

The Relationship Between ESG Performance and Corporate Financial Performance: Controversies, Mechanisms, and Contextual Factors

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ABSTRACT

This paper systematically examines the complex relationship between ESG performance and corporate financial outcomes, revealing its controversy, underlying mechanisms, and contextual dependence through theoretical analysis and empirical research. Findings indicate that short-term ESG investments may impose financial pressures due to increased explicit costs (e.g., direct expenditures on clean energy equipment procurement and pollution control facility construction) and implicit costs (e.g., indirect expenses for ESG strategic planning and management system development). Some studies show a negative correlation between ESG performance and current stock returns, particularly pronounced under climate risk exposure. Such investments may also exacerbate credit rating inflation, leading to market information asymmetry. Over the medium to long term, ESG practices significantly enhance financial performance through risk mitigation, innovation-driven growth, and resource efficiency improvements: Risk mitigation reduces environmental compliance costs, minimizes labor disputes and negative public incidents, and curbs internal corruption and operational errors. Innovation-driven growth fosters green technology, product, and management innovation, building technological barriers and differentiated competitive advantages. Resource efficiency lowers operational costs and creates market value. Additionally, contextual factors such as industry attributes (high-pollution sectors exhibit significant returns on environmental investments, consumer-oriented industries show pronounced social impacts, and financial sectors rely critically on governance dimensions) and firm size (large enterprises can systematically deploy resources and spread costs, while SMEs should focus on areas yielding immediate returns) significantly moderate this relationship. This research provides theoretical foundations for corporate managers to formulate sustainable development strategies, investors to optimize decision-making, and policymakers to design incentive and regulatory mechanisms. It drives enterprises to transform ESG from a compliance burden into a value creation engine, achieving synergistic enhancement of economic and social benefits.

KEYWORDS

ESG performance; Financial performance; Risk mitigation; Innovation-driven; Context-dependent

1 Introduction

Global climate change and the sustainable development agenda are reshaping the business landscape with unprecedented intensity. With the full implementation of the Paris Agreement and the ongoing advancement of the United Nations Sustainable Development Goals, ESG principles have risen from peripheral corporate concerns to strategic core priorities. This shift stems from increasingly severe ecological challenges, widening social inequalities, and heightened international expectations for corporate transparency and accountability. The investment landscape is undergoing a profound paradigm shift. According to the latest statistics from the Global Sustainable Investment Alliance, global sustainable investment surpassed \$35 trillion in 2022. An increasing number of institutional investors are integrating ESG factors into their investment decision-making frameworks, reflecting a redefinition of corporate value and evaluation criteria within capital markets. The intensifying regulatory environment further accelerates this process. The EU's Sustainable Finance Disclosure Regulation, the U.S. Securities and Exchange Commission's new climate disclosure rules, and China's continuously refined disclosure guidelines collectively form an increasingly stringent disclosure framework. Companies now face market pressure where "failure to disclose means elimination," indicating that ESG performance has become a critical factor for market access and financing capabilities.

As ESG practices rapidly proliferate, significant academic and practical debate has emerged regarding the relationship between ESG and corporate financial performance, primarily centered on the cost-benefit balance of ESG investments. Some scholars argue that substantial initial investments required for ESG compliance—such as environmental equipment upgrades, supply chain audits, and governance reforms—directly increase operational costs, potentially squeezing corporate profit margins in the short term. Conversely, other studies demonstrate that ESG practices can generate sustained competitive advantages and long-term value through mechanisms like risk mitigation, operational efficiency gains, enhanced innovation capabilities, and reputation capital accumulation. Theoretically, this research contributes to integrating diverse academic perspectives, constructing a more systematic analytical framework, and advancing ESG research from "whether value is created" to "how value is created." Practically, the findings can provide strategic decision-making support for corporate managers in designing differentiated ESG implementation pathways; offer

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investors assessment tools to identify ESG value drivers; and furnish empirical evidence for policymakers to design more effective incentive and regulatory mechanisms. This research aims to transform ESG from a compliance burden into a value creation engine for enterprises, achieving synergistic enhancement of economic and social benefits.

