Bridging ESG and Risk Management: A Scoping Review of Factors in Corporate Integration Strategies

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Abstract
This study explores how ESG principles are embedded into corporate risk management frameworks as a strategic response to sustainability challenges. Through The Systematic Literature Review (SLR) method and PRISMA protocol of 21 peer-reviewed articles published between 2017 and 2025 from Scopus. This research identifies five key antecedent factors (innovation, governance, board characteristics, ESG awareness, and motivation for ESG integration). These factors function as foundational enablers of organizational transformation toward sustainability. Regarding consequences, ESG integration demonstrates tangible benefits, including firm performance, risk mitigation, investor trust and loyalty, and long-term strategic resilience. This study contributes to the ESG literature by synthesizing fragmented insights and offering a research agenda that promotes interdisciplinary exploration of ESG as a strategic asset in corporate decision-making.

Keywords: Environmental, Social, Governance (ESG), Risk Management, Scoping Review

1. Introduction

In an era marked by increasing attention to environmental issues and the demands for social responsibility, the business world is now faced with greater expectations to implement sustainable practices (1). This encourages organizations to focus on achieving short-term profits and creating sustainable long-term value known as Environmental Social Governance (ESG). According to Górka & Kuziak (2022), the Terms are often used interchangeably to refer to investments that consider environmental, social, and governance aspects, such as Socially Responsible Investing (SRI), sustainable, responsible, and impact-based investments. ESG was first proposed in the Who Cares Wins report published by the United Nations Global Compact in 2004, which explained that ESG is a crucial framework in controlling population growth, protecting natural resources, and developing renewable energy as an effort to achieve sustainable development and assess and maintain companies' sustainability practices (3), which may be profitable shortly, but it is also a new configuration of risk (4,5). The large and medium-sized companies that have begun to include ESG aspects in their strategic decision-making, as well as the official release of ESG reports, prove the increased awareness of corporations of the urgency of sustainability development (6)

As global attention to ESG principles increases, the approach to corporate risk management is also transforming (7). Risk is no longer solely assessed from the financial and operational side, but also includes the dimensions of sustainability, reputation, and expectations of stakeholders. In this context, integrating ESG into a company's risk management system is no longer optional, but rather a crucial strategic step to ensure the long-term resilience and sustainability of the company. Research results [NO_PRINTED_FORM] (8) Proving that nearly 11,000 mutual funds during the period 2004 to 2018 did not have any financial sacrifices in terms of investment returns on sustainable funds when compared to conventional funds, which means that the company's sustainability funds show a lower risk of loss of 144 percent, thus moving investors to not only focus on the profitability of investment strategies but also to seek social value (2).
The international literature also highlights the causal relationship between ESG factors and market dynamics, including energy price volatility and sustainability-based stock indices, as evidenced in research by [NO_PRINTED_FORM] (9) suggests that clean energy indices (ECO, NEX, SPGCE) positively correlate with oil prices, and that energy price shocks can affect investors' risk perceptions of ESG portfolios. Companies with superior ESG performance generally have a more positive reputation, lower investment risk levels, and more solid financial performance (10,11). ESG performance also strengthens organizations to expand their investor base and reduce capital costs (12). Nonetheless, ESG-based indices still show long-term advantages, especially in crisis conditions. The research questions that will be formulated in this study are as follows.
RQ1: What are the ESG factors most often analyzed in the literature related to risk management in corporate integration strategies?
Companies that can demonstrate their commitment to sustainability and social responsibility, particularly through improved environmental, social, and governance (ESG) performance, are seen as having the potential to increase long-term value and resilience in a market that increasingly demands ethical business practice.s (13). Some studies focus on ESG as an indicator of sustainability performance, while others review risk management as a mitigation tool against market uncertainty. However, little literature still systematically maps how ESG is integrated in corporate risk management frameworks, particularly in the context of integrative strategies implemented by corporations across various sectors. Any scientific research that addresses a new topic generally relies on the systematic literature review (SLR) method due to its practical ability to meet scientific criteria. (Weißer et al., 2020). The Systematic Literature Review (SLR) approach synthesizes relevant scientific findings, identifies key analytical factors, and explores trends, methodological approaches, and research gaps in ESG integration and risk management.
The results of this scoping review will be highly beneficial to corporate decision-makers, risk managers, sustainability officers, and policymakers. By understanding the critical factors that influence the integration of ESG principles with risk management, organizations can develop more cohesive and forward-looking strategies to enhance long-term performance and resilience. Given the growing emphasis on sustainability, regulatory compliance, and stakeholder expectations, it is crucial to explore how ESG and risk management intersect within corporate strategies. Furthermore, these findings can serve as a valuable reference for business leaders, consultants, ESG practitioners, and academic researchers seeking to navigate and optimize ESG–risk alignment for improved organizational outcomes.

2. Literature Review

a. Definition of Environmental Social Governance (ESG)

ESG is an essential element in supporting the achievement of the SDGs with a framework that allows companies to play an active role in issues such as climate change, social inequality, and governance (7,15,16). According to Estevez-Mendoza & Infante (2024), ESG provides focused indicators to evaluate a company's environmental, social, and governance performance. The relevance of ESG is also getting stronger along with increasing consumer awareness, demands for corporate responsibility, and encouragement from regulators and investors (18) Implementing ESG is embedded in large-scale corporate culture, so it requires special competencies and optimal resource allocation. [NO_PRINTED_FORM] (9) revealed that some business people consider ESG a burdensome obligation, but applying these guidelines can be a driver of company growth and development. However, ESG implementation depends on the company's internal awareness and external impulses in the form of government policies, market pressures, and stakeholder expectations.

a. Environmental

The environmental aspect in ESG assesses the extent to which a company is responsible for the impact of its operations on the environment. This is triggered by growing concerns about environmental damage arising from economic growth and industrialization processes that rely heavily on energy use (19). The assessment of the company's impact is carried out through indicators that include aspects of resource utilization, emissions, waste management, as well as various environmental initiatives such as energy efficiency, adaptation to climate change, biodiversity conservation, water management, and pollution control (20). Poorly managed environmental risks have the potential to damage a company's reputation and degrade financial performance in the long run.

b. Social

Social aspects include fair labor practices, diversity and inclusion, job safety, human rights, community involvement, and the products or services' social impact. In addition, this aspect reflects how the company influences and builds relationships with the community, both through its day-to-day operational activities and in its engagement with various stakeholders (21). According to Chen et al. (22) Sustainability efforts that focus on workforce welfare, the application of diversity and inclusion principles, and fair employment practices contribute to shaping a conducive work culture while encouraging increased employee satisfaction and loyalty. This aspect reflects the company's commitment to having a positive impact on the wider community while strengthening relationships with external stakeholders.

