, in 2022, the State owned Assets Supervision and Administration Commission issued the "Work Plan for Improving the Quality of Listed Companies Controlled by Central Enterprises", proposing to strive for comprehensive disclosure of ESG reports of central enterprises by 2023, and to promote the establishment of an ESG rating system. For enterprises, ESG is no longer a "multiple-choice question", but a "must answer question".

2. Literature Review

2.1. ESG and Corporate Innovation

Some scholars believe that good ESG performance of enterprises can promote innovation. The good ESG performance of enterprises promotes the improvement of their innovation level, employee innovation efficiency, and risk-taking level. Research and development investment and financing constraints have played a partial mediating role in this process. The positive impact of corporate ESG performance on green technology innovation is more evident in state-owned enterprises, and has a significant promoting effect on both heavily polluting and non heavily polluting enterprises.

In addition, studies by scholars have shown that digital transformation, increased market competition, and changes in institutional environment enhance the impact of corporate ESG performance on green innovation. Enterprises with good ESG performance can better gain the trust of consumers and investors, thereby providing more financial support for innovation activities.

2.2. ESG and Corporate Financing Constraints

Some scholars have conducted in-depth research on the financing constraints of enterprises based on a single indicator of ESG. From the perspective of E (environment), active or passive

environmental disclosure by enterprises effectively reduces the degree of information asymmetry, thereby alleviating the financing constraints of enterprises; From the perspective of S (society), when fulfilling social responsibilities, enterprises can convey positive information to stakeholders, thereby alleviating their financing constraints; From the perspective of G (management), good corporate management can enhance the value of the enterprise. In addition, as the proportion of cash holdings decreases, the volatility of the enterprise's cash flow will also decrease, optimizing the allocation of financial resources and alleviating the financing constraints faced by the enterprise due to its sensitivity to cash flow.

From the overall perspective of ESG, most scholars believe that there is a significant negative correlation between a company's ESG performance and financing costs, and this effect is even more pronounced in imperfect financial markets. Fulfilling ESG responsibilities can significantly reduce financing costs, alleviate financial burdens, and promote the increase of corporate book value; On the other hand, the disclosure of ESG information by enterprises can also send positive signals to the market, enhance market confidence in the enterprise, and thereby increase the market value of the enterprise. Research has found that a company's ESG performance can help it obtain higher commercial credit financing by strengthening its product market competitive advantage, enhancing external supervision, and improving its risk resistance capabilities.

2.3. ESG and Corporate Exports

Another literature related to this article is the study of corporate exports. As an important way to balance international payments, alleviate employment pressure, and improve overall social welfare, corporate exports have always been an important subject of academic research. Existing literature indicates that the degree of financing constraints, innovation level, trade barriers, and information friction of enterprises have an impact on their exports. The research represented by Xie Hong Jun and Lev Xue deeply analyzed the relationship between ESG performance and outward direct investment of enterprises, but there is little literature attention on the role of ESG performance in the export process of enterprises. Although scholars at home and abroad have conducted extensive and in-depth discussions on the relationship between environment, social responsibility, and governance and corporate exports, in addition to the unified view on the impact of corporate governance on corporate exports, the impact of environment and social responsibility on corporate exports has not yet reached a consensus. Yang Mian et al. found that environmental regulations can directly promote the "quality increase" of enterprise exports by reducing compliance costs, mitigating regulatory risks, and improving social reputation. On the other hand, they can indirectly promote the "quality increase" of their exports through innovation effects. However, some scholars point out from the perspective of production costs that environmental regulations or corporate social responsibility can inhibit a company's exports.

3. Theoretical analysis and research hypotheses

3.1. Stakeholder Theory

The stakeholder theory was proposed by Freeman in 1844, which states that a company forms a series of contracts with its various stakeholders. In addition to shareholders, companies should also be responsible for entities such as employees, suppliers, customers, and government departments when making decisions, as these entities have made specialized investments in the company and bear the risks associated with the investments. With the passage of time, the connotation of stakeholders is also constantly expanding.

