

From Reporting to Reality: A Bibliometric Review of ESG Integration in Strategic Corporate Decision-Making

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Abstract

Despite Environmental, Social, and Governance (ESG) criteria becoming central to corporate agendas, a significant 'Reporting to Reality' gap persists between performative disclosure and authentic strategic integration. This gap is quantitatively mapped in this study through a comprehensive bibliometric review of 315 articles retrieved from Scopus and Web of Science. Using co-citation analysis, bibliographic coupling, and keyword co-occurrence, the paper visualizes the intellectual and conceptual structure of ESG integration in strategic decision-making.

Findings reveal a field in rapid transition, with scientific production surging from 11 articles in 2019 to 149 by late 2025. The analysis identifies five primary thematic clusters, uncovering a structural fracture where mandatory reporting streams remain conceptually distanced from strategic integration and financial performance clusters. The intellectual foundations are anchored in the tension between Agency and Stakeholder theories, tracking an evolution from compliance-oriented CSR toward a modern, integrated ESG paradigm.

The 'ESG-Financial Performance' nexus is identified as the most active research hotspot. Critical knowledge gaps are pinpointed, specifically the need to bridge the disconnect between ESG disclosure and executive compensation mechanisms. The study is concluded with a targeted research agenda to guide scholars in bridging the implementation gap between reporting and reality.

Keywords: ESG (Environmental, Social, Governance), Bibliometric Review, Corporate Sustainability, Good Governance, Strategic Decision-Making

1. Introduction

In the modern twenty-first century corporate environment, Environmental, Social, and Governance (ESG) requirements have transitioned from a niche ethical concern to a core component of mainstream corporate strategy. Global capital flows, regulatory pressure, and shifting stakeholder expectations have placed sustainable business models at the forefront of the corporate agenda. However, this rapid ascent has contributed to major ambiguity marked by an expanding gap between performative reporting and authentic strategic integration. This is the "Reporting to Reality" gap.

On one side of this gap is "Reporting": the act of communicating information to the public, often driven by a need to manage public perception. Foundational literature has extensively debated whether sustainability reporting is a genuine commitment or merely a "legitimation strategy" a tool to manage stakeholder impressions rather than a reflection of true operational change [1, 2]. This scepticism is confirmed by market data. Some studies find that higher ESG ratings, counterintuitively, correlate with higher systematic risk, suggesting investors remain uncertain and

perceive "window dressing" [3]. Other studies highlight that environmental practices may add value, while social and governance practices may have negative financial links [4], and mandatory disclosure rules, such as the EU Directive on non-financial information, do not always translate into value relevance in the market [5].

On the other side of the gap is "Reality": The firm's authentic commitment to ESG principles within its strategic and operational backbone. This "reality" is rooted in actual practices, not just disclosures. This includes linking executive compensation directly to ESG outcomes like carbon reduction [6], the 'Reality' of integration is further evidenced by the inclusion of ESG-specific Key Performance Indicators (KPIs) into internal management systems [7] embedding "green strategic investment decision-making" (GSIDMP) into operational planning with Industry 4.0 technologies [8], and aligning ESG performance with financial strategies to mitigate distress [9]. The literature demonstrates that these mechanisms do lead to real-world changes, such as actual reductions in CO₂ emissions, even if they do not immediately result in superior financial performance [6].

This disconnect, where authentic ESG integration is happening (Reality) but is often overshadowed or diluted by the noise of performative disclosure (Reporting), creates the central problem this paper addresses. The literature reflects two opposing sides. While some studies find a positive link between ESG disclosure and economic performance [10, 11], others find a negative or neutral link [4, 5]. The field is further complicated by internal and external drivers, from governance factors like board gender diversity [12] and board size [13] to institutional pressures [14].

While this "Reporting to Reality" gap is widely discussed, its structure, evolution, and intellectual foundations have not been quantitatively mapped. A clear picture of whether the academic literature itself is fragmented is not currently available. Are the scholars who study ESG disclosure (e.g., [15, 1]) talking to the scholars who study strategic ESG integration (e.g., [8, 6])? Or are these two conversations happening with isolated streams running in parallel?

This study addresses this gap by conducting a comprehensive bibliometric review to quantitatively map the intellectual structure of the research domain. While qualitative systematic literature reviews (SLR) excel at thematic synthesis, they are limited in detecting the structural fragmentation of a field. This bibliometric approach is superior for addressing the 'Reporting to Reality' gap because it moves beyond a traditional narrative review to visualize the 'intellectual DNA', the foundational themes and conceptual connections, of the domain. "By analysing co-citation and bibliographic coupling networks, it is possible to quantitatively pinpoint if 'Reporting' scholars and 'Integration' scholars are operating in isolated silos, revealing 'structural holes' that a narrative review might overlook.

2. Research Objectives

- 2.1. To analyse the performance and publication landscape of the ESG strategic integration literature, identifying the most influential research constituents (authors, journals, institutions, and countries).
- 2.2. To identify the intellectual foundations and foundational thematic clusters of the research field using co-citation analysis.
- 2.3. To map the current conceptual structure and emerging research themes using bibliographic coupling and keyword co-occurrence, with a specific focus on identifying the "Reporting to Reality" gap.
- 2.4. To identify critical knowledge gaps and emerging hotspots, proposing a targeted future research agenda to bridge the gap between ESG reporting and strategic implementation.

