

10.18686/frim.v2i3.4220

Does Corporate ESG Performance Improve Export Performance? Evidence from China

Jing Li, Jiajia Wang^{*(Corresponding author)}, Hanqiong Wang

Business School (School of Quality Management and Standardization), Foshan University, Guangdong, Foshan 528000, China.

Abstract: Against the backdrop of the increasing importance of high-quality development, how to enable Chinese exporters to survive and develop in the complex international situation is an important issue that requires urgent attention. This study aims to build a bridge between theoretical and empirical analysis for corporate ESG performance affecting export performance. Utilizing the data of A-share listed manufacturing companies in Shanghai and Shenzhen from 2014 to 2023, how corporate ESG performance affects export performance is examined at the micro level. The empirical finding is that corporate ESG performance not only significantly enhances export performance, but also helps corporate export performance through the path of enhancing total factor productivity.

Keywords: Corporate ESG performance; Export performance; Total factor productivity

1. Introduction and Literature Review

ESG (Environmental, Social and Governance) is defined as an enterprise's business activities and financial investments should not only be based on economic benefits, but also pay attention to its performance in promoting sustainable development, fulfilling social responsibility and perfecting corporate governance, so as to realize multi-dimensional balanced development^[1]. According to CSI statistics, the number of listed companies disclosing ESG information in China's Shanghai and Shenzhen A-share markets has grown from 1,566 in 2009 to 5,361 in 2023, showing significant growth momentum. However, the "three highs" of high energy consumption, high emissions and high pollution are still prevalent in China's manufacturing enterprises^[2-4]. Under such circumstances, manufacturing enterprises must follow the ESG concept, which is the necessary way for them to become bigger and stronger.

Based on the neo-new trade theory framework, the intrinsic drivers of firms' exports are mainly attributed to productivity differences (Melitz, 2003; Bernard and Jensen, 2004). Total factor productivity (TFP) has the central connotation of the additional unpredictable productivity achieved given a certain level of factor inputs (Olley et al., 1996), and is usually used to measure the productivity growth of pure technological progress excluding all tangible factors of production^[5-7]. Firms facing higher environmental governance pressures will be forced to engage in technological innovation, which can further optimize the combination of production factors (Sheng Mingquan et al., 2022). Through technological innovation, enterprises improve production technology and production processes, optimize the combination of production factors, and thus increase the efficiency of resource allocation and enterprise total factor productivity (Li Duan et al., 2023), which in turn promotes the enhancement of export performance.

2. Theoretical Analysis and Research Hypotheses

2.1 Mechanism analysis of corporate ESG performance affecting export performance

Based on the theory of sustainable development, the active assumption of social responsibility by enterprises is an effective means for them to realize sustainable development. Enterprises that pay attention to responsibility often show that they can more accurately assess the work management performance of their managers^[8], reduce the two-way moral risk of the enterprise, and motivate managers to make spontaneous investment in human capital (Luo, Pinliang, and Si, Chunlin, 2001), which in turn benefits the quality of operation and labor productivity, and further promotes export enterprises to take the road of sustainable development and improve international competitiveness. This paper proposes Hypothesis 1: Good ESG performance of enterprises can promote their exports.

2.2 Mechanism analysis of total factor productivity mechanism effect

According to stakeholder theory, in terms of the social responsibility dimension of ESG performance, a firm's active commitment to social responsibility facilitates its ability to gain the trust and support of its stakeholders, providing it with the resources it needs for technologi-

cal innovation^[9]. Combined with excellent internal governance, increased innovation and improved labor productivity, firms can increase total factor productivity (Deng et al, 2023). This paper proposes Hypothesis 2: Firms with good ESG performance can boost export performance by increasing total factor productivity.

3. Research Design

3.1 Sample selection and data sources

The research objects of this paper are selected from Chinese A-share listed companies in the manufacturing industry from 2014 to 2023. By excluding ST and *ST enterprises with serious losses and enterprises with more missing data on overseas sales revenue^[10], 4, 480 sample observations are finally obtained. All data are from Wind database and CSMAR database.

3.2 Modeling and Variable Definition

Based on the assumptions of the article, this paper constructs a panel regression model.

$$\text{Model (1): } \text{EXP}_{it} = a_0 + a_1 \text{ESG}_{it} + a_2 \text{Control}_{it} + \text{Stkcd}_i + \text{Year}_t + e_{it}$$

Modeling the mechanism using total factor productivity TFP as the mechanism variable, Model(2): $\text{TFP}_{it} = b_0 + b_1 \text{ESG}_{it} + b_2 \text{Control}_{it} + \text{Stkcd}_i + \text{Year}_t + e_{it}$

Table 1 Variable Definitions and descriptive statistics

Variable type	VarName	Definition	Obs	Mean	SD	MIN	MAX
explained variable	EXP	Export performance	4480	8.382	4.372	1.000	14.727
explanatory variable	ESG	Corporate ESG performance	4480	4.150	0.915	2.000	6.000
control variables	Size	Enterprise size	4480	22.534	1.226	20.029	25.690
	Grow	Enterprise growth	4480	0.137	0.366	-0.864	3.303
	Lev	gearing	4480	0.411	0.194	0.055	0.873
	Top10	Shareholding ratio of top ten shareholders	4480	54.799	14.137	23.810	89.420
	Holding	foreign holding	4480	0.035	0.183	0.000	1.000
	Age	Age of business	4480	2.617	0.564	0.000	3.367

4. Empirical results and analysis

4.1 Multiple regression analysis

This paper adopts the multiple linear regression model to empirically test the sample data, and the specific analysis results are shown in Table 2.

