

**ADVANCED INTERNATIONAL JOURNAL OF
BUSINESS, ENTREPRENEURSHIP AND SMES
(AIJBES)**www.aijb.com**ESG AND CORPORATE GOVERNANCE: A SYSTEMATIC
REVIEW**

Noor Hidayah Ab Aziz^{1*}, Ahmed Razman Abdul Latif², Mohammad Noor Hisham Osman³, Sajeed Alshdaifat⁴

¹ Faculty of Accountancy, Universiti Teknologi MARA, Johor Branch, Segamat Campus, Johor, Malaysia

Email: noorh469@uitm.edu.my

Putra Business School, Serdang, Malaysia.

Email: pbs21104067@grad.putrabs.edu.my

² Putra Business School, Serdang, Malaysia.

Email: razman@putrabs.edu.my

³ School of Business and Economics, Universiti Putra Malaysia, Serdang, Malaysia

Email: mhisham@upm.edu.my

⁴ Putra Business School, Serdang, Malaysia.

Email: pbs21104065@grad.putrabs.edu.my

* Corresponding Author

Article Info:**Article history:**

Received date: 25.10.2023

Revised date: 10.11.2023

Accepted date: 18.12.2023

Published date: 26.12.2023

To cite this document:

Ab Aziz, N. H., Latif, A. R. A., Osman, M. N. H., & Alshdaifat, S. (2023). ESG and Corporate Governance: A Systematic Review. *Advanced International Journal of Business, Entrepreneurship and SMEs*, 5 (18), 185-204.

DOI: 10.35631/AIJBES.518018.

This work is licensed under [CC BY 4.0](https://creativecommons.org/licenses/by/4.0/)

**Abstract:**

In an era when organisations are under more significant pressure to balance operational effectiveness with ethical and environmental obligations, it is critical to comprehend the impact of environmental, social and governance (ESG) on corporate governance (CG). This review aims to synthesize the current body of literature, distinguishing significant themes, trends, and gaps to present a structured synthesis of this field. This research utilised the PRISMA framework. An advanced search strategy was performed using Scopus and Web of Science databases to retrieve the relevant studies and articles concerning ESG, corporate governance, and their interaction utilising the keyword (1. ESG 2. Board of Directors 3. Corporate Governance). The result unveiled the importance of ESG factors in influencing corporate strategies, policies, and the composition of boards as governing bodies. The final data findings consist of thirty papers identified through this review. The expected validation is comprised of the following three themes: (1) The significance of CG integration with ESG, (2) Framework for Research on ESG and CG, and (3) New research area on CG and ESG. The results highlight the necessity of incorporating CG on ESG principles as a foundation for a firm's sustainability and stakeholder trust. Furthermore, this assessment serves to identify gaps in knowledge, providing valuable insights for future research and policy implications.

Keywords:

ESG, Board Characteristics, Corporate Governance.

Introduction

In an era marked by heightened awareness of environmental, social, and governance (ESG) concerns, businesses across the globe find themselves at the crossroads of public expectations, regulatory pressures, and market dynamics (Brogi et al., 2022; Irawan & Okimoto, 2022). The fusion of ESG factors with corporate governance (CG) has become a point of interest, as stakeholders, including investors, consumers, and regulators, demand greater corporate transparency and responsibility. Thus, ESG disclosure has become the vehicle for a firm to communicate its dedication to sustainable practices and principles. (Cerciello et al., 2023; Wang et al., 2022; Ye et al., 2022). Conversely, CG plays a critical role in shaping and enforcing the strategic decisions and policies that underscore a company's ESG performance. Together, ESG disclosure and CG form the nexus through which businesses navigate the challenges and opportunities arising from the rapidly evolving landscape of ethical, social, and environmental responsibilities (Ahmad et al., 2023; Chebbi & Ammer, 2022; Khan, 2019).

The association between CG and ESG factors has garnered substantial attention in recent scholarly research. Scholars such as Chebbi & Ammer (2022) and Ahmad et al. (2023) have highlighted the potential relationship between enhanced CG practices and ESG disclosures, underscoring the strategic influence of CG, ESG practices, and firm characteristics on financial performance. Notably, discussions by Uzliawati et al. (2023), Bamahros et al. (2022), and Adeneye et al. (2023) have highlighted the impact of specific CG components such as board size, independence, audit committees, and gender diversity on ESG performance and corporate value. Moreover, establishing ESG committees has significantly bolstered ESG disclosure within companies (Nicolo et al., 2023). However, while there is a consensus on the pivotal role of specific governance structures in fostering ESG disclosures and enhancing corporate value, divergent perspectives persist across geographic regions. Some studies, such as those by Kuzey et al. (2023) and Rooh et al. (2021), present contrasting views, suggesting that CG might weaken the relationship between board characteristics and extensive ESG engagement. Specifically, evidence suggests a negative impact of CG features, particularly within the banking sector, on ESG performance. Further insights by Mohammad et al. (2023) highlight a negative correlation between CG and ESG scores in emerging markets, emphasizing the role of institutional and regulatory frameworks in shaping these intricate relationships.

Thus, this paper aims to review the current literature on CG and ESG factors systematically. This review offers a perspective on the current state of knowledge and identifies the gaps and emerging trends that warrant further investigation. This study will help academics, regulators, investors, and businesses navigate the complex landscape of CG and ESG practices.

