

Global ESG Integration in Governance: A Systematic Review of Accountability Frameworks, Challenges, and Strategic Innovations

Fadiah Abdulrahman M Bagais¹, Sameer Mohammed Majed Dandan², Fatima Ali Alsaleh Algazo³, Zain ALDahabi⁴,
Anas Alshareef⁵, Shaima A. Kh. Barakat⁶

¹Faculty of Business in Rabigh, King Abdulaziz University, Jeddah, P.O. Box: 80200, Zip Code : 21589, Kingdom of Saudi Arabia ,
fadiahbagais@hotmail.com, fbagaies@kau.edu.sa, <https://orcid.org/0009-0001-9277-3152>

²Assistant Professor Department of Information Systems Management, Faculty of Business Administration, 1321, Northern Border
University, Arar, 91431, Saudi Arabia, e-mail address sameer.dandan@nbu.edu.sa, samotoom@hotmail.com , <https://orcid.org/0000-0003-0140-312X>

³Assistant Professor, Department of Business and Administration, Applied College , Northern Border University, Box: 1321, Arar, P.O. 91431
Saudi Arabia; fatemah.alsaleh@nbu.edu.sa, Fatimahghazo@gmail.com, <https://orcid.org/0000-0002-8234-7045>

⁴Department of Accounting, Applied College , Northern Border University, Box: 1321, Arar, P.O. 91431 Saudi Arabia;
2370454767@nbu.edu.sa/ zain20048@hotmail.com, <https://orcid.org/0009-0000-1320-1985>

⁵Assistant Professor, Department of Accounting, College of Business Administration, Northern Border University, box: 1321, Arar, P.O. 91431
Northern region, Saudi Arabia, ANAS.ALSHAREEF@NBU.EDU.SA, <https://orcid.org/0009-0007-6866-5606>

⁶Assistant Professor, Department of Human Resources Management, Faculty of Business Administration, Northern Broder University, Box:
1321, Arar, P.O. 91431 Saudi Arabia, Shaymaa.barakat@nbu.edu.sa, barakat.shaima@yahoo.com, <https://orcid.org/0009-0002-6075-7294>

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ABSTRACT

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Introduction: The integration of Environmental, Social, and Governance (ESG) practices into governance frameworks has become a cornerstone for promoting transparency, accountability, risk management, and sustainable development across global contexts. However, significant regional and institutional disparities remain, underscoring the need for a comprehensive examination of ESG adoption trends and challenges.

Objectives: This study aims to systematically review how ESG practices are incorporated into governance frameworks globally, identify key differences between developed and emerging economies, and provide strategic insights to enhance the alignment of governance with sustainability goals.

Methods: Following the PRISMA 2020 guidelines, a systematic review was conducted on 25 peer-reviewed articles published between 2015 and 2025, retrieved from high-impact academic databases. Comparative analysis was applied to assess ESG integration across different regional, sectoral, and institutional settings.

Results: The findings reveal pronounced disparities between developed and emerging economies in ESG practices. Developed regions demonstrate more robust integration supported by standardized reporting, strong regulatory environments, and active board participation. Conversely, emerging markets face challenges including fragmented governance, limited institutional capacities, and cultural resistance. Nevertheless, effective ESG implementation was found to enhance governance quality, strengthen stakeholder trust, and improve institutional resilience.

Conclusions: Bridging the global gaps in ESG integration requires the establishment of universal metrics and the development of governance strategies adaptable to local contexts. The study offers practical recommendations for policymakers, corporate leaders, and researchers seeking to reinforce governance systems with sustainability-oriented practices.

Keywords: Corporate sustainability strategies; ESG policy harmonization; Stakeholder engagement; Institutional governance reform; Comparative governance analysis; Sustainability accountability frameworks.

INTRODUCTION

As global challenges—including climate change, social inequality, and economic volatility—intensify, the integration of Environmental, Social, and Governance (ESG) practices into governance frameworks has emerged as a pivotal strategy for promoting sustainable development, reinforcing corporate accountability, and fostering long term organizational resilience. ESG practices transcend traditional corporate responsibilities by embedding environmental stewardship, social responsibility, and transparent governance into core operational and strategic processes, aligning business objectives with broader societal and environmental imperatives [1, 2]. In response to escalating regulatory pressures and evolving stakeholder expectations, a nuanced understanding of how ESG metrics interact with governance mechanisms is essential for driving sustainable value creation and effective risk management. Yet, despite widespread recognition of ESG's importance, its adoption remains inconsistent across regions, sectors, and governance structures. Variations in regulatory maturity, institutional capacity, and cultural dynamics continue to generate significant disparities, highlighting the dual necessity for standardized frameworks and adaptable, context-sensitive governance strategies. While the literature on ESG integration has expanded, much remains fragmented, focusing narrowly on individual components such as environmental reporting, financial outcomes, or sector-specific applications. Therefore, there is a clear lack of comprehensive comparative analyses to explore the holistic integration of ESG principles. This lack is linked to the governance frameworks across diverse geopolitical and institutional settings. Additionally, limited scholarly attention has been directed towards understanding the complex interplay between regulatory environments, cultural resistance, and institutional weaknesses, particularly within emerging markets. This fragmentation represents a critical research gap, hindering the formulation of cohesive strategies that balance global ESG standards with local governance realities. This study addresses these gaps by conducting a systematic review of contemporary literature, critically evaluating how ESG practices influence governance frameworks worldwide. Through thematic synthesis of comparative analyses, regulatory frameworks, and emerging best practices, this review elucidates ESG's role in enhancing transparency, accountability, risk management, and strategic decision-making. Furthermore, it identifies persistent barriers—such as inconsistent reporting standards, governance fragmentation, and cultural resistance—while highlighting opportunities for advancing ESG integration through adaptive governance models, standardized metrics, and proactive institutional oversight. By bridging these gaps, the findings contribute to a comprehensive understanding of the evolving relationship between ESG practices and governance effectiveness. To date, few studies have systematically synthesized ESG governance integration across diverse contexts with a focus on both structural challenges and adaptive solutions. This research offers actionable insights for policymakers, corporate leaders, and scholars, supporting the optimization of governance frameworks to align with global sustainability objectives, strengthen stakeholder trust, and enhance organizational agility in an increasingly complex global environment.

