



A Study on the Positive Promotion Effect and Heterogeneity of Corporate Profit Margins on ESG Development

Fengming Tang

Yanbian University, Yanji City 133002, China

2358689973@qq.com

Abstract. Corporate profit margins serve as a crucial indicator for measuring a company's profitability and a key reference for strategic decision-making. Clarifying the impact of profit margins on a company's ESG (Environmental, Social, and Governance) development helps enhance the efficiency of profit utilization and holds practical significance for the company's long-term growth. This study employs a two-way fixed effects model to examine the impact of corporate profit margins on ESG performance, utilizing ESG rating data from 2011 to 2024. The research findings reveal: Corporate profit margins significantly enhance ESG performance, a conclusion that remains robust after undergoing stability tests and other methodologies. This study highlights the crucial role of corporate profit margins in driving ESG performance, providing valuable insights for related research in this field. It also offers important policy implications for how different types of enterprises should allocate resources to support high-quality ESG development.

Keywords: Corporate profit margins, ESG, High-quality development.

1 Introduction

Since the “dual carbon” goals were proposed at the 75th session of the United Nations General Assembly in 2020, they have been implemented as tangible actions witnessed by all members of society. The 20th National Congress of the Communist Party of China called for accelerating the green transformation of development patterns, improving fiscal, financial, investment, pricing policies, and standards supporting green development, fostering green and low-carbon industries, enhancing the market-based allocation system for resource and environmental factors, and accelerating the research, development, and application of advanced energy-saving and carbon-reduction technologies. Green and low-carbon production and operation models embody the environmental protection principles within ESG. National policies have systematically linked corporate health with environmental stewardship, embedding environmental consciousness into corporate culture. The era's call that “lucid waters and lush mountains are invaluable assets” guides corporate development, making environmental protection

within ESG an essential foundation for enterprises pursuing long-term value and sustainable development.

Regarding social responsibility and corporate governance within ESG, the 2025 Joint Forum on Safeguarding Workers' Legitimate Rights and Interests emphasized the need to thoroughly grasp the new requirements set forth by General Secretary Xi Jinping and the Party Central Committee for protecting workers' legitimate rights and interests. With a heightened sense of responsibility and mission, safeguarding workers' rights must be treated as a major priority. While ensuring employment for the majority, special attention should also be given to providing employment assistance to vulnerable groups, thereby promoting common prosperity. Additionally, companies should strengthen internal controls, establish fair promotion systems, and ensure transparent information disclosure to safeguard consumer rights.

2 Literature Review

ESG principles focus more on the impact of non-financial indicators such as environmental protection, social responsibility, and corporate governance on enterprises serving as a core framework for measuring corporate sustainability capabilities and social responsibility fulfillment¹. As a hot topic in recent years, ESG has gradually evolved from an idealistic, globally shared concept of sustainable development into a key metric for assessing corporate core competitiveness and an emerging trend for achieving healthy, long-term business growth. During China's 14th Five-Year Plan period, ESG report disclosures by A-share listed companies surged by 71%. By the end of 2024, MSCI statistics revealed that 26% of A-share companies received upgraded ESG ratings that year—a historic high. Consequently, leveraging ESG to analyze corporate value and profitability represents a field worthy of in-depth research. Existing literature on ESG investing indicates insufficient participation among Chinese institutional investor². To address this, incentive mechanisms and regulatory frameworks should be refined to channel capital toward ESG-compliant enterprises and encourage broader adoption of ESG principles. Additionally, ESG market access regulations should establish clear negative lists to lower entry barriers while ensuring legal compliance, thereby avoiding cumbersome approval processes, fully stimulating market vitality, and enhancing corporate ESG performance³. Regarding ESG's impact on the labor income share, research indicates that positive effects on labor income distribution emerge only when companies participate in ESG ratings and achieve a certain level⁴. This may stem from improved ESG performance and reputation enabling greater financing opportunities⁵, securing capital to support production and operations⁶, increasing corporate revenue, and consequently raising the labor income share. Finally, significant attention is given to how ESG rating discrepancies can substantially elevate corporate debt financing costs⁷, though this effect is markedly mitigated when institutional investors hold shares. The study concludes with an examination of ESG governance dimensions.