According to stakeholder theory, enterprises are "social ecological brokers". Enterprises, along with their employees, creditors, and stakeholders, form a 'community of shared destiny'. When companies proactively include stakeholders in organizational decision-making, it is both an ethical requirement and a strategic resource that can enhance the organization's competitive advantage. Actively engaging in ESG practices and improving ESG performance can enhance communication

with stakeholders Communication and collaboration have a positive impact on the business performance and value of enterprises. The good ESG performance of a company is a window for it to showcase its responsible image and spread a good reputation to the world, endowing the company with new energy and value. Export enterprises that have obtained good official ESG ratings can help them enhance their identity in the international market, thereby gaining recognition in the external market and indirectly improving their exports.

3.2. Green Finance and Sustainable Development Theory

Green finance refers to the consideration of environmental protection, climate stability, and resource conservation in economic activities. In the short term, investment activities in areas such as environmental protection, energy conservation, and clean energy carried out by enterprises to protect the environment may increase their operating costs and reduce their economic benefits. However, in the medium to long term, the practice of environmental protection by enterprises can not only reduce the punishment they face due to increasingly perfect environmental protection laws, promote research and development, but also help them establish a good image in the market and gain the favor of consumers.

Since the 20th century, with the development of industry, the environment has been under increasing pressure. The issue of environmental protection has been raised and taken seriously. In 1972, the United Nations held the United Nations Conference on the Human Environment in Stockholm, the capital of Sweden. This was the first environmental conference in human history, and the concept of sustainable development was born from it. In 1987, the World Commission on Environment and Development defined sustainable development in its report "Our Common Future": the concept of sustainable development refers to development that meets today's needs without compromising the ability of future generations to meet their own needs. Until 1992, the United Nations adopted and signed the Rio Declaration on the Environment and Agenda 21, and since then, the concept of sustainable development has become a common global action. At the 2012 United Nations General Assembly, the green economy was recognized as the key to resolving the conflict between development and the environment. The connotation of sustainable development has been expanded to include economy, society, environment, and governance. Enterprises should not neglect their responsibility to protect the environment when pursuing their own economic goals.

When enterprises actively assume environmental responsibility, improve production technology and reduce energy consumption, it is conducive to enhancing their risk resistance ability and achieving long-term healthy and stable development. Especially in the event of changes in the overall environment, companies with good reputation and market trust are more likely to establish themselves.

3.3. Reputation Trading Theory

Prston and Bannon (1997) proposed the Social Impact Hypothesis based on stakeholder theory and found that the mechanism by which social performance affects various aspects of a company's performance is to first enhance the company's external reputation, and then have a positive impact on other aspects of the company. In the 1970s, an increasing number of scholars applied this theory to research topics related to corporate social response, corporate social performance (CSP), and corporate social responsibility (CSR). Corporate reputation generally includes characteristics such as social responsibility, reliability, and integrity, and is an important intangible asset of a company.

A good reputation can bring positive social impact to a company, thereby helping it create revenue. Actively practicing social responsibility and meeting the needs of stakeholders can help companies establish a good social image and earn reputation. A good corporate reputation can win the support of stakeholders, thereby helping the company obtain more internal and external resources conducive to development, reduce transaction friction and costs caused by friction, and ultimately enhance the value of the enterprise.

4. Research Design

4.1. Sample selection and data sources

Based on the accuracy and availability of data, this article selects A-share listed companies from 2015 to 2022 as the research object to study the impact of corporate ESG performance on corporate exports. The ESG rating data of the enterprise comes from Wind database Shangdao Ronglv, while the financial data and other related data of listed companies come from CSMAR database, and the relevant data is processed as follows.

(1) Exclude financial companies and companies that were subject to ST, ST *, and PT in the current year;

(2) Exclude listed companies from the current year to avoid differences in information disclosure caused by a short listing period;

(3) Exclude samples with severe missing data;

(4) Exclude enterprises without export business.