STUDY PROBLEM

The accelerated integration of Environmental, Social, and Governance (ESG) practices into governance frameworks has significantly transformed the corporate governance landscape, positioning ESG as a cornerstone for advancing sustainable development and organizational accountability. However, despite this growing global emphasis, organizations continue to encounter substantial challenges in effectively embedding ESG principles within their governance structures. Key obstacles include the absence of universally accepted ESG metrics, pronounced regional and sectoral disparities in adoption, and the lack of standardized governance models that can accommodate diverse regulatory, cultural, and economic contexts. These inconsistencies undermine the comparability, transparency, and strategic alignment necessary for maximizing ESG's potential benefits. Moreover, the dynamic interplay between ESG factors and governance outcomes remains insufficiently examined in existing literature, creating a critical gap that limits the capacity of organizations to leverage ESG frameworks for informed decision, making, risk management, and long, term value creation. This lack of comprehensive understanding prompts essential questions regarding how ESG practices influence governance effectiveness across varying contexts, and what adaptive strategies, regulatory reforms, and best practices are required to overcome these persistent barriers and foster cohesive, sustainable governance systems globally.

STUDY QUESTIONS

To address the identified gaps in understanding the integration of Environmental, Social, and Governance (ESG) practices within governance frameworks, this study seeks to answer the following research questions:

Q1) What are the prevailing global trends in ESG adoption, and how do these trends vary across different regions, sectors, and governance structures? *This question explores the dynamic patterns of ESG integration, highlighting regional, industrial, and structural disparities influenced by regulatory, cultural, and socio, economic factors.*

Q2) What are the primary challenges and barriers organizations encounter when embedding ESG practices into governance frameworks, and how do these obstacles differ based on contextual factors such as regulatory environments, institutional capacity, and cultural dynamics? *This question investigates the multifaceted obstacles' ranging from inconsistent metrics to governance fragmentation, that hinder effective ESG implementation across diverse settings.*

Q3) How do ESG practices impact core governance functions, particularly in enhancing transparency, accountability, risk management, and fostering stakeholder trust? *This question examines the transformative role of ESG in strengthening governance outcomes, focusing on how ESG integration reshapes organizational accountability and resilience.*

Q4) What best practices, frameworks, and adaptive strategies are identified in the literature for optimizing ESG integration, and how can these approaches be leveraged to improve governance effectiveness and advance sustainable development goals? *This question aims to synthesize evidence, based practices that facilitate coherent ESG adoption, emphasizing standardization, proactive governance, and context, sensitive implementation*

Despite the growing body of literature on ESG practices, significant gaps remain concerning the coherent integration of ESG principles within governance frameworks across diverse regional and sectoral contexts. Existing studies often focus on isolated aspects, such as financial performance or environmental reporting, without offering a comprehensive synthesis of governance, related challenges and adaptive strategies. Moreover, there is limited comparative analysis addressing how institutional capacity, cultural dynamics, and regulatory fragmentation impact ESG adoption globally. This systematic review addresses these gaps by providing a structured, comparative evaluation of ESG integration within governance systems, highlighting persistent barriers, and proposing actionable, context, sensitive solutions to advance sustainable governance practices.

STUDY OBJECTIVES

This study aims to address critical gaps in the integration of Environmental, Social, and Governance (ESG) practices within governance frameworks through the following objectives:

1. To critically examine global trends in ESG integration, with a focus on identifying regional, sectoral, and structural variations in adoption and implementation.

This objective targets understanding how different regulatory, cultural, and institutional contexts shape ESG practices worldwide.

2. To identify and analyze the key challenges and barriers that hinder effective ESG integration within governance frameworks, including issues related to standardization, regulatory fragmentation, and organizational resistance.

This emphasizes diagnosing both systemic and contextual obstacles impacting ESG adoption.

3. To evaluate the influence of ESG practices on core governance outcomes, specifically in enhancing transparency, accountability, risk management, strategic decision, making, and stakeholder trust.

This objective explores the transformative role of ESG in strengthening governance effectiveness.

4. To synthesize evidence, based best practices, frameworks, and adaptive strategies that facilitate coherent and effective ESG integration across diverse governance contexts.

This focuses on extracting actionable insights from the literature to guide ESG implementation.

5. To develop practical recommendations for policymakers, corporate leaders, and scholars aimed at advancing sustainable development, improving governance resilience, and promoting standardized ESG reporting and oversight mechanisms.

This ensures that the study contributes not only to academic discourse but also offers solutions for real, world application.