c. Governance

Governance aspects include the structure of the board of directors, transparency of financial statements, risk management, anti-corruption policies, and regulatory compliance. Among the three ESG categories, corporate governance has the most significant influence, especially for companies with a less robust governance structure.e (23). According to [NO_PRINTED_FORM] (24), kualitas tata kelola perusahaan memiliki peran krusial dalam menjamin integrasi aspek sosial dan lingkungan ke dalam proses pengambilan keputusan serta dalam memastikan kepatuhan terhadap prinsip-prinsip tata kelola yang baik. Selain itu, peran dewan direksi menjadi sangat penting dalam mengarahkan strategi berkelanjutan dan mengawasi implementasi kebijakan yang mendukung nilai-nilai lingkungan dan sosial.

b. Definition of Risk Management

Risk management is an internal mechanism that identifies, assesses, and mitigates potential threats that can affect a company's performance (25). More and more companies are presenting sustainability reports complete with quantitative indicators to facilitate evaluating sustainability performance. Big data-based analytics can comprehensively process the information to strengthen the management system and achieve the company's sustainability targets. Effective risk management and monitoring can create a competitive advantage, thus emphasizing the importance of using tools that support resource utilization efficiency and energy consumption optimization throughout complex supply chains (26).

According to Chen et al. (27)Various studies conducted between 2018 and 2020 state that ESG significantly contributes to the formation of company value. ESG practices have become a strategic benchmark for risk managers, consumers, and investors, who now judge companies not only from financial aspects, but also from how they are managed, contribute to society, and maintain environmental sustainability as a reflection of their holistic performance. The risk management landscape has now evolved, not only for non-financial companies that are beginning to integrate risk cultures to improve the quality of decision-making, but also for the financial industry that faces new challenges in incorporating ESG factors into credit risk assessments to ensure strong and prudent lending standards, both in the disbursement and monitoring proces.s (25,28).

3. Research Method

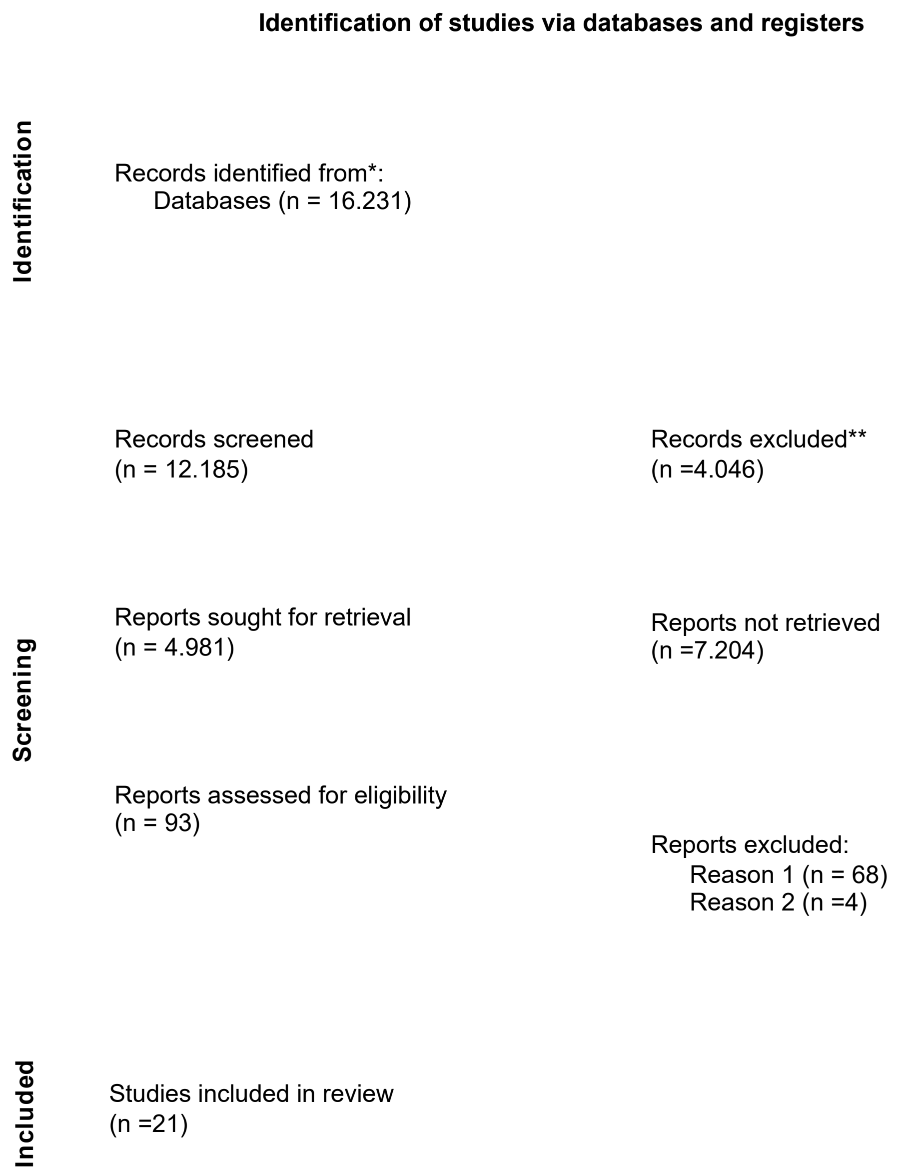
a. Identification

The selection of articles in the SLR must consider criteria such as the year of publication, the type of article, the scope of the study, the type of research, and the context. The study includes articles published between 2017-2025. The study only considered articles published in scientific journals, while proceedings, chapters in books, research reports, reference entries, and conference papers were not included. The scope of the included articles includes Business Management and Accounting. The types of research considered include systematic literature review (SLR), quantitative studies, qualitative studies, peer-reviewed and empirical studies, while annual reports are excluded. The research context is focused on articles related to the discussion of Environmental, Social, Governance (ESG) and risk management; therefore, those not by this context are excluded from the research. Data is collected through the literature search feature and analyzed using VOSviewer software to perform bibliometric analysis, mapping the linkages between articles, authors, and keywords frequently appearing in ESG publications. This study uses journal publication data from the Scopus database because it is one of the largest and most trusted academic databases, including peer-reviewed literature.

b. Screening

The flowchart shown describes the article selection process used in this review. In the first stage, 16,231 articles were identified from Scopus data-based that discussed ESG. Furthermore, articles were reduced by 4,046 that were not included in the 2017-2025 period. Then, 7,204 articles were obtained that were not relevant to business, management, and accounting, so there were 4981 articles that were considered more credible and had more in-depth scientific contributions. The final selection using the keywords Environmental, Social, Governance (ESG), and Risk Management was obtained with 93 articles, and the results were available in 21 articles with open access.