Material and Methods**Identification**

The systematic review approach comprises three primary phases when selecting suitable papers for this study. The initial stage involves identifying keywords and exploring associated terms using resources and prior scholarly investigations. Subsequently, once the pertinent keywords had been determined, search strings were formulated for the Scopus and Web of Science (WOS)

databases, as indicated in Table 1. During the initial stage of the systematic review procedure, 261 papers were successfully retrieved from the selected databases.

Table 1
The Search Strings

SCOPUS	TITLE-ABS-KEY ("Environmental Social Governance*" OR esg* AND "corporate governance" AND board) AND (LIMIT-TO (PUBYEAR, 2020) OR LIMIT-TO (PUBYEAR , 2021) OR LIMIT-TO (PUBYEAR , 2022) OR LIMIT-TO (PUBYEAR , 2023)) AND (LIMIT-TO (SUBJAREA , "BUSI")) AND (LIMIT-TO (DOCTYPE , "ar")) AND (LIMIT-TO (PUBSTAGE , "final")) AND (LIMIT-TO (LANGUAGE , "English")) AND (LIMIT-TO (SRCTYPE , "j"))
WOS	"Environmental Social Governance*" or ESG* AND "corporate governance" AND board (Topic) and 2023 or 2022 or 2021 or 2020 (Publication Years) and Article (Document Types) and Management or Business or Business Finance (Web of Science Categories) and English (Languages)

Screening

During the initial round of screening, it is imperative to exclude duplicated papers. In the initial stage, 146 papers were excluded from consideration. Subsequently, in the second phase, 115 articles were subjected to a screening process that adhered to the researchers' specific inclusion and exclusion criteria. The initial criterion for selection was literature in the form of research articles, as it serves as the primary source of practical information. Additionally, the present study incorporates the omission of publications such as systematic reviews, meta-analyses, meta-syntheses, book series, books, chapters, and conference proceedings. Moreover, the analysis focused solely on scholarly articles in English. It is imperative to acknowledge that the timeframe selected for the schedule spans four years, specifically from 2020 to 2023. A total of 25 publications were removed based on certain factors.

Eligibility

In the third phase, the eligibility stage, a compilation of 90 articles has been assembled. At this step, a comprehensive evaluation was conducted on the titles and main content of all publications to ensure that they met the inclusion criteria and aligned with the research objectives of the present study. Hence, 60 papers were excluded from consideration due to their lack of adherence to the criteria. A total of 30 articles are now accessible for examination, as indicated in Table 2.

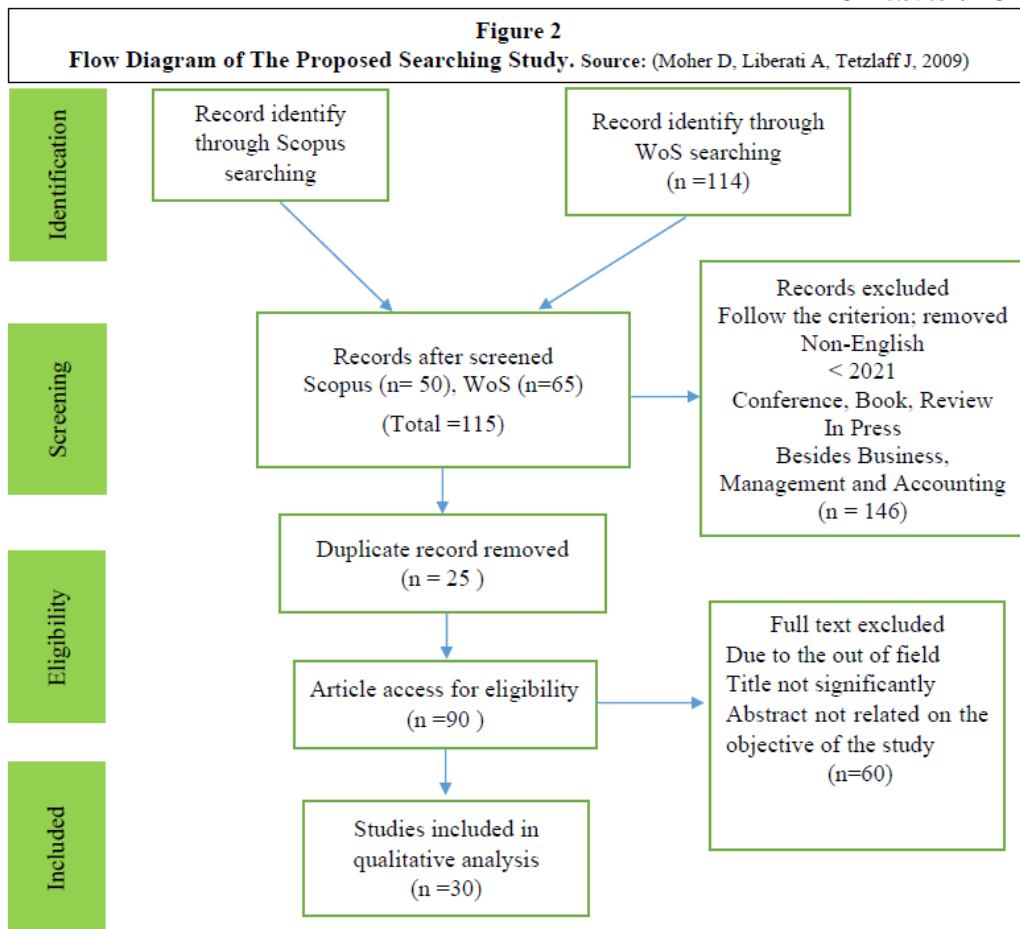
Table 2
The Selection Criterion Is Searching

