

Original Research Article

The impact of ESG information disclosure on audit reports of GEM listed companies

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Abstract: With the global advancement of sustainable development, Environmental, Social, and Governance (ESG) factors have become increasingly important in corporate governance and capital market evaluation. In 2025, China officially implemented mandatory ESG disclosure for A-share listed companies, significantly changing the information environment of the Growth Enterprise Market (GEM). Due to the characteristics of GEM firms—Such as high innovation intensity, rapid growth, and relatively immature governance structures—The relationship between ESG information disclosure and audit report outcomes becomes particularly complex. This research adopts a theoretical analysis approach to examine how the quality of ESG information disclosure affects three key dimensions of audit reports: audit opinion type, audit fees, and audit report lag. Drawing on stakeholder theory, information asymmetry theory, and audit risk theory, this paper develops a comprehensive analytical framework explaining how high-quality ESG disclosure can reduce information asymmetry, mitigate corporate risk, and influence auditors' decision-making processes. The analysis suggests that high-quality ESG disclosure decreases the likelihood of modified audit opinions, lowers audit fees, and shortens audit report lag. Furthermore, corporate governance efficiency and institutional investor attention positively moderate these relationships, while ownership type and industry characteristics produce heterogeneous effects. The findings provide theoretical insights for regulators, GEM-listed companies, and audit firms in improving ESG disclosure quality and audit practices.

Keywords: ESG information disclosure; audit report; audit fees; audit opinion; GEM

1. Introduction

The integration of ESG considerations into corporate strategy and capital market valuation has become an irreversible global trend. Governments and regulators increasingly require enterprises to disclose ESG information to promote sustainable development and improve market transparency. In China, ESG has been elevated to a strategic level as the country pursues carbon neutrality and high-quality economic growth. In January 2025, the China Securities Regulatory Commission officially implemented mandatory ESG disclosure for listed companies in the A-share market. Among these markets, the Growth Enterprise Market (GEM) occupies a unique position. GEM-listed firms are typically technology-driven, innovation-oriented, and characterized by high R&D intensity and rapid growth. However, these firms often face greater operational uncertainty and relatively weaker corporate governance structures compared with main-board companies. These features result in more severe information asymmetry between firms and external stakeholders, increasing the importance of transparent information disclosure.

Audit reports play a critical role in ensuring the credibility of corporate information disclosed to the market. Traditionally, audits focus primarily on financial statements. However, with the increasing importance of ESG factors, auditors are gradually incorporating non-financial ESG information into their risk assessment and audit procedures. ESG disclosure may therefore influence auditors' judgments regarding audit opinions, audit effort, and reporting efficiency. Despite growing attention to ESG issues, existing research has several limitations. First, most studies focus on large main-board firms, while the specific characteristics of GEM companies receive less attention. Second, many studies rely heavily on empirical analysis but provide limited theoretical exploration of

the underlying mechanisms linking ESG disclosure to audit outcomes.

Therefore, this research aims to theoretically explore how ESG information disclosure quality influences audit reports of GEM-listed companies. By integrating multiple theoretical perspectives, the research constructs a comprehensive analytical framework and examines moderating factors and heterogeneous effects.

2. Literature review and theoretical foundation

2.1. ESG information disclosure

ESG information disclosure refers to the process through which companies communicate their environmental performance, social responsibility practices, and governance structures to external stakeholders. Unlike financial information, ESG disclosure is multidimensional, forward-looking, and often qualitative, which makes its quality evaluation more complex. Prior research generally evaluates ESG disclosure quality based on three dimensions: completeness, accuracy, and relevance. Completeness refers to whether key ESG indicators are comprehensively disclosed; accuracy concerns the reliability of information, including third-party verification; and relevance refers to the extent to which disclosure meets stakeholder information needs. For GEM firms, ESG disclosure is influenced by both internal and external factors. Internally, firm size, profitability, R&D intensity, and governance structures affect disclosure behavior. Externally, regulatory requirements, investor expectations, and industry competition play important roles.

2.2. ESG disclosure and audit outcomes

Existing studies indicate that ESG disclosure can significantly affect audit outcomes. First, regarding audit opinions, high-quality ESG disclosure is often associated with a lower probability of modified audit opinions. Companies that actively engage in ESG practices usually have better internal control systems and lower operational risks, which reduces the likelihood of material misstatements in financial reports. Second, regarding audit fees, the mainstream view suggests a negative relationship between ESG disclosure quality and audit fees. High-quality ESG information reduces information asymmetry between auditors and firms, allowing auditors to obtain relevant information more efficiently and lowering audit costs. Third, regarding audit report lag, previous studies show that transparent disclosure can improve the efficiency of the audit process and shorten the time required to issue audit reports. However, some studies note that in the early stage of mandatory ESG disclosure, auditors may need additional effort to evaluate ESG-related information, which could temporarily increase audit fees.

3. Theoretical mechanism: ESG disclosure and audit reports

3.1. ESG disclosure quality and audit opinion

Audit opinion reflects the auditor's assessment of whether financial statements fairly represent a company's financial position. High-quality ESG disclosure can reduce the probability of modified audit opinions through several mechanisms. First, ESG disclosure signals stronger risk management practices. Firms that effectively manage environmental and social risks are less likely to encounter legal disputes, regulatory penalties, or operational disruptions, reducing financial reporting risks. Second, comprehensive ESG disclosure provides auditors with additional information that complements financial data. For instance, disclosure of environmental compliance costs or employee policies can help auditors evaluate related financial impacts. Third, transparent ESG disclosure enhances corporate credibility. When firms consistently provide reliable ESG information, auditors may have greater confidence in management representations, reducing concerns about potential misstatements. These effects are particularly important for GEM firms, which often face higher inherent risks due to innovation uncertainty and rapid growth.