3. Research Questions

- 3.1. What is the current publication landscape, and who are the most influential research constituents (authors, journals, institutions, and countries) shaping the discourse on ESG integration in strategic decision-making?
- 3.2. What are the foundational intellectual cornerstones (key cited papers and authors) and core themes that form the bedrock of this research domain?

3.3. How has the conceptual structure of the field evolved? Specifically, what do the top keyword and document linkages reveal about the structural separation or integration of performative ESG reporting versus authentic strategic integration (the 'Reporting to Reality' gap)?

3.4. Based on the thematic analysis, what are the most significant knowledge gaps and emerging trends, and what is a viable future research agenda to advance the field?

This paper proceeds as follows: Section 4 details the data collection and bibliometric methodology. Section 5 presents the results of the analysis, beginning with the performance analysis (RO1), followed by the intellectual structure (RO2), and the conceptual structure (RO3). Section 6 discusses the key findings, focusing on the "Reporting to Reality" gap, and proposes a comprehensive future research agenda (RO4). Section 8 provides the conclusion.

4. Methodology

This study employs a quantitative bibliometric analysis to systematically map the intellectual and conceptual structure of the research field linking ESG to strategic corporate decision-making. The methodology is structured around the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) [16] framework to ensure a transparent, systematic, and reproducible process for data collection and analysis.

4.1. Data Collection and Search Strategy

The data collection was conducted on November 2, 2025, using two of the most comprehensive and reputable academic databases: Scopus and the Web of Science (WoS) Core Collection. This dual database approach ensures a wide-ranging and high-quality sample, mitigating the risk of database-specific biases. Search Fields: The search string purposefully included broad terms such as 'corporate governance' and 'strategic management' to capture the full intersection of ESG within the management domain. To prevent the dilution of results by generic governance literature, a two-stage refinement process was employed. First, the Boolean logic required these terms to appear strictly in conjunction with ESG-specific identifiers. Second, the manual screening phase, resulting in the exclusion of 64 records, specifically targeted and removed articles where governance was discussed in a general sense without a substantive link to environmental or social strategic integration.

Search String: A specialized search string was designed to capture the three core concepts of this study: (1) the ESG concept, (2) the strategic management concept, and (3) the integration concept. The precise Boolean query used was: (TITLE-ABS-KEY("ESG" OR "Environmental Social Governance" OR "Environmental, Social and Governance") AND TITLE-ABS-KEY("strategic decision-making" OR "corporate strategy" OR "business strategy" OR "corporate governance" OR "strategic management")) AND TITLE-ABS-KEY("integration" OR "adoption" OR "implementation" OR "embedding" OR "incorporation"))

- **Inclusion Criteria:** To ensure the relevance and quality of the dataset, the search was limited to a specific time frame and document type. The scope was defined as:
- **Time Frame:** 2012 to 2nd November 2025
- **Language:** English
- **Document Type:** Articles only
- **Source Type:** Journals

4.2. Data Screening and Processing

The initial search yielded 379 records from both databases. These records were then screened for relevance and eligibility. After applying the inclusion criteria and removing duplicates, a final dataset of 315 articles was retained for the bibliometric analysis. The complete identification, screening, and inclusion process is detailed in the PRISMA flow diagram (Figure 1).

The datasets exported from WoS and Scopus were harmonized, merged, and de-duplicated using BibexPy, a Python-

based program specifically designed for merging and cleaning biblio-metric data from these two sources [17]. This step is crucial for creating a single, consistent bibliographic file for analysis.

The data collection period commences in 2012, a watershed year that marked the institutionalization of ESG. This period witnessed the launch of the International Integrated Reporting Council’s (IIRC) pilot framework and the introduction of mandatory reporting requirements in key emerging economies, such as SEBI’s mandate for top listed firms in India. These events signalled the transition of ESG from a voluntary corporate social responsibility (CSR) activity to a standardized, strategic reporting function.