Figure 1: Research flow diagram

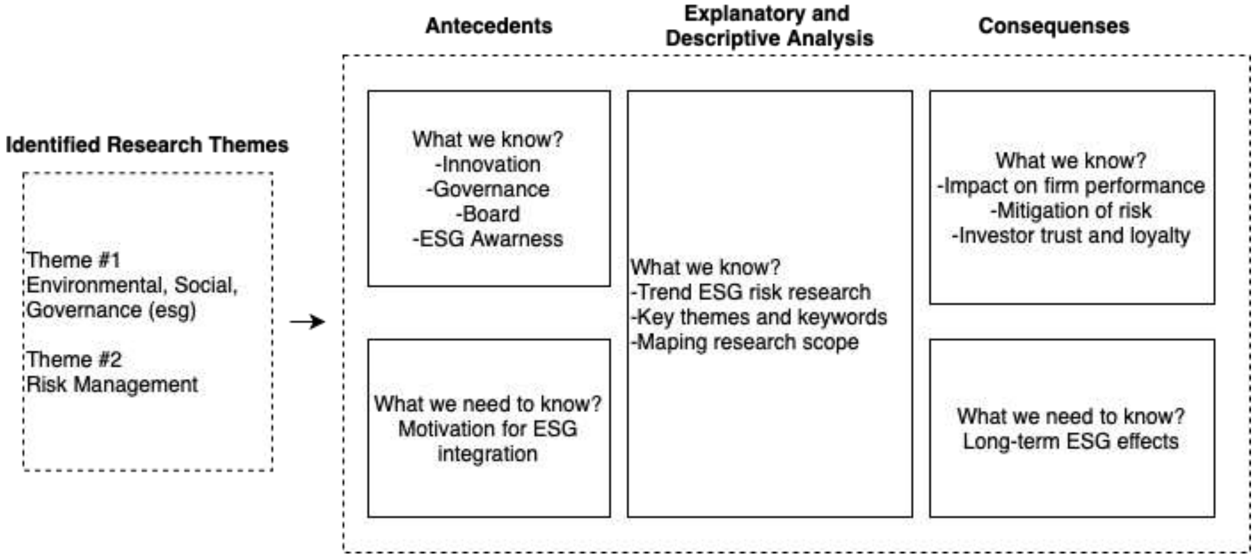


Source: Data processed by researchers (2025)

c. Research Framework

A visual representation of the mapping framework of scoping review results that connects two main themes in the literature, namely Environmental, Social, and Governance (ESG) and Risk Management. Some antecedent factors already known in ESG integration are innovation, governance, board characteristics, ESG awareness, and ESG integration motivation. Meanwhile, consequence factors highlight the impact of ESG on company performance, risk mitigation, long-term effects of ESG, and investor trust and loyalty. The following shows the research framework of this research.