3.2. ESG disclosure quality and audit fees

Audit fees primarily reflect audit effort and risk premiums. High-quality ESG disclosure can reduce audit

fees through two main channels. First, transparent disclosure reduces information asymmetry, enabling auditors to obtain relevant information more efficiently and lowering audit effort. Detailed quantitative ESG indicators can help auditors quickly identify potential risks. Second, high-quality ESG disclosure reduces perceived audit risk. Firms with better ESG practices typically have stronger internal controls and risk management systems, lowering the likelihood of litigation or reputational damage faced by auditors. However, during the early stage of ESG regulation, auditors may charge additional fees due to the lack of experience and specialized knowledge in ESG auditing.

3.3. ESG disclosure quality and audit report lag

Audit report lag measures the time between the fiscal year-end and the issuance of the audit report. High-quality ESG disclosure can shorten audit lag in several ways.

First, structured ESG information allows auditors to quickly understand the company's operational risks and integrate non-financial information into audit procedures. Second, transparent disclosure reduces disputes and late adjustments during the audit process, which are major causes of reporting delays. Third, comprehensive ESG information improves audit planning and resource allocation, enhancing overall audit efficiency.

4. Moderating and heterogeneous effects

4.1. Corporate governance efficiency

Corporate governance efficiency strengthens the relationship between ESG disclosure and audit outcomes. Effective governance structures—Such as independent boards, ESG committees, and performance-linked incentives—Enhance the credibility of ESG disclosure. Well-governed firms are more likely to ensure that ESG policies are effectively implemented, reducing the risk of greenwashing and increasing auditors' confidence in disclosed information.

4.2. Institutional investor attention

Institutional investors often demand higher levels of transparency and accountability. Firms receiving greater institutional attention tend to improve ESG disclosure quality to meet investor expectations. At the same time, institutional scrutiny increases the accountability pressure on auditors, encouraging them to incorporate ESG factors more thoroughly into audit procedures.

4.3. Ownership and industry heterogeneity

The impact of ESG disclosure differs across firm types. For non-state-owned enterprises, ESG disclosure plays a more significant role because these firms rely more heavily on capital markets and face stronger financing constraints. Similarly, high-tech industries exhibit stronger effects due to higher information asymmetry and more complex operational risks. ESG disclosure provides valuable non-financial information that helps auditors better understand these risks.

5. Conclusion

This research theoretically explores the impact of ESG information disclosure quality on audit reports of GEM-listed companies. The analysis shows that high-quality ESG disclosure reduces the likelihood of modified audit opinions, lowers audit fees, and shortens audit report lag by mitigating information asymmetry and reducing corporate risk. Furthermore, corporate governance efficiency and institutional investor attention strengthen these relationships, while ownership structure and industry characteristics create heterogeneous effects.

The findings provide important implications for multiple stakeholders. For regulators, ESG disclosure standards should be continuously refined, with stronger supervision against false or symbolic disclosure. For GEM-listed companies, improving ESG management systems and increasing quantitative disclosure can enhance transparency and reduce audit-related costs. For audit firms, developing ESG-specific audit methodologies and strengthening auditor training can improve risk assessment and audit efficiency. For investors, ESG disclosure

quality can serve as an additional indicator for evaluating corporate transparency and long-term investment risk.

Future research may conduct empirical analysis using GEM company data to test the theoretical framework proposed in this research and further explore additional moderating factors such as auditor characteristics and regional institutional environments.

Fundings

The research is supported by: "An Empirical Study on the Impact of ESG Information Disclosure by GEM Listed. Companies on Audit Reports" (Project No.: GKY-2025BSQDW-34)".

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References

- [1] Dhaliwal, D. S., Li, O. Z., Tsang, A., et al. (2011). Voluntary nonfinancial disclosure and the cost of equity capital: The initiation of corporate social responsibility reporting. *The Accounting Review*, 86(1), 59–100.
- [2] Dhaliwal, D., Radhakrishnan, S., Tsang, A., et al. (2012). Nonfinancial disclosure and analyst forecast accuracy. *Contemporary Accounting Research*, 29(3), 723–759.
- [3] Tsang, A., Frost, T., Cao, H. (2022). Environmental, social, and governance (ESG) disclosure: A literature review. *The British Accounting Review*, 55(5), 101149.
- [4] Christensen, H. B., Hail, L., Leuz, C. (2021). Mandatory CSR and sustainability reporting: Economic analysis and literature review. *Review of Accounting Studies*, 26(3), 1176–1248.
- [5] Clarkson, P. M., Li, Y., Richardson, G. D., et al. (2011). Does it really pay to be green? Determinants and consequences of proactive environmental strategies. *Journal of Accounting and Public Policy*, 30(2), 122–144.
- [6] Cho, C. H., Michelon, G., Patten, D. M., et al. (2015). CSR disclosure: The more things change? *Accounting, Auditing & Accountability Journal*, 28(1), 14–35.
- [7] García-Sánchez, I. M., Hussain, N., Martínez-Ferrero, J., et al. (2020). Impact of disclosure and assurance quality of corporate sustainability reports on access to finance. *Corporate Social Responsibility and Environmental Management*, 27(2), 832–848.
- [8] Liao, L., Luo, L., Tang, Q. (2015). Gender diversity, board independence, environmental committee and greenhouse gas disclosure. *The British Accounting Review*, 47(4), 409–424.
- [9] Plumlee, M., Brown, D., Hayes, R., et al. (2015). Voluntary environmental disclosure quality and firm value. *Journal of Accounting and Public Policy*, 34(4), 336–361.
- [10] Healy, P. M., Palepu, K. G. (2001). Information asymmetry, corporate disclosure, and capital markets. *Journal of Accounting and Economics*, 31(1–3), 405–440.