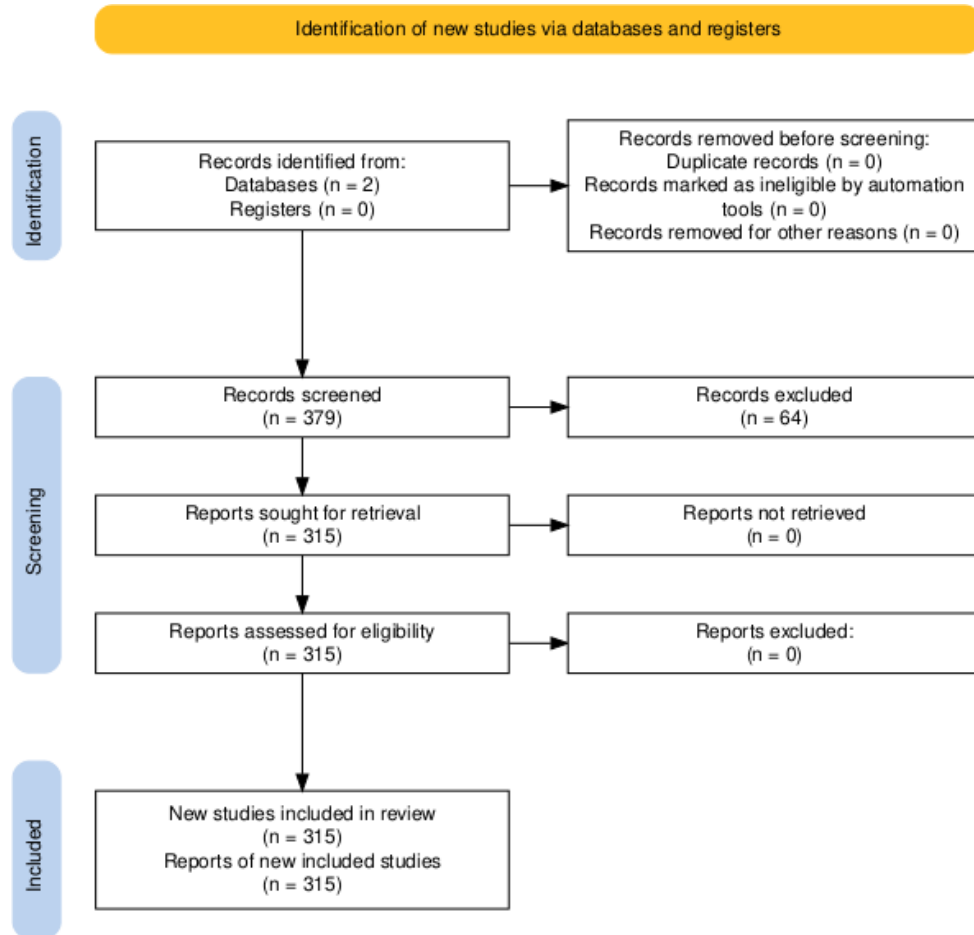


Figure 1: Data extraction process from the Web of Science and Scopus database

Data Analysis and Visualization Tools

The analysis of the final dataset was conducted using a combination of two leading bibliometric software packages:

- **Biblioshiny:** An R-based tool (part of the bibliometrix package), Biblioshiny was used to conduct the descriptive statistics and the primary science mapping analyses, including performance analysis and thematic mapping.
- **VOSviewer:** This software was used for its advanced network visualization capabilities, particularly for generating the cluster maps for co-citation, bibliographic coupling, and co-occurrence analyses.

4.3. Bibliometric Analysis Methods

The analysis was performed in stages to align with the paper’s four research objectives:

- **Performance Analysis (RO1):** To address RQ1, a performance analysis was carried out to identify the most influential research contributions. This involved calculating publication trends over time and ranking the productivity and impact (by citations) of the most relevant authors, journals, institutions, and countries.

- **Intellectual Structure Analysis (RO2):** To address RQ2, a co-citation analysis was performed. This technique visualizes the most cited works and authors, highlighting the roots of the field's knowledge base. The resulting clusters represent the core theories and seminal works that contemporary research builds upon.
- **Conceptual Structure Analysis (RO3):** To address RQ3 and investigate the "Reporting to Reality" gap, two methods were used:
- **Bibliographic Coupling:** This analysis links documents that cite the same references, grouping them into clusters that represent current research fronts.
- **Keyword Co-occurrence Analysis:** This method maps the most frequently used keywords and their connections, revealing the primary themes and conceptual structure of the domain. This analysis is the primary tool used to visually identify the thematic separation or integration of "reporting" keywords versus "strategy" and "implementation" keywords.
- **Thematic and Trend Analysis (RO4):** To address RQ4, the results of the conceptual structure analysis were synthesized to identify emerging trends (i.e., new, high-prevalence keywords) and knowledge gaps (i.e., "structural holes" or sparsely connected themes on the network map).

5. Results and Analysis

This section presents the bibliometric findings in three parts, corresponding to the research objectives. The performance analysis (RO1) is detailed first, followed by a map of the field's intellectual foundations (RO2), and finally analyse its conceptual structure to identify the "Reporting to Reality" gap (RO3).

5.1. Performance Analysis (RO1): The Research Landscape

5.1.1. Annual Publication Trends

The annual scientific production, shown in (Figure 2), reveals that research on the strategic integration is an area of clearly recent emergence. Despite the search period commencing in 2012, the field was largely dormant for its first seven years, with zero publications recorded in 2013 and 2018 and minimal activity (1–3 articles) in all other years. A meaningful shift in trajectory occurred in 2019, which saw the publication of 11 articles. This was followed by exponential growth, surging from 9 articles in 2021 to 20 in 2022, 68 in 2024, and 149 in the first 10 months of 2025 alone. This timeline strongly suggests that while ESG reporting has been discussed for decades, its true strategic integration the "Reality" component of our framework has only just emerged as a primary academic topic. This surge aligns with increased global regulatory pressure (e.g., the EU's CSRD) and mounting investor demands for accountability beyond simple disclosure.