Criterion	Inclusion	Exclusion
Language	English	Non-English
Timeline	2021 – 2023	< 2021
Literature type	Journal (Article)	Conference, Book, Review
Publication Stage	Final	In Press
Subject Area	Business, Management and Accounting	Besides Business, Management and Accounting

Data Abstraction and Analysis

This study conducted an integrative analysis as one of the assessment methodologies employed to evaluate and synthesise several research designs, including qualitative, quantitative, and mixed approaches. Scholarly investigation focused on the formulation of suitable subjects and subcategories. The initial stage in the progression of the topic involved gathering data. The writers have conducted a thorough examination of a collection of 30 publications to identify any statements or material that pertain to the inquiries raised in this present study. The writers and experts examine the selected ESG and CG studies in the subsequent phase, subsequently identifying and establishing coherent groupings. The study identified three primary themes that were evident in the approach: (1) The significance of CG integration with ESG, (2) Framework for Research on ESG and CG, and (3) New research area on CG and ESG. The writers summarised each explored theme, encompassing related themes, thoughts, or ideas. In the context of this research, the primary author collaborated with additional co-authors to identify and construct thematic categories derived from the obtained results. During the data analysis process, a log was diligently maintained to record all pertinent analyses that were significant to the interpretation of the data.

The authors additionally conducted a comparison of the findings to address any inconsistencies that may have arisen during the process of theme development. It should be noted that in the event of any contradictions regarding the themes, the authors engaged in a discussion to address them. Ultimately, the established themes underwent adjustments to maintain their coherence. To ascertain the credibility of the concerns, the tests were conducted by two professionals, one possessing expertise in the field of ESG and the other specialising in corporate governance. The expert review process ensured each sub-theme's clarity, significance, and sufficiency by proving domain validity. The author has implemented modifications following expert feedback and comments.



Result and Finding

This section presents the study results based on three themes identified (Theme 1: The significance of CG integration with ESG, Theme 2: Framework for Research on ESG and CG, Theme 3: New research area on CG and ESG).

Theme 1: The Significance of CG Integration with ESG

Authors	Title	Year	Journal	Methodology	Findings
(Albitar et al., 2023)	Do corporate governance mechanisms and ESG disclosure drive CSR narrative tones?	2023	International Journal of Finance & Economics	The study utilized an automatic content analysis method, acquiring data from Bloomberg and corporate websites and analyzing firm-fixed and random effects regressions on FTSE 100 businesses from 2008 to 2017.	Independent directors on the board enhance comprehensive CSR reports and increase trust. Besides, higher ESG disclosure ratings and impressive CSR narratives boost a company's reputation among socially conscious investors. Lastly, gender diversity improves inclusivity, enhancing governance, sustainability, and CSR programs.
(Previtali & Cerchiello, 2023)	Corporate governance and anti-corruption disclosure	2023	Corporate Governance	The study analyzed 140 CSR reports from Italian companies and 50 from other entities, examining their implementation of Global Reporting Initiative standard number 205.	Soft regulation of board composition, incorporating qualitative and quantitative standards, can lead to beneficial outcomes, with a positive correlation between anti-corruption measures disclosure, board size, and female board members.
(Maroun, 2022)	Corporate governance and the use of external assurance for integrated reports	2022	Corporate Governance- An International Review	A quantitative method was employed to collect South Africa's integrated reporting and CG practices.	Audit and risk committees influence ESG assurance, with internal audit functions not influencing the assurance choice. These committees seek high levels of assurance, emphasizing the importance of ESG assurance in corporate governance. The research suggests that organizations should engage external auditors and conduct rigorous testing to improve the credibility of their corporate reports.

(Tran, 2023)	Impact Factors on The Adoption of Corporate Social Responsibility: Empirical Evidence from an Emerging Market	2023	Corporate Governance and Organizational Behavior Review	A survey distributed 500 questionnaires, receiving 335 valid responses at a 67% response rate using a Likert scale of five points.	Larger corporations are more likely to adopt CSR initiatives. Moreover, stakeholder-focused governance frameworks are crucial, and diverse ownership structures contribute to CSR acceptance. Further, sectors show a greater tendency for innovation, and ESG principles strengthen CSR practices.
(Nicolo et al., 2023)	Worldwide evidence of corporate governance influence on ESG disclosure in the utilities sector	2023	Utility Policy	The dataset, spanning 1,750 observations from 2011 to 2019, includes 265 utility entities across 35 countries, collected from the Eikon Refinitiv database, and analysed using panel data regression techniques.	CG significantly impacts ESG disclosure practices in utility companies. This happens through board independence and a dedicated CSR committee. Besides, larger boards also correlate with higher levels of disclosure. Lastly, to improve ESG disclosure, companies should adopt a comprehensive approach, foster board independence, form CSR committees, and exercise prudent board size judgment.
(Keddie & Magnan, 2023)	Are ESG performance-based incentives a panacea or a smokescreen for excess compensation?	2023	Sustainability Accounting Management and Policy Journal	Researchers use AI to analyze S&P 500 companies' ESG incentive implementation using 2015 data and endogenous treatment regression. The model is then trained and applied to 2016-2020 surrogate statements.	ESG incentives in executive compensation contracts reduce annual surplus cash awards, demonstrating their effectiveness in CG. However, influential ESG-incentive management teams still receive excessive bonuses, particularly in environmentally sensitive sectors, CSR committees, or institutional shareholders.
(Ellili, 2022)	Impact of environmental, social and governance disclosure on dividend policy: What is the role of	2022	CSR and Environmental management	The dataset includes publicly traded entities in the UAE financial markets between 2010 and 2020, gathered through Bloomberg data acquisition and panel data regressions.	Higher dividend distribution and superior ESG practices by corporations, with board independence influencing ESG disclosure and foreign ownership moderating the relationship positively.