Figure 2: Research Framework

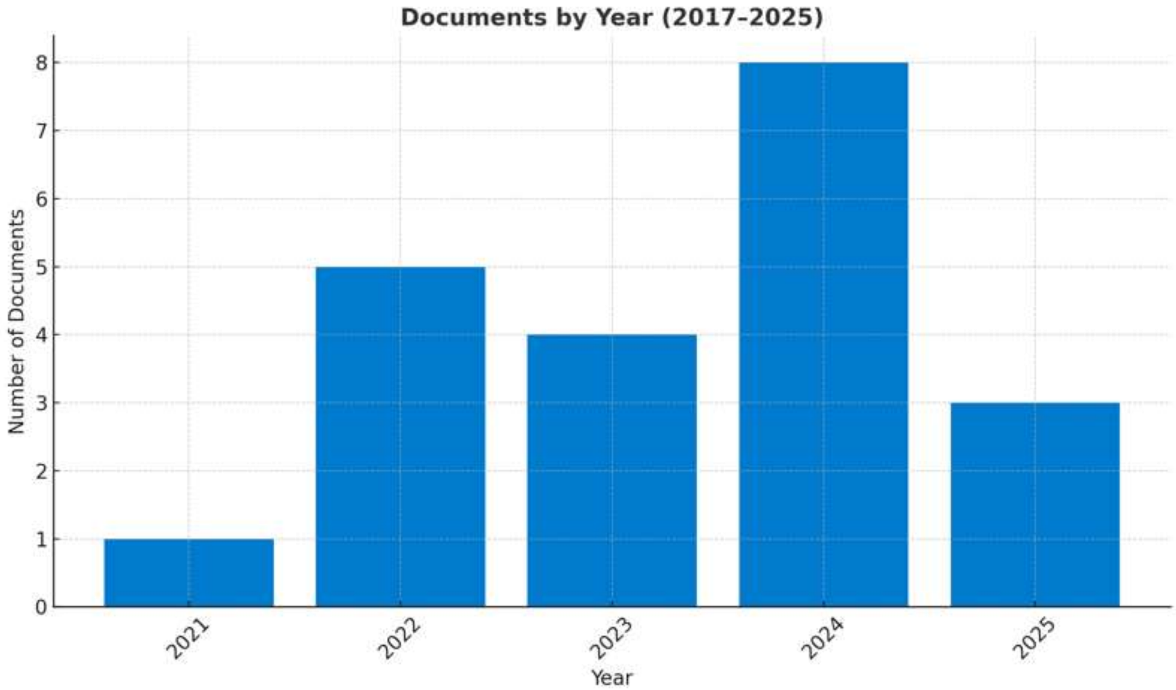


Source: Data processed by researchers

4. Results

a. ESG dan Risk Management by Affiliation

Figure 3: Documents by Year

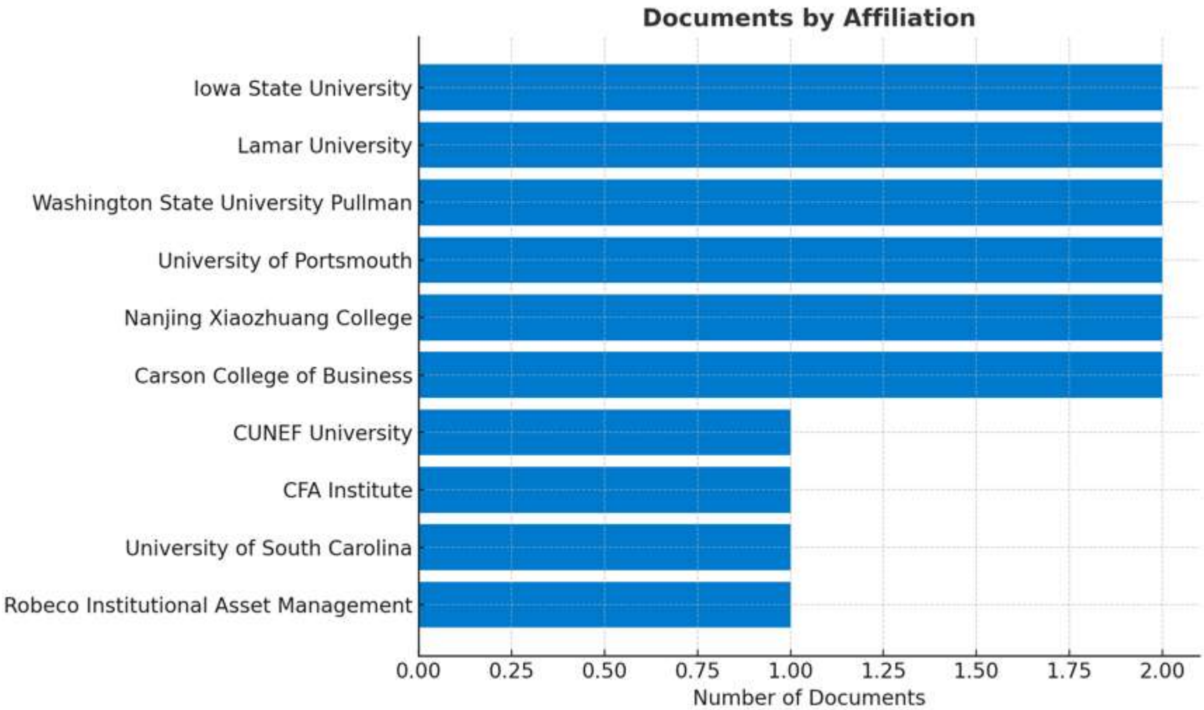


Source: Scopus Output (2025)

The distribution of the number of publications on ESG integration and risk management during the period 2017 to 2025 shows a fluctuating trend. Although the 6e-embylation6 search covers nine years, articles relevant to the keywords used have only started appearing since 2021. In 2021, there was 1 document published. Then, there was a significant increase in 2022 with 5 papers. However, it decreased 2023 by 4 articles, and there was the highest spike in 2024 with 8 published documents. This number then decreases dramatically again to 3 in 2025. These fluctuations reflect the dynamics of academic research focus that can be influenced by regulatory policies, market urgency for sustainability, and the availability of research funding. The peak of publication in 2024 indicates increasing attention to ESG issues as part of a more integrated and sustainable corporate risk management strategy. It opens up great opportunities for future researchers.

b. ESG dan Risk Management by Affiliation

Figure 4: Documents by Affiliation

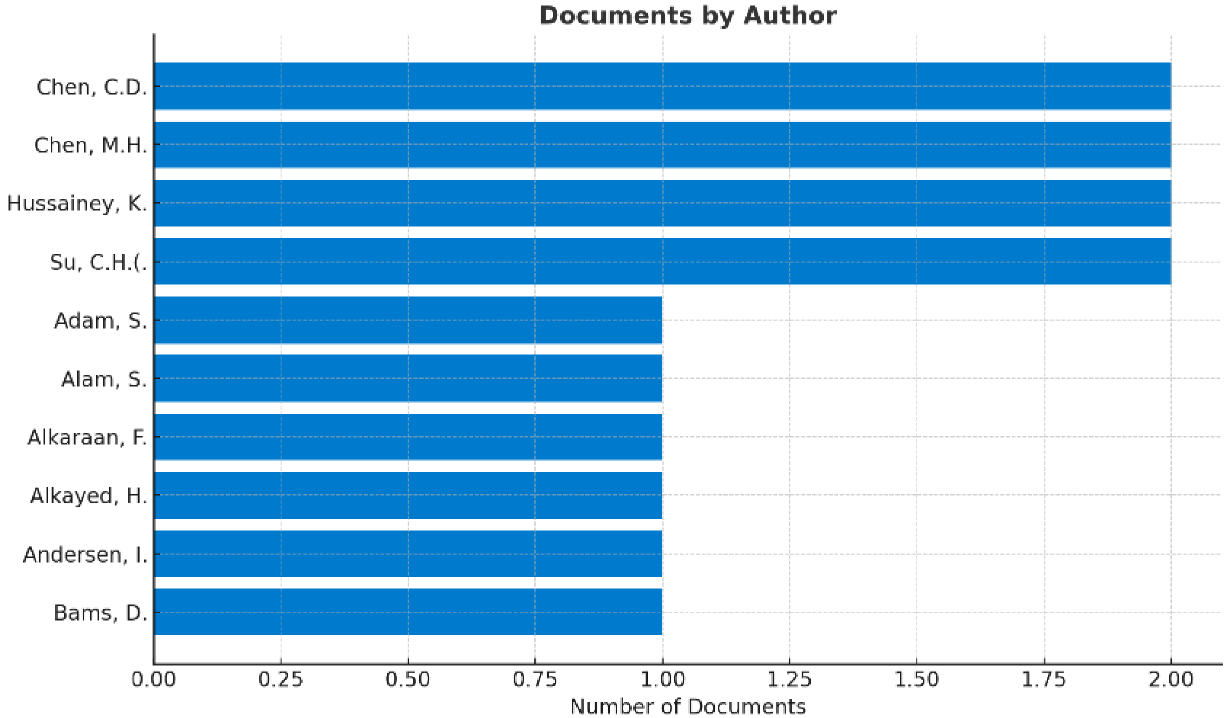


Source: Scopus Output (2025)

Figure 4 shows the distribution of the number of publications by global author-affiliated institutions in the ESG integration and risk management study. Six institutions were recorded as the highest contributors, with two publications each: Iowa State University, Lamar University, Washington State University, Pullman, University of Portsmouth, Nanjing Xiaozhuang College, and Carson College of Business. Meanwhile, institutions such as CUNEF University, CFA Institute, University of South Carolina, and Robeco Institutional Asset Management each contributed one publication. This distribution reflects that ESG and risk management have received wide attention from various institutions across countries, both from the academic environment and the industrial sector. These findings also show no significant dominance of one institution, thus strengthening the multidisciplinary and collaborative character of this field of research.