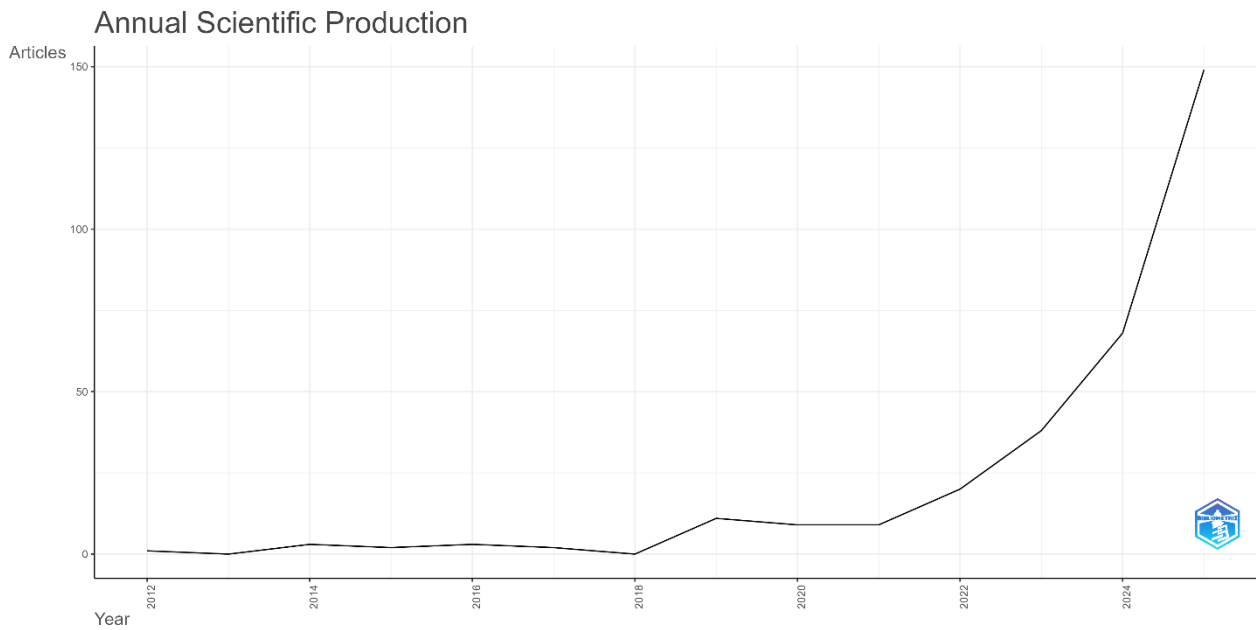


Figure 2: Annual Scientific Production (2012–2025)

5.1.2. Most Influential Journals

The research landscape is highly concentrated in a few key journals (Table 1). The field is dominated by Business Strategy and the Environment (53 articles) and Sustainability (34 articles), which together account for over 27% of all publications in this domain. This demonstrates a strong disciplinary anchor in environmental management and broad sustainability studies, supplemented by journals focusing on governance and responsibility.

Sr. No.	Source (Journal Title)	Articles
1	Business Strategy and the Environment	53
2	Sustainability	34
3	Corporate Social Responsibility and Environmental Management	11
4	Management Decision	7
5	Social Responsibility Journal	6
6	Administrative Sciences	5
7	Business Strategy and Development	5
8	Corporate Governance (Bingley)	5
9	Environment, Development and Sustainability	5
10	Journal of Cleaner Production	5

Table 1: Top 10 Most Prolific Journals

5.1.3. Most Influential Authors and Social Structure

Influential Authors and Social Structure Table 2 identifies the most productive authors, led by Razali, M.N. and Lu, W.M., though the overall output per author remains relatively low (2–3 articles). This suggests the field is still in an exploratory phase without established "gurus." The Co-authorship Network (Figure 3) reinforces this observation, revealing a highly fragmented social structure. Unlike mature fields defined by large, dense clusters of collaboration, Figure 3 displays numerous small, isolated groups (dyads and triads) with minimal interaction between them. This social fragmentation mirrors the intellectual fragmentation identified later in this study.

Sr. No.	Authors	Articles
1	Razali, Muhammad Najib	3
2	Lu, Wen Min	3
3	Ting, Irene Wei Kiong	3
4	Elmarzouky, Mahmoud	3
5	Giannarakis, Grigoris	2
6	Glova, Jozef	2
7	Panko, Matúš	2
8	Schiehll, Eduardo	2
9	Galletta, Simona	2
10	Jamaludin, Ain Farhana	2

Table 2: Top 10 Most Productive Authors in ESG and Strategic Decision-Making Research

5.1.4. Most Active Institutions

Institutional Contributions Table 3 highlights the University of Quebec and the Egyptian Knowledge Bank as the leading contributors. The prominence of diverse global institutions indicates that interest in ESG integration is not centralized in a single academic hub but is a globally distributed research priority.

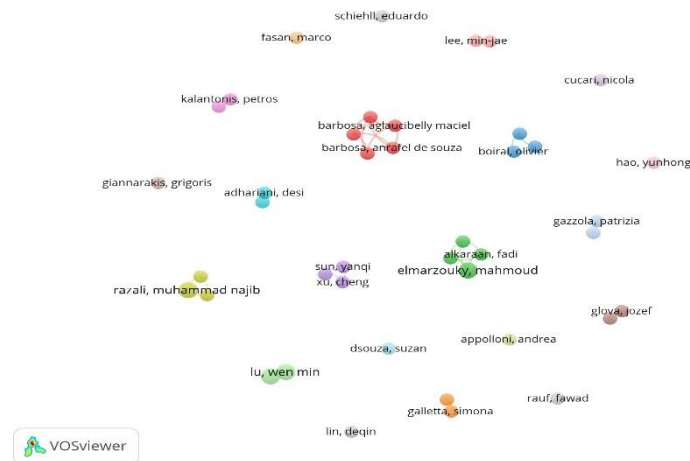


Figure 3: Co-Authorship Network (Authors)