	corporate governance? Evidence from an emerging market				
(Bamahros et al., 2022)	Corporate governance mechanisms and ESG reporting: Evidence from the Saudi Stock Market	2022	Sustainability	This research analyzed Saudi corporations listed on Bloomberg's ESG database from 2010 to 2019, using regression using Ordinary Least Squares (OLS) for data collection.	The presence of a royal family member on the board and external members on the audit committee is linked to higher levels of ESG disclosure.
(Campanella et al., 2021)	The role of corporate governance in environmental policy disclosure and sustainable development. Generalized estimating equations in longitudinal count data analysis.	2021	CSR and Environmental management	The dataset, consisting of 540 Forbes Global 2000 companies from 2014 to 2017, was analyzed using a Poisson regression model and a Generalised Estimating Equations method for longitudinal count data.	Stakeholder engagement is essential in advancing corporate environmental policy and sustainable development, with governance factors significantly impacting environmental policy disclosure, except board size.
(Al Amosh & Khatib, 2021)	Corporate governance and voluntary disclosure of sustainability performance: The case of Jordan	2021	SN Business & Economics	The study analyzed data from 51 industrial companies listed in Jordan from 2012 to 2019, focusing on 63 Amman Stock Exchange entities. The content analysis method was used to analyze the data stored in a panel data format.	There is a lack of comprehensive ESG disclosure but an upward trend due to stakeholder pressures. Furthermore, board size and meeting frequency significantly impact ESG performance. However, audit committee composition, non-executive directors, board compensation, and audit committee type did not significantly impact ESG disclosure.

Table 5
Theme 2: Framework for Research on ESG and CG

Authors	Title	Year	Journal	Methodology	Independent Variables	Dependent Variables	Intervening Variables
(Monteiro et al., 2023)	Social Performance Disclosed by European Companies: The Role of the Board Attributes and the Country's Legal System	2023	Journal of Risk and Financial Management	Empirical analysis of 2494 European in 2021 public listed companies used regression analysis to determine the likelihood of correlation among examined variables.	Board's attributes (Diversity, Inclusion, People Development and Controversies)	Social performance	-
(Paolone et al., 2023)	Longer board tenure and audit committee tenure. How do they impact environmental performance? A European study	2023	Corporate Social Responsibility and Environmental Management	This study utilized data from the Refinitiv Eikon database, focusing on EU-listed corporations relevant to original member countries from 2018 to 2020.	Board tenure and audit committee tenure	Environmental performance	-
(Lozano & Martínez-Ferrero, 2022)	Do emerging and developed countries differ in terms of sustainable performance? Analysis of board, ownership and	2022	Research in International Business and Finance	The study utilized a dataset of 69,461 firm-year observations from 2012-2018, analyzing both developed and emerging countries using a two-stage 2SLS model.	Behaviour of the board of directors, ownership and institutional pressure	Sustainable performance	-

	country-level factors						
(Kamarudin et al., 2022)	Product market competition, board gender diversity and corporate sustainability performance: international evidence	2022	Journal of Financial Reporting and Accounting	The study utilizes a global ESG dataset from Thomson Reuters, containing 23,137 firm-year observations from 37 countries, to examine hypotheses through regression analyses.	Board gender diversity	Corporate sustainability performance	Product market competition ,
(Fuadah et al., 2022)	The Ownership Structure, and the Environmental, Social, and Governance (ESG) Disclosure, Firm Value and Firm Performance: The Audit Committee as Moderating Variable	2022	Economies	The study examines Indonesia Stock Exchange-listed companies from 2016 to 2020, using 700 observations and 140 companies examined, utilizing secondary data from the Indonesian capital market directory and annual, financial, and sustainability reports.	Ownership structure	ESG Disclosure, Firm Value and Firm Performance	The Audit Committee
(Issa & Hanaysha, 2023)	Breaking the glass ceiling for a sustainable future: the power of women on corporate boards	2023	International Journal of Accounting & Information Management	The study investigates 13 European non-financial enterprises from 2004-2021 using aggregated ordinary least squares regression and supplementary methodologies like alternative measurement, subsample analysis, and two-stage least squares.	Board gender diversity	ESG controversies	