LITERATURE REVIEW

The growing intersection between Environmental, Social, and Governance (ESG) practices and corporate governance has become a focal point in contemporary academic and policy discourse. As ESG considerations evolve from peripheral concerns to central elements of organizational strategy, understanding their integration within governance frameworks is essential for addressing global sustainability challenges and enhancing corporate accountability. This literature review critically examines the progression, regional variations, challenges, and impacts associated with ESG adoption, drawing attention to both established best practices and emerging areas of inquiry. By synthesizing existing research, the review highlights the transformative role of ESG in reshaping governance structures while identifying persistent gaps, particularly regarding standardization, regulatory disparities, and the practical measurement of ESG outcomes. This foundation sets the stage for a deeper exploration of how ESG practices have evolved the complexities of their global implementation, and the future directions necessary to optimize their governance integration.

THE EVOLUTION OF ESG PRACTICES WITHIN GOVERNANCE FRAMEWORKS

The integration of Environmental, Social, and Governance (ESG) practices into governance frameworks marks a fundamental shift from traditional compliance, based governance to a more holistic, sustainability, oriented approach [3]. Historically, governance focused primarily on legal adherence and financial accountability (Kuldova, 2024). However, recent scholarship highlights ESG as a strategic imperative that aligns corporate performance with long, term sustainability objectives and Sustainable Development Goals (SDGs) [4, 5]. [6]emphasizes that organizations embedding ESG frameworks are better positioned to manage systemic risks and capitalize on emerging opportunities. Similarly, Meiden and Silaban (2023) demonstrate that integrating ESG metrics into decision, making processes enhances corporate resilience by embedding environmental and social considerations into governance structures.

REGIONAL TRENDS IN ESG INTEGRATION

Global ESG adoption is characterized by significant regional disparities driven by divergent regulatory frameworks, cultural norms, and market dynamics [7, 8]. In Europe, comprehensive regulations such as the EU Taxonomy for Sustainable Activities foster robust ESG, aligned governance systems [9]. Conversely, in the United States, market, driven forces and shareholder activism are the primary catalysts for ESG integration [10, 11]. Emerging economies face unique challenges, including limited institutional capacity and financial constraints [12]. Nevertheless, initiatives in countries like Brazil, South Africa, and India illustrate the adaptability of ESG principles within diverse socio, economic contexts [3, 13], underscoring the importance of localized strategies in ESG implementation.

CHALLENGES IN ESG ADOPTION

While ESG frameworks offer significant potential, their integration is impeded by structural, regulatory, and cultural challenges [14]. [15] highlight that limited ESG, centered research, particularly in fields like public relations, constrains broader organizational alignment with sustainability goals. Earlier studies [16], [17] confirmed that despite widespread recognition of ESG benefits, inconsistent metrics, fragmented regulations, and resistance to change persist as major barriers [18]. Key obstacles include:

- **Inconsistent Metrics:** The absence of standardized ESG reporting frameworks complicates benchmarking and performance evaluation [19, 20].
- **Regulatory Gaps:** Variability in enforcement leads to uneven ESG adoption across jurisdictions [7].

- Cultural Resistance: Organizational inertia remains a critical impediment to transformative ESG integration [21].

IMPACT OF ESG PRACTICES ON GOVERNANCE OUTCOMES

Adopting ESG practices has been shown to significantly enhance governance performance by fostering transparency, accountability, risk mitigation, and stakeholder engagement [22]. Studies by [23, 24] reveal that embedding ESG within governance frameworks strengthens organizational resilience. Specifically:

- Enhanced Transparency: ESG reporting mechanisms offer clearer visibility into corporate practices [25, 26].
- Improved Risk Management: ESG, oriented firms demonstrate superior resilience to financial, reputational, and operational risks [27].
- Increased Stakeholder Trust: ESG integration deepens relationships with investors and communities, bolstering corporate reputation [28].

BEST PRACTICES FOR ESG INTEGRATION

Effective ESG integration requires structured, evidence, based strategies aligned with global standards and stakeholder expectations [29, 30]. Key best practices include:

- Adherence to Global Standards: Frameworks like the Global Reporting Initiative (GRI) and Sustainability Accounting Standards Board (SASB) enhance credibility and comparability [31].
- Board, Level ESG Committees: Dedicated governance structures ensure strategic oversight of ESG initiatives [32].
- Proactive Stakeholder Engagement: Involving stakeholders fosters alignment with societal values and enhances ESG relevance [28].

FUTURE DIRECTIONS FOR ESG AND GOVERNANCE

The evolution of ESG governance is increasingly shaped by technological innovation, regulatory developments, and changing stakeholder expectations [33, 34]. Emerging priorities include:

- AI and Big Data Analytics: Leveraging technology for advanced ESG reporting and decision, making [35].
- Supply Chain Sustainability: Extending ESG practices beyond corporate boundaries to encompass supplier networks [36].
- Impact Measurement: Developing robust methodologies to quantify ESG outcomes remains a critical research focus [37].

SUMMARY AND RESEARCH GAPS

While ESG integration offers clear benefits for enhancing governance, persistent challenges, such as inconsistent reporting standards, regulatory fragmentation, and cultural resistance, continue to limit its effectiveness. The literature highlights the necessity of standardized frameworks (GRI, SASB), proactive governance structures, and stakeholder engagement to drive meaningful ESG adoption. However, gaps remain in:

- Quantifying ESG's tangible impacts on governance outcomes.
- Addressing regional disparities, particularly in emerging markets.
- Leveraging technologies like AI and blockchain to enhance reporting accuracy and strategic decision, making.