2 Controversial perspectives on ESG and financial performance

2.1 The theory of short-term value

ESG investments do indeed impose significant financial pressure on companies in the short term. This pressure manifests in two primary ways: first, a direct increase in explicit costs, including expenditures such as purchasing clean energy equipment, constructing pollution control facilities, and implementing employee welfare programs; second, a rise in implicit costs, involving indirect expenses related to ESG strategic planning, management system development, performance evaluation system creation, and ongoing monitoring. These investments typically require substantial upfront capital expenditures yet struggle to translate into corresponding economic benefits in the near term. Hu Ying's analysis of Chinese listed companies indicates that the cost structure formed by long-term decisions significantly constrains short-term decision-making space. The fixed costs associated with ESG investments are difficult to adjust in the short term, leading to "sticky" costs—meaning that when operating revenue declines, cost reductions are far less than the cost increases seen during revenue growth, directly squeezing current profits. Research by Naseer et al on UK listed companies found a significant negative correlation between ESG performance and current stock returns. This reflects the market's initial tendency to view ESG investments as cost burdens rather than value-creating activities, with this negative effect becoming more pronounced when facing climate risk exposure (FCRE). Wang Lei et al. employ empirical methods like variable analysis to suggest that ESG may exacerbate credit rating inflation, leading to market information asymmetry. This indicates that companies with strong ESG performance may face more complex financing environments and market expectations in the short term. These findings confirm the existence of a "cost effect" associated with ESG investments, particularly during the initial transition phase when companies bear significant financial pressure. This phenomenon is especially pronounced in capital-intensive industries and among small and medium-sized enterprises (SMEs).

2.2 The theory of long-term value

Despite short-term cost pressures, extensive research indicates that ESG practices can significantly enhance a company's long-term financial performance through multiple transmission mechanisms. In terms of risk mitigation, strong ESG performance helps reduce various risks faced by enterprises. Li Jiaojiao et al. conducted empirical research on A-share listed companies and found that strong ESG performance significantly increases market value (measured by Tobin's Q ratio). The primary mechanisms at work involve mitigating information asymmetry and enhancing social recognition, thereby effectively reducing operational and compliance risks. Companies at the center of equity networks experience more pronounced risk mitigation and value enhancement effects from ESG practices. Such firms, whose actions carry stronger exemplary effects, more readily gain market trust and reduce external financing costs.

Regarding operational efficiency gains, ESG practices deliver tangible benefits by implementing people-centered principles. Wang Jing's 2025 empirical study demonstrates that corporate ESG development—through enhanced employee rights protection such as improved compensation and benefits, occupational health, and increased educational investment—effectively boosts employee belonging, cohesion, and work motivation, thereby elevating labor productivity. The study further reveals a significant U-shaped relationship between ESG development and labor productivity. While initial investments may temporarily suppress efficiency due to increased costs, ESG ultimately drives sustained productivity gains by upgrading human capital structures, curbing management short-termism, and optimizing production processes.

Regarding innovation capacity, ESG requirements drive technological innovation and management-level innovation within enterprises. Research by Gu Yang et al. shows that strong ESG performance significantly promotes green technological innovation, with positive impacts across environmental, social, and governance dimensions. Yang Juanjuan, Liu Lin, and others further revealed that ESG's promotion of green technological innovation is most pronounced in the social dimension, followed by governance and environmental dimensions. These innovations not only help alleviate financing constraints, improve stakeholder relations, and enhance information transparency, but also enable enterprises to explore new market opportunities in green technology and build sustainable competitive advantages.

Regarding market value enhancement, companies with strong ESG performance gain greater market recognition. Research by Han Xiaozhou et al.^[11] indicates that robust ESG performance significantly reduces equity financing costs for listed companies, with investor confidence playing a key mediating role. This reflects capital markets' more positive valuation recognition of ESG-leading firms. Concurrently, companies with outstanding ESG performance achieve more stable revenue growth by enhancing brand image and strengthening customer loyalty.

3 The mechanism through which ESG influences financial performance

3.1 Risk mitigation mechanism

In the environmental dimension, by implementing energy conservation, emission reduction, and resource recycling, enterprises can effectively reduce compliance costs such as carbon taxes and pollution fines that may arise from environmental violations. Simultaneously, they avoid reputational damage and legal disputes triggered by environmental incidents. For instance, research by Zhao Shao-yang et al. indicates that following the implementation of green credit policies, banks tend to reduce lending support for highly polluting large enterprises while increasing loans to low-pollution small and medium-sized enterprises. This helps the latter mitigate regulatory risks and improve asset quality. On the social dimension, building harmonious labor relations and actively participating in community interactions help reduce labor-management conflicts and negative public incidents, ensuring operational stability and continuity. Yan Aimin et al. demonstrate that implementing employee stock ownership plans significantly enhances employee satisfaction and organizational commitment, thereby effectively reducing core talent attrition rates and recurring recruitment costs. On the governance front, establishing transparent, compliant decision-making and oversight mechanisms helps prevent internal corruption and major operational errors, safeguarding corporate assets. Shen Zifan notes that independent directors, by exercising pre-approval and ongoing oversight rights, can serve as a counterbalance in related-party transactions of listed companies. This represents a crucial mechanism for curbing unfair transactions and enhancing corporate governance. However, the effectiveness of their oversight remains constrained by limitations in independence and expertise, necessitating further reinforcement through optimized exercise rules and the allocation of rights and responsibilities.