	in reducing ESG controversies						
(Arif et al., 2020)	The impact of audit committee attributes on the quality and quantity of environmental, social and governance (ESG) disclosures	2021	The International Journal of Business in Society	The study analyzes Bloomberg ESG disclosure scores and company audit committee attributes using Petersen's (2009) methodology, constructing a two-dimensional cluster and implementing a two-stage least squares method to mitigate endogeneity concerns.	Audit Committee (AC) Activism and independence	ESG disclosure	
(Elmghaamez et al., 2023)	ESG disclosure and financial performance of multinational enterprises: The moderating effect of board standing committees	2022	International Journal of Finance & Economics	This research uses quantile regression analysis on a panel dataset of 500 multinational corporations in 40 countries from 2009-2019, spanning 5500 firm-year observations.	ESG disclosure	Financial performance	Board committee index
(Disli et al., 2022)	Board characteristics and sustainability performance: Empirical evidence from emerging markets	2022	Sustainability Accounting, Management and Policy Journal,	The study examines 439 public listed non-financial corporations in 20 emergent economies, using ESG performance scores and board attribute variables from Refinitiv and Thomson Reuters Eikon databases.	Board characteristics (Board independence, gender diversity, board size and board activity)	sustainability performance (ESG)	
(Bamahros et al., 2022)	CG Mechanisms and ESG Reporting:	2022	Sustainability	This study uses Bloomberg database ESG data on Saudi companies from 2010-2019, focusing on 34 brands. The	Royal Family Member and	ESG Reporting	

	Evidence from the Saudi Stock Market			dataset includes 206 observations by company year, encompassing 206 years.	Audit Committee External Member		
--	--------------------------------------	--	--	--	---------------------------------	--	--

Table 6
Theme 3: New research area on CG and ESG

Authors	Title	Year	Journal	Methodology	New Research Area	Findings
(Alkaraan et al., 2023)	Sustainable strategic investment decision-making practices in UK companies: The influence of governance mechanisms on synergy between industry 4.0 and circular economy	2023	Technological Forecasting and Social Change	Integrating Industry 4.0 technologies and Circular Economy techniques significantly impacts the company's financial performance and Sustainable Supply Chain and Inventory Management Practices, varying across different sectors.	Industry 4.0 and CE (circular economy) technique	The integration of Circular Economy and Industry 4.0 significantly impacts organizational financial performance, sustainable supply chain and inventory management practices, though the degree of synergy varies across industry sectors.
(Tanthanong sakkun et al., 2023)	Carbon emissions, corporate governance, and staggered boards	2023	Business Strategy and the Environment	The research paper uses a novel dataset, machine learning algorithms, and textual analysis to detect a staggered board, incorporating firm fixed effects to account for unobserved heterogeneity.	Carbon emissions and environmental performance.	Staggered boards significantly decrease emission performance.
(Dicuonzo et al., 2022)	The integration of sustainability in CG systems: An	2022	International Journal of	From 2015 to 2019, a comprehensive analysis of European banks using content	Integrated sustainability and CG systems.	Financial institutions increasingly recognize the importance of sustainability in corporate

	innovative framework applied to the European systematically important banks		Disclosure and Governance	analysis methodology developed a new governance score, the "Bank's Governance ESG Integrated Index."		governance, but there is a lack of uniformity and significant improvement opportunities.
(Grishunin et al., 2022)	The Impact of Sustainability Disclosures on Value of Companies Following Digital Transformation Strategies	2022	International Journal of Technology	The panel data focuses on publicly traded telecommunications firms in the U.S. from 2011 to 2021.	Digital transformation strategies	Positive correlation between Tobin-Q and ESG disclosure scores in the telecommunications industry, with CG significantly impacting ESG pillars. In addition, CEO duality negatively impacts value, while independent directors, CSR committees, and gender diversity positively influence companies.
(Iannuzzi et al., 2023)	Nomination committee characteristics and exposure to environmental, social and governance (ESG) controversies: evidence from European global systemically important banks	2023	Corporate Governance: The International Journal of Business in Society	This study examines a dataset of 30 globally significant institutions from 2015-2021, using clustered heteroskedastic standard errors and fixed effects panel data models to account for serial correlation.	The nomination committee's susceptibility to ESG disputes	Financial institutions can mitigate ESG disputes by appointing qualified individuals to their Nomination Committees, focusing on sustainability committee members and foreign directors. Furthermore, a younger demographic and directors dedicated to ESG principles can reduce disputes.
(Beretta et al., 2023)	Board composition and textual attributes of non-financial disclosure in the banking	2023	Journal of Cleaner Production	The analysis, conducted between 2017 and 2020, involved content analysis to assess disclosures' textual attributes and a multivariate	Disclosure strategies of ESG	Board composition and textual attributes significantly influence the conciseness, comprehensiveness, favorable tone, and legibility of Non-Financial Disclosures.