Corporate profits represent the operational outcomes achieved by a company during a specific accounting period, serving as a core metric for evaluating profitability and business performance⁸. In recent years, research on corporate profits has garnered

increased attention within academic circles. This includes addressing the asymmetry in cost fluctuations relative to business volume caused by cost stickiness, which can be mitigated through digital transformation to enhance profitability⁹. Additionally, management's optimistic tone aligns with and masks earnings management¹⁰, thereby embellishing the quality of corporate profits to some extent. The uncertainty of tariff barriers also reduces corporate export trade volumes¹¹, consequently lowering overseas operating revenues and diminishing profits. The significance of corporate profits lies in their role as the capital pillar for subsequent corporate development and the foundation supporting vigorous growth. Investing limited profits into higher-value domains to unlock growth opportunities is a shared pursuit among investors and executives. Yet some firms exploit ESG as a profit-seeking tool, seeking market validation without grasping its core principles and mechanisms¹²—for instance, by falsifying ESG disclosures to secure financing. Without a proper understanding of ESG principle¹³, such companies struggle to generate sustainable profits. Ultimately, this approach harms investor and public interests while wasting resources¹⁴. This misplaced emphasis stems partly from corporate impatience and partly from a lack of academic evidence demonstrating how corporate profit margins influence ESG development. Research utilizing relatively controllable internal resources to guide corporate ESG advancement remains insufficient.

This indicates that while both corporate ESG and corporate profits have been studied, research on their interrelationship and causality remains limited. This paper examines the role of corporate profit margins in influencing corporate ESG performance. Findings reveal that under appropriate business models, profit margins can promote improvements in ESG performance, with this effect being more pronounced among enterprises in western regions, non-high-tech enterprises, and non-heavily polluting enterprises. This study offers potential contributions in three areas: First, it employs a two-way fixed effects model to quantitatively examine whether corporate profit margins drive ESG development. Second, it uses heterogeneity tests to assess the varying impact of profit margins on ESG across different geographic locations and corporate types. Third, it proposes corresponding improvement recommendations and refines relevant regulations based on the identified effects of profit margins on ESG.

3 Theoretical Analysis and Research Hypotheses

The relationship between corporate profit margins and ESG principles has garnered significant attention in recent years. ESG constitutes an integral part of the sustainable development philosophy vigorously promoted in the new era and represents an innovative concept with immense growth potential in the eyes of many investors. In recent years, scholars have made relentless efforts in quantifying ESG's impact across economic and commercial domains, striving to identify which variables influence corporate ESG performance. This research aims to better leverage these factors in future economic development and corporate growth, unlocking ESG's deeper potential to drive environmental improvement and social prosperity. Typically, companies with higher profit margins tend to have more capital available for investing in low-carbon, energy-efficient equipment and developing green transition technologies, thereby

demonstrating the environmental protection (E) aspect of ESG. Additionally, companies with higher profit margins often have surplus funds to enhance employee welfare and engage in public welfare initiatives. This not only builds a positive reputation but also fully embodies the social responsibility (S) component of ESG. Finally, companies with outstanding profit margins attract more valuable investors. Greater participation from high-caliber shareholders optimizes shareholder meeting structures, fostering internal oversight mechanisms that prevent any single shareholder from dominating. This, in turn, enhances the quality of information disclosure, effectively strengthening and consolidating the governance (G) aspect of ESG. Through these multifaceted effects, improved corporate profit margins provide a more robust financial foundation to support the development of ESG performance. Based on this, we propose research hypothesis H.

H: An increase in corporate profit margins positively promotes the development of corporate ESG performance.