To avoid the influence of extreme values, use the winsor2 command in Stata to tail continuous variables at the 1% and 99% percentiles. By processing the data according to the above standards, this article obtained a total of 2479 sample data of listed companies, constructed panel data, and processed the sample data using Stata.

4.2. Variable Setting

4.2.1 Core explanatory variables

The mainstream rating agencies at home and abroad have formed a relatively complete and rich evaluation system for the ESG performance of enterprises. Currently, data released by multiple rating agencies can be found in multiple databases. Among them, Wind Database's Shangdao Ronglv is the earliest rating data agency released in China, with high authority. By the end of 2023, it has covered over 2000 listed companies. Therefore, this article constructs core explanatory variables based on the ESG rating data of Shangdao Ronglv and assigns them values.

4.2.2 Explained Variables

There are many indicators to measure a company's exports. In this article, due to the research object being listed companies and the availability of data, the main business income of the company's foreign operating income is selected as the dependent variable.

4.2.3 Control variables

Based on the existing research literature and mechanism analysis in the previous text, combined with the availability of primary data on the influencing factors of core variables and the research of scholars such as Anran and Chen Yimao. This article controls for the following variables: enterprise size is measured by the total assets of the listed company; Enterprise profitability (ROA) is represented by the return on total assets of the enterprise; The corporate debt situation (Lev) is expressed in terms of the company's asset liability ratio; Enterprise listing age (ListAge); Share concentration is calculated by dividing the number of shares held by the largest shareholder by the total shares of the enterprise; Board size, corporate capital intensity (PFixA), and employee productivity (PSales). In addition, industry virtuality will also be generated Variables and time dummy variables are used to control industry effects and time effects.

4.3. Model Design

To verify the hypothesis, this article constructs a regression model of corporate ESG performance on corporate exports based on research objectives and referencing existing studies:

$$Export_{it} = \alpha_0 + \alpha_1 ESG_{it} + \alpha_2 CV_{it} + \alpha_3 \varphi_{it} + \beta_1 \mu_{year} + \beta_2 \mu_{inds} + \lambda_{i,t} \quad (1)$$

Among them, Export is the export data of the customs database enterprise, and ESG is the enterprise ESG rating issued by Wind Shangdao Ronglv. i represents the individual enterprise, and t represents the year. μ_{year} represents annual fixed effects, μ_{inds} represents industry fixed effects, and $\lambda_{i,t}$ is a random perturbation term.

5. Empirical Results and Analysis

5.1. Descriptive statistics

Table 1 reports the descriptive statistical results of the main variables. The mean export performance (Exp) is 21.936, with a variance of 24.369, indicating that there are certain differences in the export performance levels of the sample enterprises. The mean of the explanatory variable ESG is 4.2436, with a variance of 0.99, indicating that the overall ESG rating of the sample companies is at a moderate level.

Table 1. Descriptive Statistics of Main Variables

Variable	Obs	Mean	Std. Dev.	Min	Max
Exp	2479	21.936	24.3638	.0315	97.2602
ESG	2479	4.2436	.9981	2	8
SIZE	2479	23.932	1.2363	21.7208	27.6637
ROA	2479	.044	.072	-.2782	.2291
LEV	2479	.4829	.1843	.0923	.868
AGE2	2479	14.3292	7.3127	1	28
TOP1	2479	35.3127	15.6458	7.94	75.01
BOARD	2479	2.1463	.211	1.6094	2.7081
PFixA	2479	14.8578	.8269	13.0232	17.1751
Psales1	2479	14.2731	.8101	12.5876	16.6869