Sr. No.	Affiliation	Articles
1	University of Quebec	8
2	Egyptian Knowledge Bank (EKB)	5
3	LUM Giuseppe DeGennaro University	5
4	Sapienza University of Rome	5
5	University of Quebec Montreal	5
6	HEC Montreal	4
7	Jiangsu University	4
8	Peking University	4
9	Shanghai University of Finance and Economics	4
10	Université de Montréal	4

Table 3: Top 10 Most Productive Institutions in ESG and Strategic Decision-Making Research

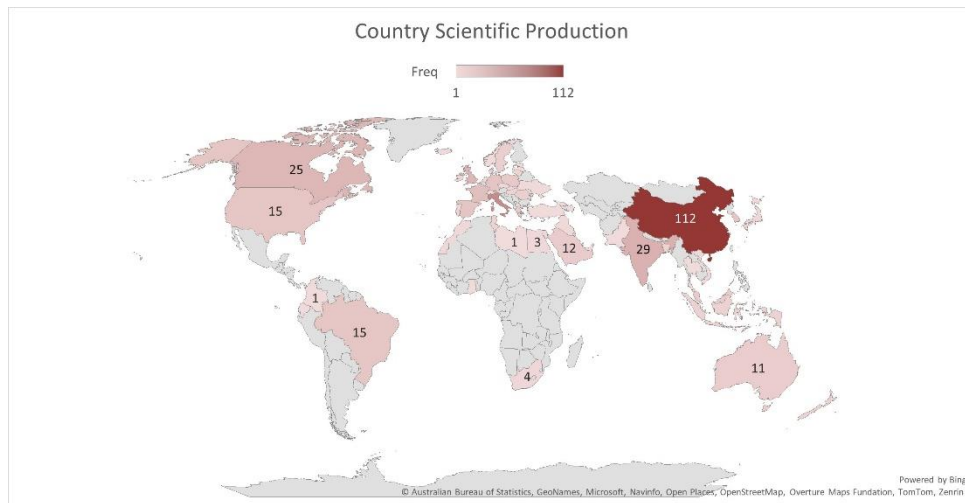


Figure 4: Country Scientific Production

5.1.5. Geographical Distributions

Geographic Distribution and Impact The geographic analysis reveal a dichotomy between scientific volume and citation impact. As shown in Figure 4, China leads in total scientific production (112 articles), reflecting the country's recent regulatory push for green disclosure. However, Table 4 reveals that Italy (963 citations) and Australia (715 citations) dominate in terms of academic influence (Total Citations). The Country Co-authorship Network (Figure 5) further highlights that while China is central to production, European nations (Italy, UK, France) form the densest cluster of international collaboration, driving the theoretical discourse.

Sr. No.	Country	Total Citations (TC)
1	Italy	963
2	Australia	715
3	China	645
4	Canada	547
5	Saudi Arabia	545
6	United Kingdom	349
7	Romania	328
8	Germany	322
9	India	244
10	Spain	229

Table 4: Top 10 Most Influential Countries by Total Citation

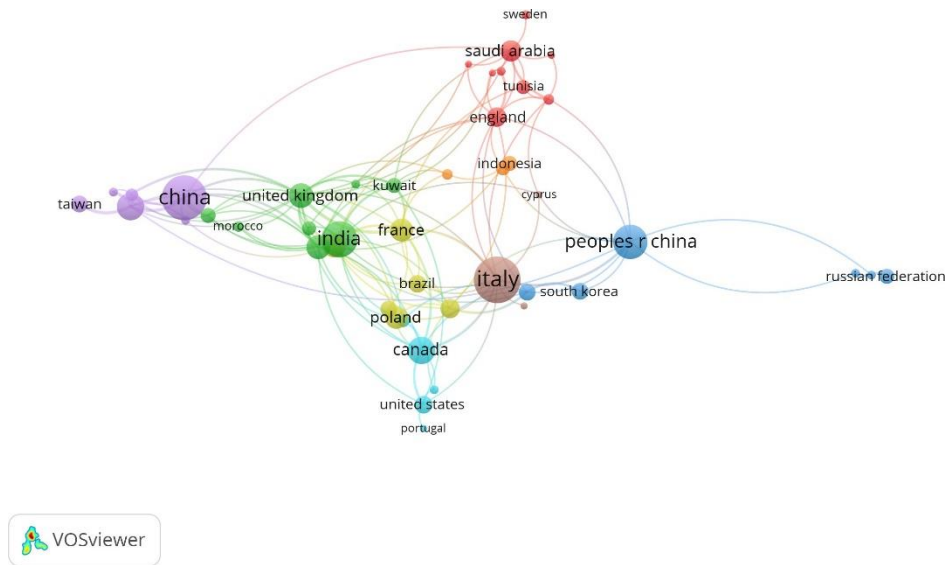


Figure 5: Co-Authorship Network (Countries)

5.2. Intellectual Structure (RO2): The Field’s Foundations

To address RQ2 and understand the intellectual DNA of the ESG strategy field, a co-citation analysis was conducted. This method maps the foundational "bedrock" of the literature by identifying which seminal works are most frequently cited together by the 315 articles in our dataset. The resulting network reveals the core theories and debates upon which all current research is built.