Future research should prioritize the development of standardized ESG reporting methodologies, the exploration of adaptive governance models tailored to diverse regulatory and cultural contexts, and the advancement of technological solutions to enhance ESG integration. In particular, further studies are needed to examine the

intersection of ESG frameworks with emerging digital governance tools, such as artificial intelligence and blockchain, to address persistent challenges related to transparency, comparability, and reporting efficiency.

METHODOLOGY

SYSTEMATIC REVIEW FRAMEWORK

This study adopts a qualitative systematic review methodology aimed at critically synthesizing existing literature on the integration of Environmental, Social, and Governance (ESG) practices within governance frameworks. The review adheres to established methodological standards to ensure transparency, reproducibility, and academic rigor throughout the research process. Special emphasis was placed on identifying comparative studies that examine regional, sectoral, and structural variations in ESG governance, thereby addressing key gaps in the literature concerning how ESG principles are operationalized across diverse contexts. To maintain methodological consistency and reliability, the review was conducted in accordance with a predefined protocol guided by the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) framework. This protocol outlined the search strategy, selection of databases, clearly defined inclusion and exclusion criteria, and systematic quality assessment procedures. These measures were implemented to minimize selection bias, enhance the validity of the review process, and ensure that the findings are grounded in a comprehensive and objective analysis of the relevant literature. This review adhered to the PRISMA framework to ensure methodological transparency and rigor. The protocol for this review was not registered in a public database.

ELIGIBILITY CRITERIA

To ensure objectivity, relevance, and methodological rigor, a clearly defined set of inclusion and exclusion criteria was established prior to initiating the literature search. These criteria were designed to filter studies that offer significant contributions to the understanding of ESG integration within governance frameworks, particularly from a comparative perspective. The inclusion criteria required that studies:

- Be published between 2015 and 2025, ensuring coverage of recent developments and contemporary practices in ESG governance.
- Appear in peer, reviewed journals indexed in reputable academic databases, including Scopus, Web of Science, ScienceDirect, and Wiley Online Library. While, the database search was conducted between January 1, 2024, and January 15, 2025
- Be written in English to maintain consistency in language analysis.
- Explicitly address the integration of Environmental, Social, and Governance (ESG) principles within governance frameworks, with a focus on comparative analyses, such as cross, country, cross, sectoral, or cross, framework studies.
- Be published in journals with an impact factor of 2 or higher, reflecting a commitment to high, quality, influential research.

Conversely, the exclusion criteria eliminated:

- Non, peer, reviewed materials, including conference papers, editorials, book chapters, and other grey literature.
- Studies focusing exclusively on financial performance without a substantive link to ESG or governance themes.
- Articles without full, text availability, which limited comprehensive evaluation.
- Duplicate records and studies that did not align with the thematic scope of ESG governance integration.

The structured filtering process ensured that only studies of high relevance, methodological soundness, and academic quality were included in the review, thereby enhancing the validity and reliability of the findings.

SEARCH STRATEGY

A comprehensive and systematic search strategy was employed to identify relevant literature across multiple reputable academic databases, including Web of Science (WoS), Scopus, ScienceDirect, and Wiley Online Library. To

enhance precision and ensure comprehensive retrieval of pertinent studies, Boolean operators (e.g., AND, OR) were utilized to structure search queries effectively. The primary search terms were developed to capture the intersection of governance frameworks and ESG integration, and included combinations such as:

- "Accounting AND Governance" AND ("ESG" OR "Sustainability")
- "Comparative Governance Frameworks" AND "Corporate Governance"
- "ESG Integration" AND "Governance Practices"

This search strategy yielded a broad pool of records reflecting diverse perspectives on ESG practices within governance contexts.

The selection process proceeded through sequential screening phases:

1. Title and Abstract Screening, Irrelevant studies, duplicates, and those lacking a comparative focus were excluded.
2. Full, Text Review, Remaining articles were assessed for methodological rigor, thematic relevance to ESG governance, and compliance with predefined inclusion criteria.
3. Quality Appraisal, a structured evaluation was conducted to ensure only high, quality studies were included.

The quality assessment applied a standardized appraisal checklist, evaluating each study against the following criteria:

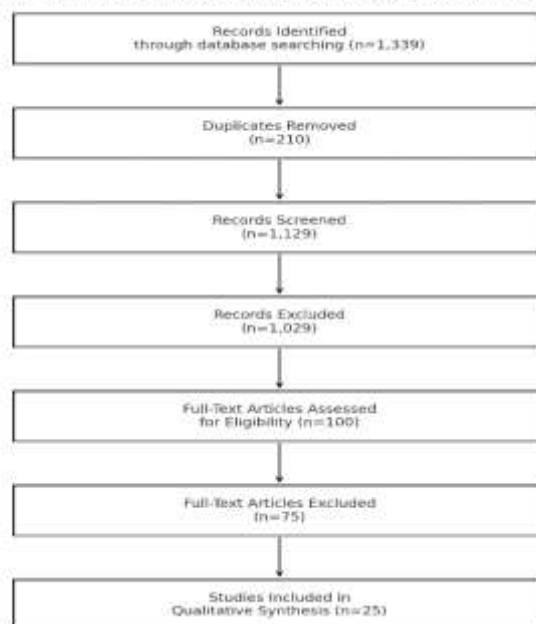
- Direct relevance to ESG governance integration.
- Demonstration of clarity and methodological robustness in comparative analysis.
- Transparency in reporting data, methodologies, and conclusions.
- Publication in peer, reviewed journals with an impact factor ≥ 2 , ensuring scholarly credibility.