c. ESG dan Risk Management by Author

Figure 5: Documents by Author

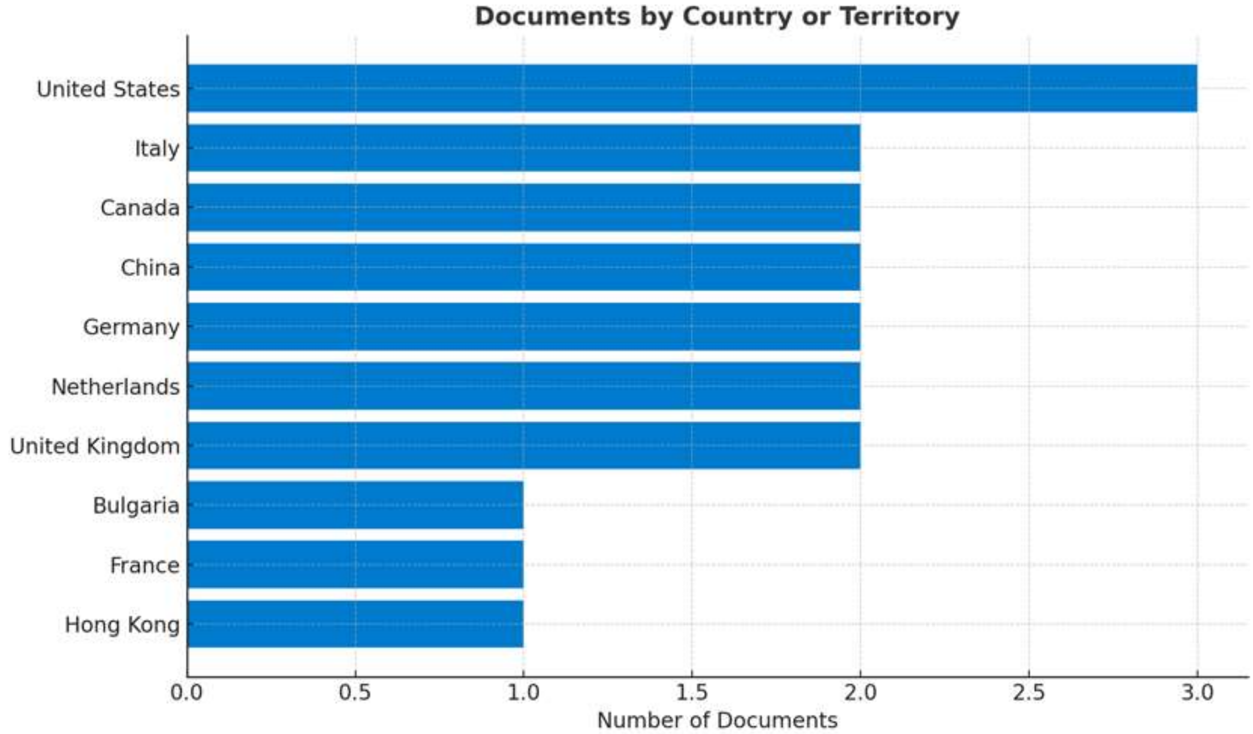


Source: Scopus Output (2025)

Figure 5 shows the distribution of the number of publications by authors involved in the ESG integration and risk management study. Four authors with the highest contributions, each producing two documents, namely Chen, C.D.; Chen, M.H.; Hussainey, K.; and Su, C.H. These authors consistently examine ESG topics in relation to corporate risk. In addition, there are six other authors who each contribute one publication, namely Adam, S.; Alam, S.; Alkaraan, F.; Alkayed, H.; Andersen, I.; and Bams, D. These findings indicate that although most of the contributions are individual, there are several researchers who are pretty active and can be considered essential contributors to the development of the ESG and risk management literature.

d. ESG dan Risk Management by Country

Figure 6: Documents by Country



Source: Scopus Output (2025)

Figure 6 shows the distribution of the number of documents by country or region of origin of authors who contributed to ESG integration and risk management research. The United States was the highest contributor with 3 papers, followed by Italy with 2 documents. Other countries such as Canada, China, Germany, the Netherlands, and the United Kingdom also showed strong interest in the 2 papers. Meanwhile, Bulgaria, France, and Hong Kong each contributed 1 document. This data reflects that ESG and risk management issues have become a global concern, with the active involvement of countries with emerging economies and corporate governance systems, while demonstrating the potential for expanded cross-border research collaborations.

e. The Highest Number of Citations

Table 1: Citation Distribution Table

Source	Journal	Year	Citations
Alkaraan F.; Elmarzouky M.; Hussainey K.; Venkatesh V.G.	Technological Forecasting and Social Change	2023	125
Brogi M.; Lagasio V.; Porretta P.	Journal of International Financial Management and Accounting	2022	82
Capelli P.; Ielasi F.; Russo A.	Corporate Social Responsibility and Environmental Management	2021	65
Chen C.-D.; Su C.-H.J.; Chen M.-H.	Tourism Management	2022	60
Chen C.-D.; Su C.-H.J.; Chen M.-H.	Journal of Air Transport Management	2022	42
Doni F.; Fiameni M.	Business Strategy and the Environment	2024	26

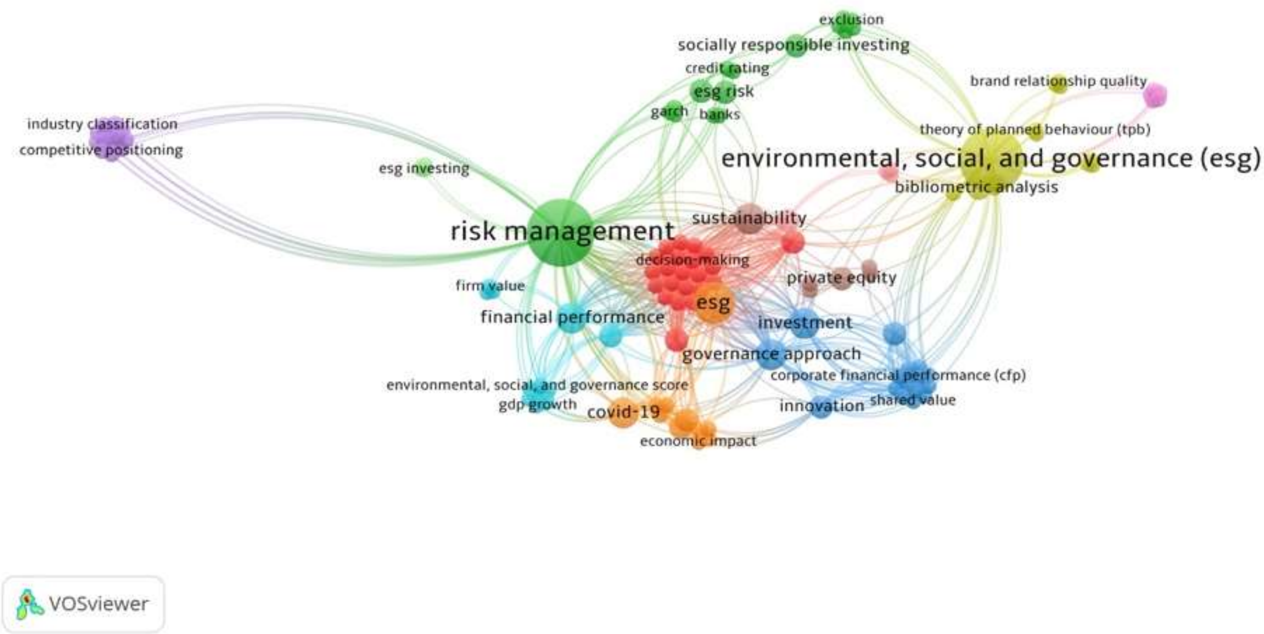
Górka J.; Kuziak K.	Risks	2022	13
Krastev B.; Krasteva-Hristova R.	Journal of Risk and Financial Management	2024	10
Blitz D.; Swinkels L.	Journal of Sustainable Finance and Investment	2023	10
Andersen I.; Bams D.	Journal of Cleaner Production	2022	9
Mian H.R.; Hewage K.; Sadiq R.	Sustainable Futures	2024	8
Alkayed H.; Shehadeh E.; Yousef I.; Hussainey K.	Journal of Risk and Financial Management	2024	4
Drobetz W.; El Ghoul S.; Guedhami O.; Hackmann J.P.; Momtaz P.P.	Journal of Business Venturing Insights	2024	3
Le L.T.	Cogent Business and Management	2024	3
Rooh S.; El-Gohary H.; Khan I.; Alam S.; Shah S.M.A.	Journal of Risk and Financial Management	2023	2
Pong H.K.; Man F.L.C.	Journal of Risk and Financial Management	2024	1
Kaul S.	Asian Journal of Interdisciplinary Research	2023	0
Estevez-Mendoza C.; Infante J.	Corporate Social Responsibility and Environmental Management	2025	0
Adam S.; Müller-Thümen F.; Kaiser S.; Hovemann G.	Managing Sport and Leisure	2025	0
Muazaroh; Lestari W.; Sari L.P.	Problems and Perspectives in Management	2025	0
Serap Vurur N.; Özdemir L.; Özen E.; Grima S.	Folia Oeconomica Stetinensia	2024	0