The top 10 most-cited references (Table 5) reveal the fundamental tensions that define the field. The intellectual foundation is anchored by a direct theoretical conflict: Agency Theory [18] and Stakeholder Theory [19], which argues for a broader societal purpose. However, the 'Reporting to Reality' gap is best understood through the lens of Institutional Theory, specifically the concept of 'Decoupling' from organizational sociology [20,21]. Decoupling occurs when organizations adopt highly visible ESG reporting practices to maintain social legitimacy while keeping their core strategic processes unchanged. This theoretical framework provides the underpinning for our finding that reporting and strategic integration often exist as separate intellectual and operational silos. Surrounding this core conflict are two other major themes: the "business case" debate, represented by major meta-analyses on the ESG-financial performance link [22, 23], and the strategic/reporting pillar, represented by works on strategy [24], disclosure [25], and sustainability integration [26].

S. No.	Cited Reference	Citations	Links (Weight)	Total Link Strength
1	Jensen, M.C., & Meckling, W.H. (1976). Journal of Financial Economics	18	14	27
2	Friede, G., et al. (2015). Journal of Sustainable Finance & Investment	16	16	34
3	Freeman, R.E. (1984). Stakeholder Management	14	13	30
4	DiMaggio, P.J., & Powell, W.W. (1983). American Sociological Review	11	14	27

5	Orlitzky, M., et al. (2003). Organization Studies	10	14	25
6	Eccles, R.G., et al. (2014). Management Science	10	12	18
7	Garcia, A.S., et al. (2017). Journal of Cleaner Production	10	11	18
8	Dhaliwal, D.S., et al. (2011). The Accounting Review	10	10	16
9	Cheng, B., et al. (2013). Strategic Management Journal	9	11	19
10	Barney, J. (1991). Journal of Management	9	10	14

Table 5: Top 10 Most-Cited References

The co-citation network (Figure 6) reveals a structural fracture in the field's intellectual foundation. The distinct isolation of 'Reporting' works (Cluster 4, Yellow) from the 'Strategic Value' (Cluster 3, Blue) and 'Financial Performance' (Cluster 1, Red) clusters empirically validate that the separation between disclosure mechanisms and strategic value creation is deeply rooted in the literature's theoretical origins. This foundational fragmentation explains why the field has evolved in parallel streams and why researchers are still working to build the conceptual bridges between these core ideas.

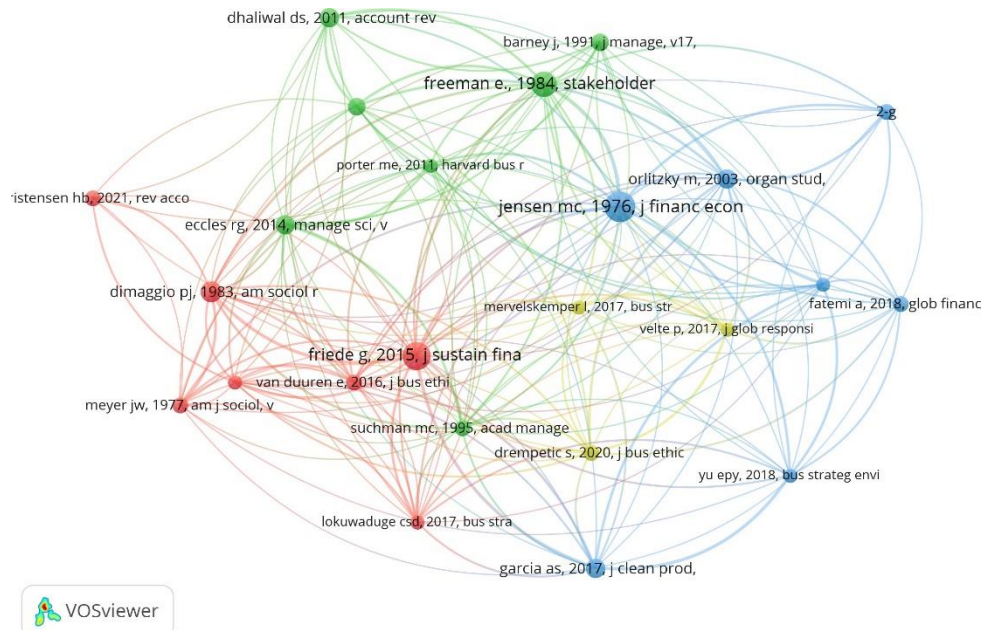


Figure 6: Co-citation Network of Cited References

5.3. Conceptual Structure (RO3): Mapping the "Reporting to Reality" Gap

5.3.1. Research Fronts via Bibliographic Coupling

Bibliographic coupling links the 315 articles in our dataset that cite the same foundational literature. The resulting network (Figure 7) maps the field's current "research fronts." The analysis reveals a highly fragmented landscape where current research streams operate in isolation. Specifically, the disconnect between Cluster 4 (Mandatory Reporting) and Cluster 2 (Financial Implications & Incentives) indicates that scholars investigating regulatory

compliance are structurally distanced from those examining the operational and financial integration of ESG. Table 6 details these five distinct clusters which define the active literature.

