

ESG Performance and Corporate Resilience

Kaixuan Zhang

Shandong University, Qingdao 250100, China

ABSTRACT

This study explores how ESG performance affects corporate resilience using data from Chinese A-share listed companies (2016–2023). It combines performance growth and financial volatility into a resilience index via the entropy method. The results show a positive relationship between ESG performance and resilience, significant even after controlling for various factors. Robustness tests confirm that strong ESG performance reduces financial risks and enhances resilience. The study recommends governments establish clear ESG-related policies and companies integrate ESG principles into their operations for sustainable development.

KEYWORDS

ESG; Resilience; Corporate resilience

1 Introduction

Business resilience refers to a company's ability to adapt, recover and even develop when hit by natural disasters or other unexpected events^[1]. The global economic landscape is undergoing profound shifts. Frequent crises, challenges, economic downturn pressures, and rising extreme weather, geological disasters, and public health events are making the business environment more complex. Amid these severe challenges, building business resilience is crucial^[2]. Companies with high resilience usually have stronger financial management systems and maintain lower financial uncertainty. Resilient companies can quickly respond to market changes and overcome significant challenges^[7]. In addition, corporate resilience can boost investor confidence and reduce vulnerability during crises^[6]. Thus, constructing and enhancing corporate resilience has become a core strategic management issue for businesses.

As global climate change, resource depletion, and environmental pollution become more severe, sustainable development has drawn global attention. Against this background, the concept of environmental, social, and governance (ESG) has emerged as a vital tool for promoting sustainable corporate development. ESG (Environment, Social, and Governance) is a methodology for assessing corporate sustainability^[3]. ESG is a comprehensive methodology for assessing corporate sustainability. It requires companies to consider environmental protection, fulfill social responsibilities, and establish robust governance structures while pursuing economic benefits. From an environmental perspective, companies should monitor their carbon emissions, energy efficiency, and natural resource protection to minimize ecological impacts and promote low-carbon growth. Socially, they should safeguard employee rights by offering fair compensation, safe working conditions, and career development opportunities, while engaging in community support. In terms of governance, companies must establish sound internal mechanisms, ensure board independence and oversight, enhance information transparency, and make scientifically sound and lawful decisions to effectively manage risks. The ESG concept emphasizes that while seeking economic benefits, companies must also focus on environmental, social, and governance issues to achieve long-term sustainable development. In 2018, China's Securities Regulatory Commission updated the "Corporate Governance Guidelines for Listed Companies" to include ESG disclosure requirements. In 2022, the Chinese Academy of Social Sciences released the "CASS-ESG 5.0 Guidelines for Chinese Corporate Social Responsibility Reports," offering detailed guidance on ESG disclosure that aligns with China's context and development needs, and boosting the practical application of ESG principles locally. High ESG has positive social impacts. It helps ease corporate financing constraints^[8], boost market attention^[9], enhance performance and internal control quality^[10], thus increasing corporate value, strengthening risk - resistance ability, and promoting long - term value creation^[11].

Amid rising global uncertainty, studying the impact of ESG performance on corporate resilience is crucial for enhancing enterprises' risk resistance and crisis management. This paper uses data from Chinese A - share listed companies (2016 - 2023) to delve into this impact.

2 Theoretical Analysis and Research Hypotheses

The ESG (Environment, Social, and Governance) concept covers three main areas: the environment, social responsibility, and corporate governance. Good ESG performance means companies take active and effective environmental protection measures, fulfill their social responsibilities, and have a sound and efficient governance structure. Environmentally, such companies prioritize environmental management and are well - prepared for physical

climate - related risks, making them more resilient and better able to handle natural disasters and other unexpected events. Socially, companies that actively fulfill their social responsibilities gain wide - ranging social recognition and support. This enhances their reputation and brand image, improves their debt - financing ability and managerial confidence, and strengthens their market competitiveness and risk - resistance. In terms of governance, good corporate governance ensures scientifically sound and stable decision - making under social pressures. It balances the interests of all parties, prevents short - sighted decisions, and enables companies to pursue economic interests while also considering social and environmental interests. This allows companies to better adapt to market changes, make quick and reasonable decisions, and coordinate resources to deal with crises, thereby strengthening their overall resilience. Based on this, the paper proposes a hypothesis: there is a positive link between good ESG performance and corporate resilience.

3 Research Design

3.1 Sample Selection and Data Sources

This study focuses on Chinese A - share listed companies from 2016 to 2023, analyzing their data with Stata software. To ensure the data accurately reflects the companies' true situations and enhance empirical reliability, we conducted thorough preprocessing: excluding specially processed or delisted companies, removing financial industry -related data, and excluding ST and *ST firms. We also trimmed continuous variables at the 1st and 99th percentiles to reduce disturbances from extreme and abnormal values. The Huazheng ESG ratings data for these companies comes from the Wind Database, while other data is from the CSMAR Database.

3.2 Variable Selection

3.2.1 Dependent Variable

To measure corporate resilience, this paper borrows Ortiz and Bansal's method, analyzing it from performance growth and financial volatility perspectives. Performance growth is shown by the 3 - year cumulative sales growth, reflecting business expansion and growth ability. Financial volatility is measured by the standard deviation of monthly stock returns over a year, where a larger standard deviation means more volatile stock returns and higher risk. This paper combines these two key indicators using the entropy method to form a comprehensive corporate resilience index (Resilience), which effectively captures overall resilience by integrating business growth and financial stability.