Following this rigorous multi, stage process, a total of 25 studies were selected for inclusion. This number reflects an optimal balance between comprehensive coverage of regional, sectoral, and structural aspects of ESG governance, and the necessity for analytical depth. All retrieved records were organized and managed using Microsoft Excel, facilitating systematic screening, duplicate removal, and documentation of eligibility assessments in alignment with PRISMA guidelines

STUDY SELECTION PROCESS

The study selection process was conducted in strict accordance with the PRISMA guidelines, ensuring a transparent, replicable, and methodologically rigorous approach. The process comprised four key phases: identification, screening, eligibility assessment, and final inclusion. Each phase was systematically applied to reduce selection bias and ensure the integrity and reliability of the review. The progression of study selection is illustrated in Figure 1 (PRISMA Flow Diagram), detailing the number of records identified through database searches, the exclusions made at each stage, and the final set of studies included in the qualitative synthesis.

Figure 1. PRISMA Flow Diagram of Study Selection Process

**Figure 1. PRISMA Flow Diagram of Study Selection Process**

Following the structured application of predefined inclusion and exclusion criteria, along with a comprehensive quality appraisal, a total of 25 peer reviewed studies were retained. These studies provide robust insights into the integration of Environmental, Social, and Governance (ESG) practices within governance frameworks, covering diverse regional, sectoral, and institutional contexts.

QUALITY ASSESSMENT

To ensure the methodological rigor and reliability of this systematic review, each included study underwent a structured quality assessment. This appraisal was guided by a customized checklist, developed in alignment with established protocols such as the PRISMA guidelines and the Critical Appraisal Skills Program (CASP) framework. The evaluation focused on five core criteria:

- Clarity and specificity of research objectives
- Appropriateness and justification of the chosen methodology
- Depth and robustness of comparative analysis
- Transparency and completeness in data reporting
- Direct relevance to ESG integration within governance frameworks

Studies were only retained if they demonstrated high standards across these dimensions, ensuring that the final synthesis was grounded in credible, methodologically sound, and thematically pertinent literature. This rigorous appraisal process reinforces the validity of the review's conclusions and supports its contribution to advancing knowledge in ESG governance integration.

RESULTS

According to the PRISMA guidelines, the systematic review process followed a structured, transparent methodology to ensure the rigorous identification, screening, and selection of relevant literature on the integration of Environmental, Social, and Governance (ESG) practices within governance frameworks. This section outlines each phase of the review process, beginning with the comprehensive database search and proceeding through sequential filtering steps designed to refine the dataset based on predefined inclusion and exclusion criteria. The objective was to ensure that only high, quality, thematically relevant studies were retained for analysis, thereby providing a robust foundation for the subsequent thematic synthesis.

RESULTS OF SYSTEMATIC REVIEW FILTERING PROCESS

A total of 1,339 records were initially identified through database searches. After removing duplicates and applying predefined inclusion and exclusion criteria, 25 high, quality studies were retained for analysis. The detailed progression of this filtering process is presented below, ensuring that only methodologically robust and thematically relevant studies form the basis of the subsequent thematic synthesis.

IDENTIFICATION OF STUDIES THROUGH DATABASE SEARCHES

The identification phase began with a structured search across four major academic databases—Scopus, Web of Science (WoS), ScienceDirect, and Wiley Online Library—using Boolean operators and targeted keyword combinations to retrieve studies on accounting, governance, and Environmental, Social, and Governance (ESG) practices. This comprehensive strategy yielded 1,339 records, with Scopus contributing the largest share (484), followed by Web of Science (398), ScienceDirect (325), and Wiley Online Library (132), which primarily included specialized literature on sustainability and governance. The use of multiple databases minimized publication bias and ensured broad yet focused coverage, as summarized in Table 1.

Table 1. Database Query Results

Database	Number of Records Retrieved	Search Keywords Used
Scopus	484	"Accounting AND Governance" AND ("ESG" OR "Sustainability")
Web of Science	398	"Comparative Governance Frameworks" AND "Corporate Governance"
ScienceDirect	325	"ESG Integration" AND "Governance Practices"
Wiley Online Library	132	Mixed ESG and Governance Terms
Total	1339	

Table 1 summarizes the 1,339 records retrieved through a comprehensive search of four high, impact databases—Scopus, Web of Science (WoS), ScienceDirect, and Wiley Online Library—all recognized for their extensive indexing in governance, sustainability, and corporate management literature. The use of Boolean operators and targeted keyword combinations, such as “Accounting AND Governance” and “ESG AND Sustainability,” ensured a focused retrieval of studies addressing the intersection of ESG practices and governance frameworks. Scopus contributed the largest number of records (484), followed by Web of Science (398) and ScienceDirect (325), reflecting their broad disciplinary scope. Wiley Online Library, with 132 records, provided specialized insights into corporate governance and sustainability reporting. This variation highlights the importance of a multi, database strategy to ensure comprehensive coverage and mitigate database, specific bias, thereby enhancing the robustness and relevance of the systematic review.

FILTERING PROCESS

After identifying 1,339 records, a structured multi, phase filtering process was applied to retain only studies that met the predefined inclusion criteria and demonstrated high methodological rigor. This process systematically excluded duplicates, non, peer, reviewed publications, outdated studies, and those lacking thematic relevance to ESG governance integration. The outcomes of each filtering stage are detailed in Table 2.