- Cluster 1 (Red): ESG Performance & Governance: This cluster, containing 89 articles, forms the core of the field. It links foundational papers (e.g., [27] with recent work on performance [7] and disclosure [10]
- Cluster 2 (Green): Financial Implications & Incentives: This 73-item cluster represents the "strategic reality" of ESG. It connects key papers on executive compensation [6], financial distress (Habib, 2023), and the barriers to investor integration [28].
- Cluster 3 (Blue): ESG Measurement & Digital Transformation: This cluster of 63 articles focuses on the "how" of measurement. It includes papers that analyse ESG scores as a data-driven phenomenon [29,30] and the impact of digital transformation on ESG [31].
- Cluster 4 (Yellow): Mandatory Reporting & Carbon: This 54-item cluster is the "Reporting" stream. It is defined by papers analysing the impact of regulation [5], carbon disclosure [32, 33], and the role of financial analysts in an integrated reporting setting [34].
- Cluster 5 (Purple): Institutional Drivers & Emerging Economies: This 36-item cluster focuses on the institutional context, anchored by work on China [11] and other institutional studies [36].

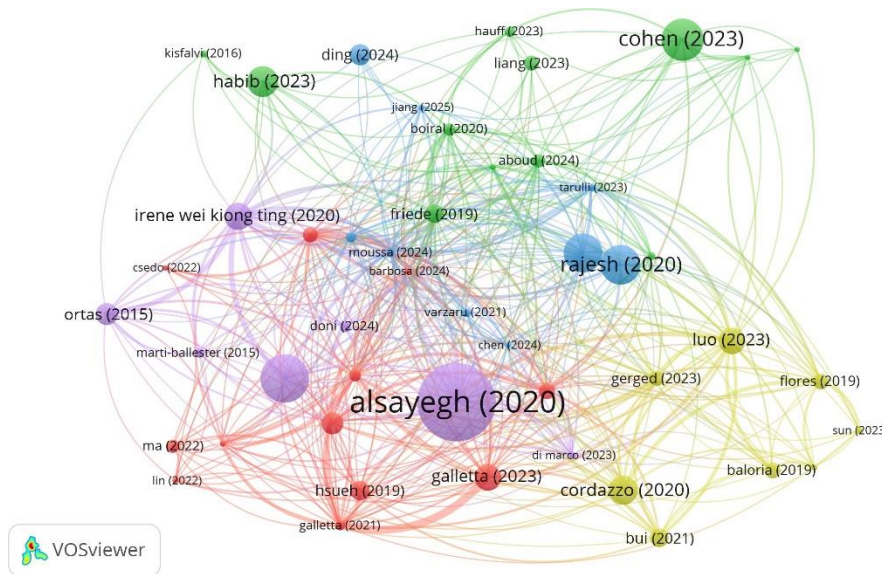


Figure 7: Network of Bibliographic Coupling (Documents)

S. No.	Cluster	Main Themes	Representative Articles (Top Cited in Cluster)
1	Cluster 1 (Red)	ESG Performance and Governance	Alsayegh et al. (2020); Baraibar-Diez et al. (2019); Gebhardt et al. (2023); Galletta et al. (2021)
2	Cluster 2 (Green)	Financial Implications and Incentives	Cohen et al. (2023); Habib (2023); Friede (2019); Liang et al. (2023)
3	Cluster 3 (Blue)	ESG Measurement and Digital Transformation	Rajesh and Rajendran (2020); Kim and Li (2021); Ding et al. (2024); Bodhanwala and Bodhanwala (2023)

4	Cluster 4 (Yellow)	Mandatory Reporting and Carbon	Cordazzo et al. (2020); Luo et al. (2023); Bui et al. (2021); Flores et al. (2019)
5	Cluster 5 (Purple)	Institutional Drivers and Emerging Economies	Weber (2014); Irene Wei Kiong Ting et al. (2020) [35]; Ortas et al. (2015)

Table 6: Main Research Fronts Identified by Bibliographic Coupling

5.3.2. Conceptual Map via Keyword Co-occurrence

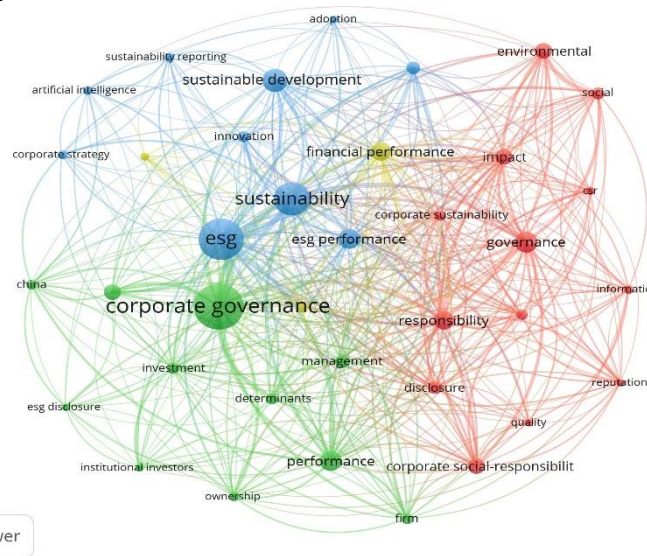


Figure 8: Conceptual Map (Keyword Co-occurrence)

A keyword co-occurrence analysis provides the "conceptual map" of the field, revealing the most dominant themes and their interconnections (Figure 8). The map is organized into four main conceptual clusters, detailed in Table 7.