Source: Scopus Output (2025)

Table 1 presents a list of the 21 articles analysed in this study, compiled by the highest number of citations to identify the most influential contributions in the ESG and risk management literature. The article with the highest citation was written by [NO_PRINTED_FORM] (29) In Technological Forecasting and Social Change, with 125 citations, showing significant academic influence. Followed by [NO_PRINTED_FORM] (28) in the Journal of International Financial Management and Accounting with 82 citations, and [NO_PRINTED_FORM] (30) In Corporate Social Responsibility and Environmental Management, which obtained 65 citations. [NO_PRINTED_FORM] (31) In Tourism Management, it also occupies an important position with 60 citations. Most of the highly-cited articles were published between 2021 and 2024, indicating that the issue of ESG integration and risk management is a relatively new but rapidly evolving topic. The dominance of reputable journals such as Tourism Management, Corporate Governance, and Journal of Business Research confirms that this topic has high relevance in strategic management, corporate governance, and sustainability. Therefore, this table provides a comprehensive overview of the most influential articles and authors, and is an essential reference for future research development.

f. Map Research on ESG and Risk Management

Figure 7: Conceptual Visualisation



Source: VOSviewer (2025)

Figure 7 results from a keyword co-occurrence visualization using VOSviewer that shows the linkages between key topics in the ESG and risk management literature. Keywords such as risk management and environmental, social, and governance (ESG) emerged as the center with the highest frequency, signaling their central role in research. Other keywords that often appear together include "financial performance, investment," "sustainability," and "innovation," indicating a close relationship between sustainability, financial strategy, and governance. The color clusters in this visualization indicate different thematic groups, helping to identify the dominant research focus and potential for future study development.

5. Discussion

a. Theoretical Framework

Table 2 shows the linkages between the theories underlying antecedents and consequences in ESG integration and risk management. Agency Theory and Stakeholder Theory are the primary basis for explaining governance, board, and ESG awareness, where management interests must be aligned with stakeholders' interests. Resource-Based View (RBV) describes the role of innovation as a strategic capability that strengthens sustainable competitiveness. Meanwhile, for the consequences aspect, Signaling Theory explains how ESG functions as a positive signal for investors in building trust and loyalty. On the other hand, Legitimacy Theory emphasizes the importance of ESG as a means for companies to gain social legitimacy, which impacts long-term performance. Thus, these theories complement each other in explaining how ESG driving factors shape a company's strategy and produce relevant strategic consequences.

Table 2: Theoretical Framework

Source	Resrach Focus	Theory
Chen et al. (2022a)	ESG commitment and financial resilience in the hospitality sector	Resource-Based View, Stakeholder Theory
Capelli et al. (2021)	Forecasting volatility using ESG risk and credit ratings	Agency Theory
Brogi et al. (2022)	Impact of ESG on bank credit risk and performance	Stakeholder Theory, Legitimacy Theory
Doni & Fiameni (2024)	Role of innovation in ESG disclosure and corporate performance	Innovation Theory, Institutional Theory
Alkaraan et al. (2023)	Strategic decision-making for sustainable investment under ESG framework	Resource-Based View, Strategic Decision Theory
Mian et al. (2024)	Determinants of ESG adoption in Islamic finance	Legitimacy Theory
Rooh et al. (2023)	Behavioral intention in ESG investing during COVID-19	Stakeholder Theory, Theory of Planned Behavior
Górka & Kuziak (2022)	ESG index and volatility modeling in financial markets	Agency Theory, Risk Management Theory
Alkayed et al. (2024)	Board gender diversity and ESG risk disclosure	Signaling Theory
Pong & Man (2024)	Effect of ESG on investor trust and brand relationship quality	Stakeholder Theory
Le (2024)	Corporate governance and ESG in the energy sector	Legitimacy Theory
Krastev & Krasteva-Hristova (2024)	ESG-related investment decisions in emerging markets	Resource-Based View
Blitz & Swinkels (2023)	Bibliometric mapping of ESG and financial performance literature	Institutional Theory, ESG Framework
Estevez-Mendoza & Infante (2024)	Stakeholder engagement in ESG-driven firms	Stakeholder Theory
Kaul (2023)	Influence of CSR and ESG on capital markets	Corporate Governance Theory
Chen et al. (2022b)	ESG integration in airline financial performance post-COVID	Legitimacy Theory
Andersen & Bams (2022)	Transparency and sustainability reporting practices under ESG mandates	Stakeholder Theory
Adam et al. (2025)	Board characteristics and ESG disclosure in manufacturing firms	Agency Theory
Muazaroh et al. (2025)	Consumer behavior towards ESG-labeled brands	Theory of Planned Behavior
Drobetz et al. (2024)	ESG influence on institutional investment decisions	Institutional Theory
Serap Vurur et al. (2024)	Innovation and sustainability integration in ESG research	Stakeholder Theory, Innovation Theory

b. Factor Antecedents

1. Innovation

Innovation significantly influences the integration of ESG in a company's strategy, especially in the face of major crises such as the COVID-19 pandemic. [NO_PRINTED_FORM] (27) Emphasizing that implementing ESG is not only a regulatory compliance, but also a strategic innovation that allows companies, in this case, airlines, to strengthen financial resilience and stabilize stock volatility during periods of uncertainty. In addition, [NO_PRINTED_FORM] (29) show that Innovation is central in strengthening the relationship between governance and sustainability strategies, especially in the context of Sustainable Strategic Investment Decision-Making Practices (SSIDMP). The research