Table 2 Multiple regression analysis

	(1)	(2)
	EXP	TFP
ESG	0.148***	0.035***
	(3.118)	(3.993)
Control	YES	YES
Stked	YES	YES
Year	YES	YES
Observations	4480	4480
R-squared	0.118	0.587

Note: Data in parentheses in the table are t-statistics; ***, **, and * represent significant at the 1%, 5%, and 10% levels, respectively. Same as below.

The regression results show that: column (1) is the regression analysis of enterprise ESG performance on export performance, the results show that ESG performance is positively correlated with export performance and total factor productivity, and all of them are significant at 1% significance level, which indicates that the better the ESG performance of the enterprise, the more conducive to the enhancement of export performance and total factor productivity, and Hypotheses 1 and 2 are proved.

4.2 Robustness test

4.2.1 Replacement of explanatory variables

This paper replaces the natural logarithm of the enterprise's annual overseas sales revenue with the enterprise's export profit (exp) as the

explanatory variable for the robustness test. The results show that after adopting export intensity as an explanatory variable, the ESG coefficients remain significant at the 1% significance level and the results remain robust.

4.2.2 Dealing with endogeneity

Mitigating bidirectional causality through lagged one-period ESG performance. In this paper, we choose one-period lagged ESG disclosure (EXP) as an instrumental variable, and replace the ESG performance indicator of the current period in the model with the data of the relative lagged period. The results show that lagged one-period ESG performance is still significantly and positively associated with firms' export performance (EXP) at the 1% level of statistical significance.

5. Main Conclusions and Policy Implications

This paper empirically investigates the relationship between ESG performance and export performance of export enterprises, and intends to explore possible paths for export enterprises to actively practice ESG performance. The results show that: firstly, good ESG performance has a significant promotion effect on the export performance of manufacturing enterprises; secondly, ESG performance can realize the export performance promotion effect through the channel of improving total factor productivity.

The conclusions of this paper provide useful policy insights for further promoting the practice of ESG concepts among manufacturing enterprises and striving to create new advantages in international competition. First, government departments should actively promote ESG practices to effectively promote export performance. Manufacturing enterprises with high levels of environmental pollution should be given ESG ratings on a regular basis, and short-, medium-, and long-term planning goals should be formulated to actively and steadily promote ESG practices and facilitate the improvement of export performance^[11]; second, enterprises should incorporate ESG into their strategic planning for business development in order to improve total factor productivity. Internalize environmental friendliness and social responsibility into corporate governance, establish a positive corporate image through good ESG performance, and then obtain sufficient funds to improve the level of technological innovation and total factor productivity to create high value-added export benefits^[12].

References

- [1] An Ran, Chen Yimao. Corporate ESG performance, R&D investment and export performance improvement[J]. *Economic Journal*, 2023, (08):98-106.
- [2] Andrew B. Bernard, Jonathan Eaton, J. Bradford Jensen et al. Plants and Productivity in International Trade[J]. *The American Economic Review*, 2003, 93(4):1268-1290.
- [3] CHEN Fang, WU Chunwei, FENG Quanwei. Research on the impact of ESG performance on firms' exports[J]. *Asia-Pacific Economy*, 2023, (06):103-115.
- [4] Chen H, Zhang LX. ESG performance, digital transformation and corporate value enhancement[J]. *Journal of Zhongnan University of Economics and Law*, 2023, (03):136-149.
- [5] Chen Lingfang. Research on the impact of ESG performance on total factor productivity of forestry enterprises[J]. *Forestry Economic Issues*, 2022, 42(05):532-539.
- [6] Chunhong Wang, Minru Zhao, Zhenhua Zhang. Research on the Relationship Between Corporate Governance Performance and Financing Cost Under the Background of ESG Theory[J]. *E3S Web of Conferences*, 2021, 23501054-.
- [7] Deng Xiang, Li Weihao, Ren Xiaohang. More sustainable, more productive: Evidence from ESG ratings and total factor productivity among listed Chinese firms[J]. *Finance Research Letters*, 2023, 51
- [8] Fang Xianming, Hu Ding. Corporate ESG performance and innovation—Evidence from A-share listed companies[J]. *Economic Research*, 2023, 58(02):91-106.
- [9] FENG Bo, CHENG Liting, FENG Junwen. Study on Enterprise Value Evaluation Based on ESG: Taking Tesla Enterprise as An Example[J]. *Canadian Social Science*, 2022, 18(1):61-74.
- [10] FU Jialin, HUANG Xiaohong. How does corporate ESG performance affect corporate total factor productivity? [J]. *Economic Jingwei*, 2023, 40(03):108-117.
- [11] Fu Tao, Li Jiangjun. An empirical analysis of the impact of ESG on financial performance: the moderating role of digital transformation[J]. *Frontiers in Environmental Science*, 2023, 11
- [12] He Feng, Feng Yaqian, Hao Jing. Corporate ESG rating and stock market liquidity: Evidence from China[J]. *Economic Modelling*, 2023, 129