S. No.	Cluster	Label	Top Keywords (by Occurrence)
1	Cluster 1 (Red)	Governance and Responsibility	governance (34), responsibility (30)
2	Cluster 2 (Green)	CSR and Corporate Governance	corporate governance (91), corporate social responsibility (24), performance (33)
3	Cluster 3 (Blue)	Modern ESG and Sustainability	ESG (80), sustainability (62), sustainable development (38), ESG performance (32)
4	Cluster 4 (Yellow)	Financial Performance	financial performance (30)

Table 7: Main Conceptual Clusters (Keyword Co-occurrence)

5.4. Thematic Evolution & Emerging Trends (RO4)

To identify emerging research “hotspots” and set the stage for our future research agenda (RQ4), the temporal evolution of the key conceptual themes was analysed using keyword overlay visualization. The keyword overlay visualization (Figure 9) colours the conceptual map from Figure 8 by the average publication year of articles containing each keyword. A clear temporal trend emerges older, foundational themes (coloured in dark blue and green)

- **A Duality in the Intellectual Foundations (RO2):** The co-citation analysis (Figure 6) revealed that the field is built on a fundamental, unresolved tension. The intellectual "bedrock" is split between competing theoretical camps. On one side are the strategic and financial pillars, anchored by Agency Theory [18] and the Resource-Based View [37]. On the other are the societal pillars, anchored by Stakeholder Theory [19] and Institutional Theory [20]. Critically, the "Reporting" pillar [25] formed its own cluster, separate from the core strategy and finance-driven theories. This foundational split shows that from its inception, the field has struggled to integrate the "Profit" and "Purpose" motives.
- **A Visual, Conceptual Distinctiveness (RO3):** The distance between the dominant keywords 'corporate governance' and 'ESG' (Figure 8) highlights a critical lag in theoretical evolution. While governance literature remains anchored in traditional compliance terminology, the emerging ESG lexicon has yet to fully penetrate the board-level strategic discourse. This creates a conceptual void where integrated decision-making mechanisms should reside.

Finally, our temporal analysis (Figure 9) shows the field is rapidly pivoting away from the "Reporting"-focused language of CSR and converging on "ESG" as the dominant paradigm. The newest, most active research "hotspot" is the direct nexus of "ESG" and "financial performance" the very conceptual battleground where the gap between reporting and reality is most consequential.

6.2. A Future Research Agenda (RO4)

6.2.1. Agenda 1: Bridge the "Reporting" and "Strategy" Clusters

- From "Reporting" to "Incentives": A disconnect between the disclosure theme and the executive compensation theme is shown by the maps. Research that moves beyond simply noting the existence of 'ESG Pay' is needed [6]. Future work should ask: What are the specific designs (e.g., Key Performance Indicators (KPIs), weighting, vesting periods) of ESG compensation that most effectively translate disclosure goals into executive action and improved firm performance?
- From "Reporting" to "Risk": The literature is divided on whether ESG increases or de-creates risk [9, 3]. This suggests a failure to differentiate "reporting risk" (e.g., greenwashing) from "integration value" (e.g., operational efficiency).
- Future work should ask: How can financial markets and analysts distinguish between symbolic "reporting" and substantive "strategic integration" when assessing firm risk?

6.2.2. Agenda 2: Explore the "Implementation" Gap

- The "How" of Integration: Building on the work of [8], future studies should ask: What firm-level dynamic capabilities, internal control systems, and governance mechanisms enable firms to successfully embed GSIDMP into core operations?
- The Role of Technology: The temporal analysis identified technology-related keywords as a key hotspot. Future work should ask: What is the role of Industry 4.0 technologies in closing the "Reporting to Reality" gap by automating data collection, verifying performance, and providing real-time data for strategic decisions?

6.2.3. Agenda 3: Reconnect "Governance" with "ESG"

- Beyond the "G-in-ESG": Reunify governance concepts with ESG strategy. Future work should ask: How can corporate boards move from a compliance-focused view to a strategic oversight role for ESG?
- The Board's Role: What specific board processes (e.g., committee structures, information flow, expertise) are most effective for ensuring that ESG reporting accurately reflects operational reality?

7. Limitations

This study has methodological constraints. The quantitative bibliometric approach maps structural patterns but cannot analyse article content qualitatively. The search was limited to English articles in Scopus/WoS, potentially missing relevant studies. Recent exponential publication growth (2019-2025) creates recency bias in citation analyses. Network visualizations, while revealing the "Reporting to Reality" gap, involve interpretative choices. These limitations suggest our findings should guide, not replace, deeper qualitative investigation.

8. Conclusion

This comprehensive bibliometric review of 315 articles provides a quantitative and visual map of the academic landscape on ESG and strategic decision-making. Two primary contributions are made by this analysis. First, we provide a detailed performance and map the intellectual foundations (RO2) of this rapidly expanding field. Second, and most critically, empirical, structural evidence of the "Reporting to Reality" gap that defines this domain is provided. A field fragmented by parallel conversations is revealed by the analysis. The intellectual foundations are split between "Profit" and "Purpose" (RO2). The current conceptual map is divided between "Reporting" (CSR, compliance) and "Reality" (ESG, strategic integration) (RO3). The literature, in effect, reflects the very problem it seeks to study.

This "Reporting to Reality" gap is not a criticism of the field, but rather a clear illumination of its most urgent task. The research community is now rapidly pivoting from the "why" of CSR to the "how" of ESG integration, with the "ESG-Financial Performance" nexus as its newest and most active frontier.

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