Table 2. Filtering Process Results

Filtering Step	Initial Count	Excluded Studies	Remaining Count
Initial Query	1,339	N/A	1,339
Duplicate Removal	1,339	210	1,129
Non, Peer, Reviewed Exclusion	1,129	150	979
Outdated Studies Exclusion	979	120	859
Relevance Screening (Title/Abstract)	859	759	100
Full, Text Exclusion (Eligibility)	100	75	25

The filtering process began with the removal of 210 duplicate entries resulting from overlapping database indexing. Next, 150 non, peer, reviewed publications, including conference papers and editorials, were excluded to uphold academic rigor. An additional 120 studies were removed for falling outside the predefined timeframe of 2015–2025, ensuring focus on contemporary ESG governance developments. The most substantial reduction occurred during the relevance screening of titles and abstracts, leading to the exclusion of 759 studies that did not align with the core research objectives. A final full, text review excluded 75 studies due to insufficient methodological rigor or failure to meet inclusion criteria. This systematic refinement resulted in a final selection of 25 high, quality studies, providing a robust foundation for thematic synthesis and analysis. The stages of this process are summarized in Table 2, reflecting a transparent and rigorous approach to ensuring the credibility and relevance of the review's findings.

SELECTION CRITERIA AND RATIONALE FOR FINAL STUDY INCLUSION

The reduction from 1,339 initial records to 25 high, quality studies was achieved through a transparent, multi, stage evaluation process, consistent with systematic review best practices. This rigorous approach prioritized relevance, methodological robustness, and alignment with the research objectives. The key selection criteria included:

1. **Thematic Relevance:** Studies had to directly address the integration of Environmental, Social, and Governance (ESG) practices within governance frameworks. Works focusing solely on financial performance without a governance or ESG linkage were excluded.
2. **Methodological Quality:** Only peer, reviewed articles from reputable, high, impact journals indexed in databases such as Scopus, Web of Science, and ScienceDirect were considered. Preference was given to studies demonstrating methodological rigor, especially those employing comparative analyses. Publications from journals with an impact factor ≥ 2 were prioritized.
3. **Comparative and Analytical Depth:** Studies offering cross, regional, cross, sectoral, or framework, based comparisons were favored to ensure diversity of insights. Purely theoretical works lacking applied analysis were excluded.
4. **Contribution to Addressing Research Gaps:** Selected studies provided valuable insights into challenges such as regional disparities in ESG adoption, governance structure variations, and the need for standardized ESG reporting frameworks—supporting both academic inquiry and practical applications.
5. **Avoidance of Redundancy:** To ensure a diverse yet focused dataset, studies with overlapping findings were carefully reviewed, retaining only the most comprehensive and methodologically sound contributions..

The decision to finalize 25 studies reflected a balance between comprehensive thematic coverage and analytical depth. A narrower, high, quality dataset allowed for critical engagement and meaningful synthesis, avoiding dilution of insights. This structured refinement ensured alignment with the review's objectives, emphasizing quality over quantity while addressing practical constraints inherent in qualitative research.

THEMATIC SYNTHESIS OF SELECTED STUDIES

The final set of 25 studies underwent a thematic synthesis to extract key patterns, critical challenges, and research gaps in the integration of Environmental, Social, and Governance (ESG) practices within governance frameworks. This analysis, in line with systematic review standards, moved beyond isolated study summaries to identify recurring themes across diverse contexts. Five core thematic categories emerged, reflecting the multidimensional nature of ESG governance integration:

- **Regional Disparities in ESG Adoption:** Variations in regulatory frameworks, institutional capacity, and cultural norms were found to shape ESG implementation across geographic regions.
- **Governance Structures and ESG Performance:** Strong, integrated governance systems were consistently associated with enhanced ESG outcomes.
- **Board Composition and Strategic Alignment:** Proactive, diverse board structures played a critical role in embedding ESG into corporate strategies.
- **Standardization of ESG Metrics:** The lack of universally accepted metrics remains a significant barrier to comparability and transparency, with several studies advocating for the adoption of global frameworks.
- **Sustainability Reporting and Accountability:** Well-structured reporting mechanisms were linked to improved stakeholder trust, transparency, and long-term corporate accountability..

To illustrate these themes, Table 3 presents representative studies aligned with each category. While the table includes selected examples, the thematic synthesis incorporates insights from the full dataset, ensuring analytical depth and thematic rigor:

Table 3. Thematic Synthesis of Key Insights from Selected Studies

Theme	Key Insights	Representative Studies
Regional Disparities in ESG Adoption	Regulatory, cultural, and socio, political factors shape ESG adoption across regions.	[38]
Governance Structures and ESG Performance	Strong governance frameworks correlate with enhanced ESG outcomes.	[39]
Board Composition and Strategic Alignment	Diverse and proactive boards drive effective ESG integration.	[40]
Standardization of ESG Metrics	Lack of global ESG standards hinders comparability and transparency.	[31]
Sustainability Reporting and Accountability	Structured reporting enhances corporate accountability and stakeholder trust.	[41]

This thematic synthesis aligns with the study's objectives by capturing global ESG integration trends, diagnosing critical challenges, assessing governance impacts, and consolidating best practices. The insights presented in Table 3 provide a structured foundation for understanding how ESG practices are operationalized across varying regional, sectoral, and institutional contexts, thereby supporting both academic analysis and practical application.