	sector: Evidence from the Italian setting after directive 2014/95/EU			regression model using panel data.		
(Dyck et al., 2023)	Renewable Governance: Good for the Environment?	2023	Journal of Accounting Research	This research uses panel data and a fixed-effects approach to analyze board renewal mechanisms in Canada and France, incorporating quasi-exogenous shocks from 3,293 companies across 41 nations.	Renewable Governance and ESG	Board renewal mechanisms enhanced environmental performance, particularly in environments with strong and highly motivated institutional investors.
(Zheng et al., 2022)	Can green innovation affect ESG ratings and financial performance? evidence from Chinese GEM-listed companies	2022	Sustainability	The study uses a panel dataset of 3100 observations from 2014 to 2019 in China's Growth Enterprise Market (GEM). It employs a causal steps approach, dynamic panel framework, and embedded and ESG factor-integrated regression models.	Green Innovation and ESG	Green innovation significantly improves ESG scores for publicly traded GEM companies. Both green innovation and ESG performance positively impact financial performance. However, regional innovation capabilities and political connections negatively impact green innovation's positive impact, with corporate political connections being more pronounced.
(Schiemann & Tietmeyer, 2022)	ESG Controversies, ESG Disclosure and Analyst Forecast Accuracy	2022	International Review of Financial Analysis	The dataset, spanning nine years from 2008 to 2017, includes 1,614 companies and 8,369 firm-year observations across 51 countries, and it uses panel regression methods.	ESG controversies and analyst forecast accuracy.	Companies with significant ESG controversies are more likely to make analyst forecast errors, with ESG disclosure as a moderating factor and social controversies as the primary influencing factors.
(Wong & Zhang, 2022)	Stock market reactions to adverse	2022	The British Accounting Review	This research examines publicly traded corporations in the United States using panel	Corporate reputation risks arising from ESG concerns.	Corporate reputation risks significantly impact smaller, less liquid companies, especially those not in the S&P500 index.

	ESG disclosure via media channels			data analysis from January 2007 to December 2018.		Surprisingly, negative ESG media coverage does not significantly affect alcohol, tobacco, and gaming companies, but steel manufacturing, confectionery, insurance, and banking sectors are most vulnerable.
--	-----------------------------------	--	--	---	--	---

Discussion and Conclusion

The findings highlight the significant integration between CG and ESG. Certain governance structures and practices significantly impact ESG disclosure, ESG initiatives, and overall corporate reputation. Among the crucial things highlighted, independent directors improve ESG reports by emphasizing the value of multiple perspectives in developing sustainability strategies. Besides, higher ESG disclosure scores help a company's reputation, especially among socially conscious investors. Gender diversity and governance are associated with increased inclusivity, which benefits governance, sustainability, and ESG programs. Board composition and remuneration committees can have positive consequences, highlighting the importance of adaptable governance structures. Additionally, audit and risk committees are critical to the credibility of business reporting. Moreover, larger firms are more likely to implement ESG disclosure strategies, highlighting the significance of stakeholder-focused governance systems. Lastly, the engagement of stakeholders is critical for developing ESG policy and sustainable development.

Furthermore, different frameworks demonstrate a complicated association of CG and ESG with board qualities, performance measurements, and other intervening variables. Board characteristics such as diversity, inclusiveness, people development, and resolving disputes impact social, environmental, sustainable, and financial success. These factors are also influenced by board duration, audit committee tenure, behaviour, ownership structure, and institutional pressure. Intervening variables such as audit committee gender diversity, activism, and independence also impact this relationship. Lastly, a holistic approach to governance, including good controversies management is critical for improving sustainability and financial performance.

Lastly, when the study probes into new areas of research on ESG and CG, there are various aspects of business and sustainability. For instance, industry 4.0, digital transformation strategies, renewable governance, green innovation, and the impact of negative media coverage on corporate reputation. This is interesting as Industry 4.0 substantially impacts financial performance, sustainable supply chain, and inventory management practices. Furthermore, staggered boards significantly reduce emission performance, demonstrating the impact of governance structures on environmental outcomes. In addition, mitigating ESG issues entails qualified appointments to Nomination Committees, emphasizing sustainability committee members, international directors, and younger demography and directors committed to ESG principles. Besides, renewable governance and environmental sustainability are highly associated, particularly in situations with strong institutional support and committed investors. Green innovation also benefits ESG scores for publicly listed companies, highlighting the commercial rationale for sustainability. Finally, analyst forecast accuracy and ESG controversies are highlighted, with societal controversies functioning as a moderating element.

Acknowledgment

I want to express sincere appreciation to all of the authors identified, as well as those who contributed directly or indirectly to the successful publishing of this paper.

References

- Adeneye, Y. B., Fasihi, S., Kammoun, I., & Albitar, K. (2023). Does earnings management constrain ESG performance? The role of corporate governance. *International Journal of Disclosure and Governance*. <https://doi.org/10.1057/s41310-023-00181-9>