3.2.2 Independent Variable

The measurement of firms' ESG performance is based on the Huazheng ESG rating system, a widely - used tool for evaluating domestic firms' ESG level from a well - known third - party Chinese institution. It's recognized for its wide market coverage and timely data updates. In the Huazheng database, ESG ratings are classified into nine categories: AAA, AA, A, BBB, BB, B, CCC, CC, C. For empirical analysis, following prior literature, we assign scores from 1 to 9 to these ratings, with higher scores indicating better ESG performance. Specifically, the ESG score for each firm in a given year is calculated as the average of its annual ratings, which objectively reflects the firm's annual ESG performance.

3.2.3 Control Variable

This study follows prior literature in selecting the following control variables: debt - to - asset ratio (Lev), firm size (Size), return on total assets (ROA), proportion of independent directors (Indep), equity concentration (Top1), and whether the company is audited by the Big4 (Big4).

4 Results and Analysis

4.1 Baseline Regression Analysis

The results indicate that, at the 1% significance level, there's a positive link between corporate ESG performance and resilience. Even after including control variables, this positive relationship remains significant. This confirms the initial hypothesis.

4.2 Robustness Tests

To address potential reverse causality between corporate ESG performance and resilience, this paper uses lagged ESG

scores in regression analysis. This approach aims to reduce endogeneity - induced bias. After introducing control variables, the lagged ESG scores remain significant at the 1% level, confirming the positive and robust impact of ESG performance on corporate resilience and strengthening the benchmark regression results.

To enhance the reliability and robustness of the conclusions, the paper moves beyond a single - dimension resilience measure. It breaks down the entropy - based resilience index into two dimensions: performance growth (Growth) and financial volatility (Vol), and re - conducts regression analysis. The results show a negative link between ESG performance and the volatility dimension, and a positive link with the growth dimension. This means better ESG performance can reduce financial risks and enhance corporate risk - resistance.

5 Conclusions and Recommendations

In today's complex and uncertain world, businesses face systemic risks from multiple fronts, including geopolitical tensions, supply - chain overhauls, extreme weather, technological disruptions, and social trust crises. In this context, leveraging ESG principles to enhance corporate resilience has become a critical topic.

Based on the findings, the paper proposes that governments should expedite the development of ESG - related laws and policies, providing businesses with a clear legal framework and policy support. For example, mandating environmental information disclosure and promoting green finance can direct financial resources toward green industries and sustainable development, creating a favorable policy environment for businesses. Meanwhile, companies must prioritize building organizational resilience to tackle various crises and risks. Given the growing economic uncertainty and faster business turnover, firms need a forward - looking perspective, proactive risk prevention, and solid organizational resilience.

Specifically, companies should strengthen their systematic risk - resistance capabilities strategically. They need to integrate ESG principles into daily operations, expand information channels to detect risk signals, and establish dynamic early - warning mechanisms for timely strategic adjustments. Additionally, firms should enhance organizational learning mechanisms to boost their adaptability and growth potential in adversity. Through this systematic resilience building, companies can navigate economic fluctuations, build competitive barriers for sustainable development, and achieve long-term stability

About the Author

Kaixuan Zhang, master, research direction: business administration.

References

- [1] LINNENLUECKE M K. Resilience in business and management research: A review of influential publications and a research agenda[J]. *International Journal of Management Reviews*, 2017, 19: 4-30.
- [2] LI P. Organizational resilience in VUCA conditions: analytical framework and practical implications[J]. *Tsinghua Management Review*, 2020(6): 72-83.
- [3] HUANG S Z. Three theoretical pillars of ESG[J]. *Financial and Accounting Monthly*, 2021(19): 3-10.
- [4] ORTIZ-DE-MANDOJANA N, BANSAL P. The long-term benefits of organizational resilience through sustainable business practices[J]. *Strategic Management Journal*, 2016, 37: 1615-1631.
- [5] EL NAYAL O, SLANGEN A, VAN OOSTERHOUT J, et al. Towards a democratic new normal? Investor reactions to interim-regime dominance during violent events[J]. *Journal of Management Studies*, 2020, 57: 505-536.
- [6] KAHN W A, BARTON M A, FISHER C M, et al. The geography of strain: Organizational resilience as a function of intergroup relations[J]. *Academy of Management Review*, 2018, 43(3): 509-529.
- [7] XIE Y P, CHEN R J. Turning crisis into opportunity: A review and future outlook of organizational resilience research based on knowledge graphs [J]. *Science of Science and Scientific Management*, 2022, 43(3): 131-153.
- [8] WANG L L, LIAN Y H, DONG J. Research on the impact mechanism of ESG performance on corporate value[J]. *Securities Market Tribune*, 2022 (5): 23-34.
- [9] WANG B, YANG M J. Research on the impact mechanism of ESG performance on corporate value empirical evidence from China's a-share listed companies[J]. *Soft Science*, 2022, 36(6): 78-84.
- [10] TONG Y, ZHAO Z Y, LI X. Has corporate ESG performance promoted the implementation of annuity plans?[J]. *Scientific Decision-Making*, 2023 (9): 1-22.
- [11] CERQUETI R, CICIRETTI R, DALÒ A, et al. Mitigating contagion risk by ESG investing[J]. *Sustainability*, 2022, 14: 3805.