[NO_PRINTED_FORM] (9) Also shows that renewable energy stock indices such as NEX are becoming innovative instruments for investors looking to internalize sustainability values in long-term financial strategies. [NO_PRINTED_FORM] (32) Emphasizing that investment in R&D as an innovation proxy is a key driver in creating sustainability value, especially in product innovation, environmental regulatory compliance, and ESG-oriented brand communication.

2. Governance

Governance not only reflects the company's formal structure but also determines the extent to which the values of accountability, transparency, and ethical decision-making are consistently executed. Strong governance provides a framework for companies to apply the principles of transparency, accountability, and compliance with ethical and regulatory norms, which ultimately increases investor confidence and long-term competitiveness. (33,34). The studies of Brogi et al. (2022) and Doni & Fiameni (2024) suggest that governance effectiveness, such as board quality and internal audit functions, positively correlates with ESG disclosure and more accurate and sustainable investment decision-making.

In conceptual studies, [NO_PRINTED_FORM] (17) Governance is the central pillar in constructing ESG theory, especially in the context of agency and stakeholder theory, because it acts as a link between economic and corporate social values. Strong governance allows companies to respond to crises more adaptively through transparent decision-making, effective internal control systems, and accountable managerial structures. (31). [NO_PRINTED_FORM] (2) It should also be underlined that ESG is not only an indicator of corporate ethics but also a strategic risk management instrument that has a real impact on the structure of investment returns and investor confidence in the company's management. Therefore, a small company's ESG can signal managerial competence, indicating that strong governance plays a role in building long-term internal and external credibility. (35,36).

3. Board

[NO_PRINTED_FORM] (37) Found that board size and gender diversity significantly influence company performance, with board size proven to be effective in reducing risk. An independent board and the existence of an audit committee play a strategic role in driving sustainable investment decision-making that aligns ESG principles with the Circular Economy and Industry 4.0. The Board is also expected to maintain alignment of business strategies with the SDGs through data-driven leadership and innovation (29). Board structure and functions, such as board function and board structure, significantly influence financial performance indicators and play a role in the effectiveness of ESG governance, especially in companies with high innovation capacity (32). Furthermore, [NO_PRINTED_FORM] (38) The Journal of Risk and Financial Management found that gender diversity, board size, and board independence positively impact sustainability reporting in the healthcare industry in the U.S. This indicates that an inclusive and independent board structure can strengthen ESG transparency and accountability in the eyes of investors and stakeholders.

4. ESG awareness

[NO_PRINTED_FORM] (28) explained that the level of corporate awareness of ESG plays a significant factor in mitigating credit risk. In his article, it was found that an increase in ESG scores was significantly negatively correlated with a credit risk score (Z-score), suggesting that companies with a high understanding and attention to ESG tend to have a better risk profile and are more creditworthy. Meanwhile, [NO_PRINTED_FORM] (27) highlight that in the context of the COVID-19 crisis, ESG awareness is an essential driver in restructuring business models in the travel and hospitality sector. They point out that integrating ESG into operational and investment decision-making processes is part of the "new normal" shaped by market pressures and stakeholder expectations. Awareness of the importance of ESG in creating business resilience is growing stronger, along with the need to navigate market uncertainty and strengthen long-term competitiveness.

5. Motivation for ESG Integration

An integrated ESG strategy can expand access to capital markets, improve financial performance, and drive sustainable growth. ESG integration arises from various aspects, such as the drive to enhance reputation, gain investor trust, access sustainable finance, or reduce environmental and social risk exposure. During the COVID-19 pandemic, the tourism, travel, and hospitality industries had to be evaluated by establishing ESG integration as the "new normal" across all operations and management plans. (31)This drive for ESG integration also reflects a shift in the business paradigm from a profit-oriented approach to a stakeholder-oriented one, where sustainability is a key cornerstone in the company's strategic planning. ESG integration is not just a short-term response to a crisis but is part of a broader strategic transformation in risk management and long-term value creation. Thus, ESG is key in creating a sustainable competitive advantage and reflects a long-term commitment to balanced economic and social values.

c. Factor Consequenses

1. Impact on firm performance

[NO_PRINTED_FORM] (17) Identify that financial performance is one of the main clusters in ESG research and encourage business efficiency, reduce capital costs, and increase the company's market value. [NO_PRINTED_FORM] (7) Developed five additional hypotheses stating that company size, asset turnover ratio, and debt-to-asset ratio contribute to financial performance. However, only ESG shows consistent positive impacts across all scenarios. Findings [NO_PRINTED_FORM] (37) Although gender diversity does not directly reduce risk, ESG integration can increase strategic synergies, contributing to better performance outcomes and more competitive business strategies. High-Innovation Companies (HICs) experience a significant improvement in financial performance when they have strong social ESG(S) performance. In addition, companies with high levels of income volatility experience greater improvements in ESG performance after gaining investor support, which ultimately positively impacts financial performance indirectly. (35).

2. Mitigation of risk

Mitigation of risk in the context of ESG is powerfully demonstrated in studies by Brogi et al. (2022), which examined the role of ESG awareness in lowering corporate credit risk and was strengthened with an alternative model using Probability of Default (PD) that showed a significant negative relationship between ESG awareness and credit risk. In other words, companies that are more ESG aware tend to be more financially stable and have less risk of default. Companies in the heavy industry category face high environmental risks such as pollution or hazardous material spills, making them more likely to adopt ESG-based risk mitigation strategies (39). ESG, in this case, acts as a strategic protective tool that reduces the possibility of losses and strengthens the market's perception of the company's credibility in managing risk. In the context of risk mitigation, board size has been shown to significantly reduce organizational risk, while gender diversity supports inclusive and accountable governance. This is in line with the importance of data-driven leadership in supporting ESG-oriented strategic decisions that are responsive to regulations and proactive in identifying risks early (29,37).