5.2. Benchmark Regression Analysis

Table 2. Regression Results Table

VARIABLES	Exp	Exp
ESG	0.137*** (3.39)	0.2603*** (2.61)
SIZE		2.3123*** (3.59)
ROA		-3.5220** (-2.17)
LEV		1.0001 (0.69)
AGE2		0.1172 (0.25)
TOP1		-0.0362 (-1.42)
BOARD		-1.2976 (-1.35)
PFixA		-2.7738*** (-4.29)
PSales1		1.5102*** (3.01)
Constant		-17.0001 (-1.18)
R-squared	0.0875	0.0147
firm fe	No	Yes
year fe	No	Yes

Note: The robust standard error for product level clustering adjustment is indicated in parentheses. *, * ***, Significant at the 10%, 5%, and 1% levels respectively.

From the regression results, the ESG performance of enterprises is significantly correlated with export scale at a 1% significance level, with fixed individual and time effects. The coefficients of the ESG variables in both columns are significantly positive, preliminarily confirming the positive promoting effect of ESG performance on export scale. The estimated coefficient of ESG in the first column is 0.137, indicating that for every unit increase in ESG, the company's export scale will increase by 13%. From the perspective of controlling variables, the larger the scale of the enterprise, the higher the capital intensity, and the higher the production efficiency of employees, the larger the scale of the enterprise's exports.

6. Main conclusions and inspirations

With the continuous dissemination and development of the concept of sustainable development, responsible exports have received particular attention. This type of export can rebuild the export advantage of enterprises and also provide an opportunity to showcase China's role as a major exporting country to countries around the world.

The article is based on data from Chinese A-share listed companies in Shanghai and Shenzhen from 2015 to 2022, and summarizes existing literature to analyze the impact of a company's ESG level on its export scale. The following conclusion can be drawn: (1) Overall, the ESG level of a company has a significant promoting effect on its export scale. (2) Enterprises with excellent ESG performance can significantly promote the growth of their export scale by enhancing green innovation and reducing financing costs.

Firstly, the government should deepen policy guidance and improve supervision and management mechanisms. With the increasing emphasis on ESG, Chinese companies have also encountered more hidden trade barriers when exporting. Our country's ESG rating information has always followed the principle of voluntary disclosure, and government agencies often use "suggestions" in relevant documents, which makes companies less willing to disclose. In the absence of a reward and punishment system, the disclosure of ESG information by companies can lead to an increase in short-term costs and a decrease in profits. Therefore, the government should establish a corresponding reward and punishment system to promote the development and optimization of ESG architecture. Specifically, we should attach importance to the popularization of ESG, realize the ideas between financial intermediaries, industry university research centers, and environmental supervision departments, and thereby reduce the risks of enterprises while optimizing their ESG performance, improve their technical efficiency and financing capabilities, guide more financial resources to tilt towards enterprises with high ESG ratings, and help enterprises alleviate their social responsibility dilemma while reducing their export costs.

Secondly, enterprises should maintain export sensitivity and respond to the demands of stakeholders. Enterprises need to take ESG as a starting point and have a correct understanding of the impact of ESG performance on their exports. Maintain relevant sensitivity when conducting export trade, gain in-depth insight and respond to the requirements of different stakeholders. While creating economic value, we should also pay attention to the joint efforts of environmental and social responsibility. At the same time, establish effective ESG management mechanisms at the strategic level of the enterprise.

Enterprises need to actively and truthfully disclose and optimize relevant indicators of ESG governance, not limited to publishing positive ESG ratings. By demonstrating a good ESG rating, companies can respond to stakeholders' concerns and establish a more positive reputation on the international stage.

Thirdly, we will continue to promote lending activities in the ESG field. In recent years, lending activities in the ESG field have been thriving. In terms of ESG investment, the domestic market supervision and administration bureau has launched a series of economic policies with green finance and inclusive finance as the core, aiming to encourage various financial institutions such as commercial banks and public funds to develop more financial products based on ESG equity

investment management concepts, such as green ecological loans, funds, and carbon products. Enterprises should also seize the opportunity and utilize various favorable conditions provided by the state.

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