3.2 Innovation-driven mechanism

ESG requirements drive companies to increase R&D investment in green technologies and clean production processes, helping to establish technological barriers and create long-term cost advantages. Yang Juanjuan and Liu Lin found through empirical research on Chinese A-share listed companies from 2012 to 2022 that strong ESG performance significantly promotes corporate green technological innovation, with the marginal effect of the social responsibility (S) dimension being the most pronounced. Growing demand for sustainable consumption incentivizes companies to develop environmentally friendly products for differentiated competition. Xie Xiaoyan and Wang Xinyu demonstrated through research on China's heavily polluting enterprises that ESG performance significantly promotes green dual innovation, particularly accelerating exploratory green innovation. Strong ESG performance not only directly enhances green innovation capabilities but also strengthens innovation implementation through mechanisms like alleviating financing constraints and increasing analyst attention. In management innovation, integrating ESG principles drives process reengineering and data consolidation, enhancing cross-departmental collaboration efficiency and resource allocation transparency. For instance, Haier Group embedded ESG concepts into production and supply chain management through its COSMOPlat industrial internet platform, enabling end-to-end data-driven processes from user customization to green manufacturing, significantly improving resource utilization efficiency. State Grid Corporation of China leveraged its "New Energy Cloud" platform to integrate wind, solar, and storage data, achieving a renewable energy consumption rate exceeding 95%, demonstrating ESG's innovative value in intelligent energy system management. Evidently, ESG not only propels green transformation at the technological level but also enhances organizational operational and strategic responsiveness through management system restructuring, providing a referenceable management paradigm for the high-quality development of Chinese enterprises.

3.3 Resource efficiency mechanism

Strong ESG performance positively impacts financial outcomes by enhancing resource efficiency, manifesting in reduced operational costs and increased market value creation. Regarding cost savings, companies implementing ESG principles—through energy-saving upgrades, circular production models, and eco-friendly materials—significantly lower energy and raw material consumption, directly cutting operational expenses. Research indicates a positive correlation between environmental management investments and resource utilization efficiency. For instance, Pan Zhongwen et al. found through empirical research in the Yangtze River Economic Belt that a one-unit increase in market-based environmental regulation intensity (e.g., pollution discharge fees, pollution control investment) drives a 4.6% to 6.6% improvement in regional green water resource efficiency. This primarily stems from environmental compliance pressures compelling enterprises to refine processes and enhance resource recycling rates, thereby reducing resource and energy consumption per unit of output. Regarding value creation, strong ESG performance helps shape a green and responsible corporate image, winning favor among environmentally conscious consumers and investors. This, in turn, leads to product premiums and financing advantages. Pan Zhongwen et al. further note that the impact of environmental

regulation intensity on corporate green efficiency exhibits a threshold effect: once regulation intensity crosses a specific threshold, the innovation compensation effect surpasses compliance costs. This not only drives enterprises to achieve water conservation, emission reduction, and cost control but also enables them to gain market recognition through green technological innovation and differentiated products, achieving a win-win outcome for both economic and environmental benefits.

In summary, ESG drives sustained positive impacts on corporate financial performance by leveraging resource efficiency mechanisms. This approach not only directly reduces operational costs but also creates new value in the marketplace through enhanced brand reputation and improved financing capabilities.

4 The moderating effect of contextual factors on the relationship between ESG and financial performance

4.1 Industry attribute differences

ESG performance exhibits significant heterogeneity in its impact on financial outcomes across industries due to differences in business nature, regulatory environments, and resource dependency. In highly polluting sectors, environmental governance investments demonstrate particularly pronounced benefits for financial performance. These enterprises face stricter environmental regulations, where improvements in ESG environmental dimensions directly reduce compliance costs and operational risks while enhancing long-term value through the establishment of stable social relationship networks. A case study by Du Yongkui et al. using Baosteel Group provides compelling evidence. As a representative of a heavily polluting industry, Baosteel significantly improved its ESG rating by continuously increasing environmental investments, implementing circular economy models, and strengthening community engagement. These actions not only helped the company build robust social networks but also enhanced its internal governance and risk management capabilities. Despite facing cyclical downward pressure in the industry, the company's profitability metrics consistently outperformed industry averages and demonstrated stronger debt repayment stability. In consumer-oriented industries, enterprises are more likely to benefit from social responsibility investments. Consumer preferences directly influence purchasing decisions, and performance in the social dimension of ESG becomes a key source of competitive advantage by shaping brand trust. Wang Xing's research on the hospitality industry indicates that corporate social responsibility performance significantly enhances brand value, with brand value playing a key mediating role in how social responsibility influences consumer purchasing intent. This suggests that sound social responsibility practices do not directly impact financial outcomes but ultimately influence purchasing behavior by earning consumer emotional resonance and trust, thereby driving market share and financial performance gains. In the financial sector, ESG's financial effects are primarily manifested in the governance dimension. In recent years, both academia and practitioners have increasingly focused on how financial institutions' ESG practices translate into tangible economic benefits. Research by Lei, Yanhong et al. on Chinese A-share listed commercial banks indicates that strong overall ESG performance, particularly advantages in environmental and corporate governance aspects, effectively enhances banks' financial performance. Heterogeneity analysis further reveals that this positive effect is more pronounced in joint-stock commercial banks than in large state-owned commercial banks, reflecting that robust environmental risk management and governance structures form a crucial foundation for financial institutions' stable operations and market recognition.