THEMATIC ANALYSIS AND DISCUSSION

The selected studies provide a comprehensive and nuanced understanding of the intricate relationship between Environmental, Social, and Governance (ESG) practices and governance frameworks across diverse regional, sectoral, and institutional contexts. A recurring theme throughout the literature is the decisive role of regulatory environments and socio, political dynamics in shaping ESG integration strategies. For example, [38] highlight that standardized, universal ESG frameworks often fail to account for local governance structures, cultural norms, and political landscapes, particularly in Asia. Their findings advocate for adaptive governance models tailored to regional

dynamics, offering a strategic pathway to mitigate disparities and enhance ESG implementation effectiveness. Expanding on this, [39] underscores the importance of robust and integrative management systems. His comparative analysis reveals that fragmented governance structures and weak institutional capacities, especially in emerging markets, hinder alignment between sustainability objectives and corporate governance practices. These points to the urgent need for institutional reforms that embed ESG principles within core governance strategies. A practical case is presented by [41], who examines Bahrain's transition from a resource, dependent economy to one anchored in sustainability. This shift was largely driven by structured sustainability reporting frameworks, which enhanced transparency, accountability, and stakeholder trust. The study emphasizes the critical role of formalized reporting mechanisms in aligning governance with long, term sustainability objectives. Internally, [40] focus on corporate governance dynamics, demonstrating that diverse and proactive boards—characterized by varied expertise and strategic foresight—significantly enhance ESG integration. Their research positions governance bodies not merely as oversight entities but as active drivers of sustainability embedded within decision, making processes. Addressing a persistent challenge, Ibrahim et al. (2024) identify the lack of standardized ESG metrics as a fundamental barrier to transparency, comparability, and effective cross, sectoral evaluation. They call for enhanced global cooperation to establish uniform ESG benchmarks, which are essential for cohesive governance strategies and credible ESG reporting, particularly in multinational contexts.

Collectively, these studies converge on the conclusion that effective ESG integration depends on a synergistic approach combining:

- Adaptive regulatory frameworks responsive to local contexts.
- Institutional reforms to strengthen governance capacity.
- Implementation of structured sustainability reporting.
- Proactive, strategically engaged governance bodies.
- Global standardization of ESG metrics.

These elements are pivotal in overcoming structural, cultural, and operational barriers, thereby aligning sustainability objectives with governance effectiveness. The insights derived from this thematic analysis not only highlight best practices but also underscore the critical challenges that must be addressed to advance ESG governance globally.

SUMMARY OF KEY THEMATIC FINDINGS

The thematic synthesis of the selected studies highlights five interrelated factors critical to the effective integration of Environmental, Social, and Governance (ESG) practices within governance frameworks:

- Regulatory and Socio, Political Contexts: Adaptive governance models are essential to address regional and institutional variations influencing ESG adoption [38].
- Robust Governance Systems: Strong, integrative management structures consistently correlate with enhanced ESG performance [39].
- Sustainability Reporting Mechanisms: Transparent reporting frameworks significantly improve corporate accountability and foster stakeholder trust [41].
- Board Composition and Oversight: Diverse and proactive boards play a pivotal role in aligning ESG initiatives with strategic organizational objectives [40].
- Standardization Challenges: The absence of universally accepted ESG metrics remains a major barrier, underscoring the need for global reporting standards to ensure comparability and informed governance decisions [31].

These findings underscore the multifaceted and context, dependent nature of ESG integration, highlighting the necessity for flexible, empirically grounded governance strategies that accommodate both global standards and local realities. To consolidate these insights, Table 4 presents a visual summary of the primary barriers to ESG integration alongside evidence, based solutions derived from the literature.

Table 4. Summary of Key Barriers and Proposed Solutions for ESG Integration

Key Barriers	Proposed Solutions
Lack of standardized ESG metrics	Adoption of global frameworks (GRI, SASB)
Fragmented governance structures	Integrated management systems and reforms
Cultural resistance to ESG integration	Adaptive governance sensitive to local norms
Weak institutional capacity in emerging markets	Capacity building and policy support
Limited board, level ESG oversight	Establishing ESG, focused board committees

This table encapsulates the core challenges impeding ESG governance and aligns them with practical, literature-supported strategies. Standardization through frameworks such as GRI and SASB addresses transparency and comparability gaps. Governance fragmentation, particularly in emerging markets, calls for structural reforms and integrated management systems. Cultural resistance necessitates adaptable governance approaches tailored to socio, cultural contexts. Enhancing institutional capacity through targeted development initiatives further supports ESG adoption. Lastly, strengthening board, level oversight via dedicated ESG committees ensures that sustainability is embedded within strategic decision, making processes.