- Ahmad, N., Mobarek, A., & Raid, M. (2023). Impact of the global financial crisis on firm performance in UK: Moderating role of ESG, corporate governance and firm size. *Cogent Business and Management*, 10(1). <https://doi.org/10.1080/23311975.2023.2167548>
- Al Amosh, H., & Khatib, S. F. A. (2021). Corporate governance and voluntary disclosure of sustainability performance: the case of Jordan. *SN Business & Economics*, 1(12). <https://doi.org/10.1007/s43546-021-00167-1>
- Albitar, K., Abdoush, T., & Hussainey, K. (2023). Do corporate governance mechanisms and ESG disclosure drive CSR narrative tones? *International Journal of Finance and Economics*, 28(4), 3876–3890. <https://doi.org/10.1002/ijfe.2625>
- Alkaraan, F., Elmarzouky, M., Hussainey, K., & Venkatesh, V. G. (2023). Sustainable strategic investment decision-making practices in UK companies: The influence of governance mechanisms on synergy between industry 4.0 and circular economy. *Technological Forecasting and Social Change*, 187. <https://doi.org/10.1016/j.techfore.2022.122187>
- Arif, M., Sajjad, A., Farooq, S., Abrar, M., & Joyo, A. S. (2020). The impact of audit committee attributes on the quality and quantity of environmental, social and governance (ESG) disclosures. *Corporate Governance (Bingley)*, 21(3). <https://doi.org/10.1108/CG-06-2020-0243>
- Bamahros, H. M., Alquhaif, A., Qasem, A., Wan-Hussin, W. N., Thomran, M., Al-Duais, S. D., Shukeri, S. N., & Khojally, H. M. A. (2022). Corporate Governance Mechanisms and ESG Reporting: Evidence from the Saudi Stock Market. *Sustainability (Switzerland)*, 14(10). <https://doi.org/10.3390/su14106202>
- Beretta, V., Demartini, M. C., & Sotti, F. (2023). Board composition and textual attributes of non-financial disclosure in the banking sector: Evidence from the Italian setting after directive 2014/95/EU. *Journal of Cleaner Production*, 385. <https://doi.org/10.1016/j.jclepro.2022.135561>
- Brogi, M., Cappiello, A., Lagasio, V., & Santoboni, F. (2022). Determinants of insurance companies' environmental, social, and governance awareness. *Corporate Social Responsibility and Environmental Management*, 29(5). <https://doi.org/10.1002/csr.2274>
- Campanella, F., Serino, L., Crisci, A., & D'Ambra, A. (2021). The role of corporate governance in environmental policy disclosure and sustainable development. Generalized estimating equations in longitudinal count data analysis. *Corporate Social Responsibility and Environmental Management*, 28(1). <https://doi.org/10.1002/csr.2062>
- Cerciello, M., Busato, F., & Taddeo, S. (2023). The effect of sustainable business practices on profitability. Accounting for strategic disclosure. *Corporate Social Responsibility and Environmental Management*, 30(2). <https://doi.org/10.1002/csr.2389>
- Chebbi, K., & Ammer, M. A. (2022). Board Composition and ESG Disclosure in Saudi Arabia: The Moderating Role of Corporate Governance Reforms. *Sustainability (Switzerland)*, 14(19). <https://doi.org/10.3390/su141912173>
- Dicuonzo, G., Donofrio, F., Iannuzzi, A. P., & Dell'Atti, V. (2022). The integration of sustainability in corporate governance systems: an innovative framework applied to the European systematically important banks. *International Journal of Disclosure and Governance*, 19(3), 249–263. <https://doi.org/10.1057/s41310-021-00140-2>
- Disli, M., Yilmaz, M. K., & Mohamed, F. F. M. (2022). Board characteristics and sustainability performance: empirical evidence from emerging markets. *Sustainability Accounting, Management and Policy Journal*, 13(4), 929–952. <https://doi.org/10.1108/SAMPJ-09-2020-0313>

- Dyck, A., Lins, K. V, Roth, L., Towner, M., & Wagner, H. F. (2023). Renewable Governance: Good for the Environment? *Journal of Accounting Research*, 61(1), 279–327. <https://doi.org/10.1111/1475-679X.12462>
- Ellili, N. O. D. (2022). Impact of environmental, social and governance disclosure on dividend policy: What is the role of corporate governance? Evidence from an emerging market. *Corporate Social Responsibility and Environmental Management*, 29(5), 1396–1413. <https://doi.org/10.1002/csr.2277>
- Elmghaamez, I. K., Nwachukwu, J., & Ntim, C. G. (2023). ESG disclosure and financial performance of multinational enterprises: The moderating effect of board standing committees. *International Journal of Finance and Economics*. <https://doi.org/10.1002/ijfe.2846>
- Fuadah, L. L., Mukhtaruddin, M., Andriana, I., & Arisman, A. (2022). The Ownership Structure, and the Environmental, Social, and Governance (ESG) Disclosure, Firm Value and Firm Performance: The Audit Committee as Moderating Variable. *Economies*, 10(12). <https://doi.org/10.3390/economies10120314>
- Grishunin, S., Naumova, E., Burova, E., Suloeva, S., & Nekrasova, T. (2022). The Impact of Sustainability Disclosures on Value of Companies Following Digital Transformation Strategies. *International Journal of Technology*, 13(7), 1432–1441. <https://doi.org/10.14716/ijtech.v13i7.6194>
- Iannuzzi, A. P., Dell'Atti, S., D'Apolito, E., & Galletta, S. (2023). Nomination committee characteristics and exposure to environmental, social and governance (ESG) controversies: evidence from European global systemically important banks. *Corporate Governance (Bingley)*, 23(6), 1314–1338. <https://doi.org/10.1108/CG-03-2022-0119>
- Irawan, D., & Okimoto, T. (2022). How Do ESG Performance and Awareness Affect Firm Value and Corporate Overinvestment. *Research Institute of Economy, Trade and Industry (RIETI) Discussion papers*.
- Issa, A., & Hanaysha, J. R. (2023). Breaking the glass ceiling for a sustainable future: the power of women on corporate boards in reducing ESG controversies. *International Journal of Accounting and Information Management*, 31(4), 623–646. <https://doi.org/10.1108/IJAIM-03-2023-0053>
- Kamarudin, K. A., Ariff, A. M., & Wan Ismail, W. A. (2022). Product market competition, board gender diversity and corporate sustainability performance: international evidence. *Journal of Financial Reporting and Accounting*, 20(2), 233–260. <https://doi.org/10.1108/JFRA-01-2021-0020>
- Keddie, S. L., & Magnan, M. (2023). Are ESG performance-based incentives a panacea or a smokescreen for excess compensation? *Sustainability Accounting Management And Policy Journal*, 14(3), 591–634. <https://doi.org/10.1108/SAMPJ-11-2022-0605>
- Khan, M. (2019). Corporate Governance, ESG, and Stock Returns around the World. *Financial Analysts Journal*, 75(4). <https://doi.org/10.1080/0015198X.2019.1654299>
- Kuzey, C., Al-Shaer, H., Karaman, A. S., & Uyar, A. (2023). Public governance, corporate governance and excessive ESG. *Corporate Governance (Bingley)*. <https://doi.org/10.1108/CG-01-2023-0028>
- Lozano, M. B., & Martínez-Ferrero, J. (2022). Do emerging and developed countries differ in terms of sustainable performance? Analysis of board, ownership and country-level factors. *Research in International Business and Finance*, 62. <https://doi.org/10.1016/j.ribaf.2022.101688>
- Maroun, W. (2022). Corporate governance and the use of external assurance for integrated reports. *CORPORATE GOVERNANCE-AN INTERNATIONAL REVIEW*, 30(5), 584–607. <https://doi.org/10.1111/corg.12430>