4.2 Differences in enterprise scale

Enterprise scale determines its resource endowment and strategic implementation capabilities, thereby influencing the efficiency of ESG investment returns. Large enterprises typically possess abundant resources, enabling systematic ESG planning and cost-sharing through economies of scale. For instance, a case study by Zhao Yanmin et al. on China Construction Information Technology Co., Ltd. demonstrates that by establishing a "digitalization + inclusive finance" supply chain ESG responsibility management model, the company not only significantly improved its own financial performance but also resolved financing challenges for downstream small and micro distributors. This approach reduced overall supply chain operational costs and financial risks while enhancing chain resilience and market competitiveness. This case illustrates that ESG investments can deliver tangible long-term economic benefits by optimizing operational efficiency.

Constrained by limited resources, SMEs often adopt a focused strategy, concentrating ESG investments in areas with the highest potential financial returns. Research by Zhang Yang et al. reveals the practical challenges SMEs face, such as capital scarcity and lack of specialized talent, which hinder comprehensive ESG implementation. Consequently, these enterprises typically allocate limited resources to areas like energy-saving upgrades that yield rapid cost savings. Such targeted process innovations achieve efficiency gains and expenditure reductions in a short timeframe, directly driving

profitability improvements.

5 Case analysis

To specifically reveal the intrinsic link between ESG performance and corporate financial outcomes, Zhang Hao's empirical study examining data from Shanghai Pudong Development Bank and 16 listed commercial banks from 2013 to 2022 clearly demonstrates that both the overall ESG score and its environmental, social, and governance dimensions exert a significant positive impact on bank financial performance (measured by ROA), with corporate governance showing the strongest promotional effect. The study further reveals ESG impacts exhibit heterogeneity: the positive effect is significantly stronger in joint-stock banks like SPD Bank than in state-owned banks and city commercial banks. Moreover, higher ESG ratings yield more pronounced financial improvements. Even amid narrowing net interest margins due to interest rate liberalization, ESG demonstrates countercyclical resilience, effectively mitigating profitability pressures. Practically, SPDB has systematically integrated ESG into its operations by establishing the "SPDB Green Innovation" green credit system, continuously expanding inclusive micro-enterprise and agriculture-related loans, and incorporating ESG into the functions of its board committees. This case demonstrates that ESG practices are not merely compliance burdens but crucial strategic pathways for commercial banks to enhance management efficiency, strengthen risk resilience, and ultimately improve financial performance amid complex operating environments.

This research provides empirical support for ESG practices among Chinese commercial banks, demonstrating that ESG is not merely a compliance requirement but an effective pathway to enhance financial performance and market competitiveness. Particularly against the backdrop of dual-track reforms in interest rate liberalization and green finance, commercial banks should proactively integrate ESG into their strategic core.

6 Conclusions and outlook

This study systematically elucidates the complex relationship between ESG performance and corporate financial outcomes through theoretical review and case analysis. While ESG practices may increase short-term costs due to compliance and operational investments, they significantly enhance financial performance over the medium to long term through core mechanisms such as risk mitigation, innovation-driven growth, and resource efficiency improvements. This relationship is substantially moderated by contextual factors including industry characteristics, firm size, and institutional environments. Based on these findings, companies should deeply integrate ESG principles into strategic planning and operational processes, establish dedicated management bodies, and develop quantifiable ESG indicator systems. Governments need to refine disclosure standards and incentive policies, guide market development of ESG-oriented financial instruments, and expand green financing channels. Investors should progressively incorporate ESG factors into decision-making frameworks, leveraging capital to drive corporate improvements in sustainability transparency and practice effectiveness. This study has certain limitations, such as reliance on existing literature and typical cases, which impose constraints on data timeliness and sample coverage. Future research could introduce dynamic panel models to track the long-term interaction between ESG and financial performance, conduct cross-industry and cross-regional comparative analyses to deepen understanding of contextual mechanisms, and examine the synergistic effects of ESG and digital technologies in the context of digital transformation to expand their pathways for contributing to high-quality sustainable development in enterprises.

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