DISCUSSION

This discussion interprets the key findings of the systematic review in relation to the research questions, drawing from the thematic synthesis to critically evaluate global ESG adoption trends, contextual challenges, governance impacts, and effective implementation strategies across diverse regional and sectoral landscapes. Emerging Global Trends in ESG Adoption (Research Question 1): The review highlights a global shift towards integrating Environmental, Social, and Governance (ESG) practices within corporate and institutional governance frameworks. However, this advancement is uneven, marked by regional and sectoral disparities influenced by regulatory maturity, institutional capacity, and socio, political dynamics. [38] demonstrate that in Asia, proactive regulatory frameworks are pivotal in driving ESG adoption. Similarly, [39] underscores that robust governance systems, particularly those embedded within integrative management structures, are critical for aligning ESG initiatives effectively. [40] further emphasizes the growing role of strategic board, level engagement in steering sustainability agendas, signaling a transition from passive compliance to proactive governance. Moreover, studies by [41] and [31] reinforce the importance of accountability and transparency through standardized reporting frameworks and ESG metrics. Collectively, these insights reveal that while ESG integration is advancing globally, its effectiveness hinges on localized adaptations supported by coherent global strategies. Challenges and Barriers to ESG Integration (Research Question 2): Despite the positive momentum, persistent structural and cultural barriers continue to hinder ESG integration. Cultural resistance, especially within regions adhering to traditional corporate norms, remains a significant impediment [38]. [39] highlights how fragmented governance systems, particularly in emerging markets, exacerbate institutional weaknesses, leading to inconsistent ESG practices. A critical recurring challenge is the absence of standardized ESG reporting frameworks, which undermines transparency and stakeholder confidence [31]. Internal governance issues, such as limited board oversight and lack of diversity, further delay ESG adoption [40]. Additionally, [41] noted that in developing economies, weak reporting infrastructures amplify accountability deficits. These findings underscore the multifaceted nature of ESG integration challenges, which vary by context and require tailored strategies combining regulatory alignment, organizational reform, and cultural transformation. Influence of ESG Practices on Governance (Research Question 3): The literature consistently affirms that ESG practices enhance core governance functions. Across the reviewed studies, ESG integration is linked to improved transparency, accountability, risk management, and stakeholder trust. [41] illustrates how structured sustainability reporting fosters long, term accountability and engagement. [39] emphasizes that embedding ESG within governance frameworks strengthens resilience against diverse risks. [39] highlights the role of proactive board oversight in

aligning governance with sustainability objectives, while [31] demonstrates how standardized metrics facilitate both external comparability and internal governance reforms. These collective insights confirm that ESG is not merely an adjunct to governance but a transformative force driving ethical, resilient, and forward, looking organizational practices. Best Practices and Frameworks for ESG Implementation (Research Question 4): The review identifies key best practices critical for effective ESG integration. Foremost is the adoption of standardized reporting frameworks, which enhance transparency and comparability across sectors [31]. The establishment of diverse and engaged boards is equally vital for embedding ESG priorities within corporate strategies [40]. [39] highlights the operational value of integrative management systems in embedding sustainability into daily governance processes. [38] stresses the importance of adaptive governance models tailored to regional and cultural contexts, while [41] demonstrates that transparent reporting fosters stakeholder trust and accountability. Together, these practices offer a balanced framework, combining global standards with the flexibility needed to navigate regional complexities and drive sustainable governance outcomes. In summary, the discussion emphasizes that successful ESG integration requires a nuanced approach—one that balances the rigor of standardized frameworks with adaptive strategies responsive to local governance dynamics. This dual focus ensures that ESG practices not only align with global sustainability goals but also address the unique challenges and opportunities present within diverse organizational and regional context. Future studies should explore the evolving role of digital technologies in enhancing ESG governance integration, particularly in under, researched regions.

CONCLUSION

This systematic review establishes that the integration of Environmental, Social, and Governance (ESG) practices has evolved from a peripheral consideration to a foundational element in modern governance frameworks. The collective evidence underscores that effective ESG adoption significantly enhances core governance functions—promoting transparency, accountability, and robust risk management—while simultaneously advancing global Sustainable Development Goals (SDGs) [39, 41]. However, the review also reveals a stark contrast in ESG integration across regions and sectors. Developed economies benefit from mature regulatory environments, standardized reporting frameworks, and proactive board oversight, which together facilitate smoother ESG alignment. In contrast, emerging markets continue to grapple with fragmented governance structures, inconsistent regulatory enforcement, and deep, rooted cultural resistance to sustainability initiatives [31, 38]. These challenges highlight that a universal approach is insufficient; instead, adaptive governance strategies tailored to local contexts are essential for overcoming these persistent barriers. In addressing the influence of ESG on governance effectiveness, the findings affirm that embedding ESG principles strengthens organizational resilience and fosters stakeholder trust—both critical for sustaining long, term value amidst global uncertainties [40]. Moreover, the identification of best practices—ranging from the adoption of standardized ESG metrics to the establishment of diverse, engaged boards and structured sustainability reporting—provides a clear pathway for organizations seeking to navigate ESG integration challenges effectively. Ultimately, the disparities in ESG adoption patterns emphasize a dual imperative: advancing global cooperation to promote consistent ESG standards while ensuring flexibility for region, specific adaptations. This balanced approach is vital for aligning governance frameworks with evolving sustainability objectives, stakeholder expectations, and regulatory demands. In conclusion, strategically embedding ESG practices within governance systems is not merely a compliance exercise but a critical driver of sustainable development, corporate accountability, and organizational agility in a rapidly changing global landscape. As ESG expectations evolve, continuous evaluation and adaptation of governance frameworks will be essential to sustain organizational resilience and global sustainability outcomes.

PRACTICAL IMPLICATIONS

This review offers actionable insights for policymakers, corporate boards, and ESG standardization bodies. Emphasis is placed on fostering adaptive governance strategies that respond to regional and sectoral nuances. Additionally, advancing the harmonization of ESG metrics and reporting frameworks is critical for enhancing comparability and accountability. Leveraging digital tools (e.g., AI, driven reporting platforms) and integrative management systems is recommended to strengthen transparency, support informed decision, making, and promote sustainable governance practices across diverse organizational contexts.

LIMITATIONS

This study is limited by the exclusion of non, English literature and may underrepresent regional ESG innovations published in other languages.

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