- Mohammad, W. M. W., Osman, M., & Rani, M. S. A. (2023). Corporate governance and environmental, social, and governance (ESG) disclosure and its effect on the cost of capital in emerging market. *Asian Journal of Business Ethics*. <https://doi.org/10.1007/s13520-023-00169-2>
- Moher, D., Liberati, A., Tetzlaff, J., & Altman, D. G. (2009). Preferred reporting items for systematic reviews and meta-analyses: The Prisma statement. *PLoS Medicine*, 6(7), 1–6. <https://doi.org/10.1371/journal.pmed.1000097>
- Monteiro, A. P., Cepêda, C., Pereira, C., & Silva, A. (2023). Social Performance Disclosed by European Companies: The Role of the Board Attributes and the Country's Legal System. *Journal of Risk and Financial Management*, 16(6). <https://doi.org/10.3390/jrfm16060284>
- Nicolo, G., Zampone, G., Sannino, G., & Tiron-Tudor, A. (2023). Worldwide evidence of corporate governance influence on ESG disclosure in the utilities sector. *Utilities Policy*, 82. <https://doi.org/10.1016/j.jup.2023.101549>
- Paolone, F., Pozzoli, M., Cucari, N., & Bianco, R. (2023). Longer board tenure and audit committee tenure. How do they impact environmental performance? A European study. *Corporate Social Responsibility and Environmental Management*, 30(1), 358–368. <https://doi.org/10.1002/csr.2359>
- Previtali, P., & Cerchiello, P. (2023). Corporate governance and anti-corruption disclosure. *Corporate Governance (Bingley)*, 23(6), 1217–1232. <https://doi.org/10.1108/CG-06-2022-0275>
- Samina Rooh, Muhammad Zahid, Muhammad Farooq Malik, & Muhammad Tahir. (2021). Corporate Governance Characteristics and Environmental, Social & Governance (ESG) Performance: Evidence from the Banking Sector of Pakistan. *Journal of Business & Tourism*, 7(1), 35–50. <https://doi.org/10.34260/jbt.v7i1.218>
- Schiemann, F., & Tietmeyer, R. (2022). ESG Controversies, ESG Disclosure and Analyst Forecast Accuracy. *International Review Of Financial Analysis*, 84. <https://doi.org/10.1016/j.irfa.2022.102373>
- Tanthonongsakkun, S., Treepongkaruna, S., & Jiraporn, P. (2023). Carbon emissions, corporate governance, and staggered boards. *Business Strategy and the Environment*, 32(1), 769–780. <https://doi.org/10.1002/bse.3174>
- Tran, N. H. (2023). Impact Factors On The Adoption Of Corporate Social Responsibility: Empirical Evidence From An Emerging Market. *Corporate Governance and Organizational Behavior Review*, 7(2 Special Issue), 350–359. <https://doi.org/10.22495/cgobrv7i2sip13>
- Uzliawati, L., Taqi, M., Muchlish, M., & Kalbuana, N. (2023). The Transformation of Corporate Reputation Driven by Corporate Governance, Environmental Social, and Governance (ESG), Business Activity, and Profitability in Indonesia. *Review of Economics and Finance*, 21, 1295–1305. <https://doi.org/10.55365/1923.x2023.21.142>
- Wang, N., Li, D., Cui, D., & Ma, X. (2022). Environmental, social, governance disclosure and corporate sustainable growth: Evidence from China. *Frontiers in Environmental Science*, 10. <https://doi.org/10.3389/fenvs.2022.1015764>
- Wong, J. B., & Zhang, Q. (2022). Stock market reactions to adverse ESG disclosure via media channels. *British Accounting Review*, 54(1). <https://doi.org/10.1016/j.bar.2021.101045>
- Ye, C., Song, X., & Liang, Y. (2022). Corporate sustainability performance, stock returns, and ESG indicators: fresh insights from EU member states. *Environmental Science and Pollution Research*, 29(58). <https://doi.org/10.1007/s11356-022-20789-8>

Zheng, J., Khurram, M. U., & Chen, L. (2022). Can Green Innovation Affect ESG Ratings and Financial Performance? Evidence from Chinese GEM Listed Companies. *Sustainability (Switzerland)*, 14(14). <https://doi.org/10.3390/su14148677>