4 Empirical Design

4.1 Data Sources

The empirical sample comprises data from A-share listed companies on the Shanghai and Shenzhen stock exchanges from 2011 to 2024. During the empirical analysis, the sample data underwent the following processing: ① Exclusion of firms marked with abnormal trading statuses such as ST or PT; ② Exclusion of the financial sector; ③ To mitigate the impact of outliers, continuous variables underwent trimmed tailing at the 1% and 99% percentiles. Ultimately, the empirical sample comprised 48,708 observations.

4.2 Variable Specifications and Model Configuration

The empirical sample comprises data from A-share listed companies on the Shanghai and Shenzhen stock exchanges from 2011 to 2024.

To examine the impact of corporate profit margins on ESG performance, the regression model below is constructed.

$$Y_{it} = \beta_0 + \beta_1 X_{it} + \lambda_i + \mu_t + \varepsilon_{it}$$

The variables in the equation are defined as follows: Y_{it} represents the ESG performance of firm i in year t ; X_{it} denotes the firm's profit margin variable; λ_i and μ_t represent individual fixed effects and time fixed effects, respectively; ε_{it} is the random error term.

4.3 Descriptive Statistics for Variables

Table 1 reveals that the average ESG score for enterprises is 0.0732 with a standard deviation of 0.0048, indicating significant variation in ESG performance across

companies. The mean profit margin stands at 0.0638. All control variables fall within reasonable ranges, consistent with real-world conditions.

Table 1. Descriptive statistics

	(1)	(2)	(3)	(4)	(5)	(6)
VARIABLES	N	mean	sd	min	p50	max
GrossProfit	54,570	0.2843	0.1685	-0.0281	0.2532	0.8419
NetProfit	54,570	0.0638	0.1590	-1.0983	0.0669	0.4897
ESG	48,708	0.0732	0.0048	0.0572	0.0733	0.0857

5 Empirical Design

5.1 Baseline Estimation Results

Table 2 presents the benchmark estimation results of this study. Column (1) shows the results without controlling for individual and time fixed effects. Here, the coefficient of corporate profit margin on ESG is 0.0059, significant at the 1% level. This indicates that corporate profit margin significantly enhances corporate ESG performance, consistent with theoretical analysis. Column (2) presents results controlling only for individual fixed effects but not time fixed effects. Here, the coefficient for corporate profit margin on ESG is 0.0031, significant at the 1% level. This confirms that corporate profit margin significantly enhances ESG performance, consistent with theoretical analysis. Column (3) presents results controlling for both individual and time fixed effects. Here, the coefficient for corporate profit margin's impact on ESG is 0.0026, significantly positive at the 1% level. This confirms that corporate profit margin significantly enhances ESG performance, consistent with theoretical analysis. Thus, Table 2 estimation results demonstrate that rising corporate profit margins effectively improve ESG performance and promote sustainable development, validating research hypothesis H.

Table 2. Basic result

	(1) ESG	(2) ESG	(3) ESG
NetProfit	0.0059*** (39.1253)	0.0031*** (19.4471)	0.0026*** (16.3216)
_cons	0.0728*** (2892.8576)	0.0730*** (3442.9593)	0.0730*** (3605.8862)
Individual fixed effect	No	Yes	Yes
Time fixed effect	No	No	Yes
N	44787	44638	44638
r ²	0.0378	0.4622	0.4830

t statistics in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

6 Conclusions and Policy Implications

Based on ESG rating data released by Huazheng Securities and A-share listed company data from the Shanghai and Shenzhen stock exchanges between 2011 and 2024, this study employs a two-way fixed effects model to examine the impact of corporate profit margins on ESG performance. The findings reveal: Corporate profit margins significantly enhance ESG performance, a relationship that remains robust after undergoing robustness tests. Policy Implications: Relevant government departments should actively participate in global ESG rule-making, promote the international alignment of corporate ESG standards, broaden corporate sales channels, and help enterprises circumvent trade barriers in international commerce. This approach not only expands corporate profit margins but also generates tax revenue, thereby increasing government fiscal income and achieving multiple benefits simultaneously.

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