3. Investor trust and loyalty

Investor confidence is a crucial element in the financial industry, as positive perceptions of the company directly influence investment decisions towards financial institutions and the products they offer (18). The investor trust and loyalty factor emerged as one of the strategic consequences of ESG integration because consistent sustainability practices are considered to build the company's credibility and reputation in the eyes of investors. Companies with institutional investor support and high ESG scores, especially on social and governance aspects, can build strong trust and maintain investor loyalty, even when markets are volatile.e (35)Companies with high innovation capacity and strong social ESG scores are seen as visionary and responsible entities, thus attracting the trust of institutional investors. This trust has been proven to contribute to market stability, as seen during the COVID-19 crisis, when the stocks of hospitality companies with high ESG scores experienced lower volatility. (31,32). The reputation protection mechanism makes institutional investors more tolerant of market fluctuations, strengthening loyalty and trust in companies with good ESG performance.e (30). Moreover, [NO_PRINTED_FORM] (18) Revealing companies with high media exposure and consistent stakeholder oversight on ESG issues have credibility in the eyes of investors, so that investors are more loyal and less reactive to market turmoil (Blitz & Swinkels, 2023).

4. Long-term ESG Effect

A commitment to social sustainability brings momentary benefits and is a source of long-term competitive advantage. (32). A similar point was put forward by. [NO_PRINTED_FORM] (2) ESG indices offer greater stability than conventional indices in the long run, especially when the market is under pressure. Oversight of board independence and gender diversity also contributes significantly to improving the quality of ESG reporting and building a company's reputation that is resilient to crises and ensures long-term growth.h (18,38). ESG is not just a momentary risk management tool, but it also plays a vital role in building a company's long-term value (35,36). Long-term ESG effect juga diteliti oleh [NO_PRINTED_FORM] (41) Green finance is becoming part of a long-term sustainability strategy that is increasingly important in the global financial system. In this context, ESG is no longer just a complementary dimension in investment decision-making. Still, it has evolved into a strategic element integrated into corporate governance, growth strategy, and social legitimacy framework. ESG is seen as a non-financial factor and a core value in investment decision-making that supports sustainable development.

Table 3: Antecedent Theme

Antecedent Theme	Antecedent Description	Antecedent Sources	Consequence Theme	Consequence Description	Consequence Sources
Innovation	Innovation as a strategic response to crisis and an enabler of long-term ESG value creation.	Doni F.; Fiameni M. (2024); Alkaraan F.; Elmarzouky M.; Hussainey K.; Venkatesh V.G. (2023); Chen C.-D.; Su C.-H.J.; Chen M.-H. (2022); Serap	Impact on Firm Performance	ESG practices are linked to stronger financial performance and competitive advantage.	Doni F.; Fiameni M. (2024); Alkaraan F.; Elmarzouky M.; Hussainey K.; Venkatesh V.G. (2023); Le L.T. (2024); Estevez-Mendoza C.; Infante J. (2025);

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		Vurur N.; Özdemir L.; Özen E.; Grima S. (2024)			Adam S.; Müller-Thümen F.; Kaiser S.; Hovemann G. (2025); Muazaroh; Lestari W.; Sari L.P. (2025)
Governance	Governance ensures transparency, accountability, and ethical leadership within ESG integration.	Chen C.-D.; Su C.-H.J.; Chen M.-H. (2022); Capelli P.; Ielasi F.; Russo A. (2021); Brogi M.; Lagasio V.; Porretta P. (2022); Doni F.; Fiameni M. (2024); Alkaraan F.; Elmarzouky M.; Hussainey K.; Venkatesh V.G. (2023); Mian H.R.; Hewage K.; Sadiq R. (2024); Górka J.; Kuziak K. (2022); Alkayed H.; Shehadeh E.; Yousef I.; Hussainey K. (2024); Pong H.K.; Man F.L.C. (2024); Le L.T. (2024); Estevez-Mendoza C.; Infante J. (2025); Kaul S. (2023); Chen C.-D.; Su C.-H.J.; Chen M.-H. (2022); Adam S.; Müller-	Mitigation of Risk	Effective ESG integration reduces exposure to environmental, financial, and reputational risks.	Brogi M.; Lagasio V.; Porretta P. (2022); Alkaraan F.; Elmarzouky M.; Hussainey K.; Venkatesh V.G. (2023); Andersen I.; Bams D. (2022); Muazaroh; Lestari W.; Sari L.P. (2025)

		Thümen F.; Kaiser S.; Hovemann G. (2025); Muazaroh; Lestari W.; Sari L.P. (2025); Drobetz W.; El Ghoul S.; Guedhami O.; Hackmann J.P.; Momtaz P.P. (2024)			
Board	Board characteristics such as size, diversity, and independence influence ESG implementation and corporate sustainability.	Doni F.; Fiameni M. (2024); Alkaraan F.; Elmarzouky M.; Hussainey K.; Venkatesh V.G. (2023); Alkayed H.; Shehadeh E.; Yousef I.; Hussainey K. (2024); Muazaroh; Lestari W.; Sari L.P. (2025)	Investor Trust and Loyalty	High ESG scores strengthen investor confidence and promote long-term loyalty.	Pong H.K.; Man F.L.C. (2024)
ESG Awareness	Awareness of ESG enhances corporate resilience and risk navigation under market uncertainty.	Brogi M.; Lagasio V.; Porretta P. (2022); Pong H.K.; Man F.L.C. (2024); Le L.T. (2024); Krastev B.; Krasteva-Hristova R. (2024); Chen C.-D.; Su C.-H.J.; Chen M.-H. (2022)	Long-term ESG Effect	ESG strategies deliver lasting value through improved governance and sustainability outcomes.	Doni F.; Fiameni M. (2024); Górka J.; Kuziak K. (2022); Alkayed H.; Shehadeh E.; Yousef I.; Hussainey K. (2024); Pong H.K.; Man F.L.C. (2024); Krastev B.; Krasteva-Hristova R. (2024); Adam S.; Müller-Thümen F.; Kaiser S.; Hovemann G.

					(2025); Drobetz W.; El Ghoul S.; Guedhami O.; Hackmann J.P.; Momtaz P.P. (2024)
Motivation for ESG Integration	Motivation for ESG integration includes reputation, sustainable financing, investor trust, and risk mitigation.	Doni F.; Fiameni M. (2024); Andersen I.; Bams D. (2022); Adam S.; Müller-Thümen F.; Kaiser S.; Hovemann G. (2025)			

6. Conclusion and Recommendation

a. Conclusion

Integrating Environmental, Social, and Governance (ESG) principles into corporate risk management has become a strategic necessity, no longer just a symbolic commitment. Amid increasing environmental uncertainty and regulatory pressures, ESG offers a structured framework to balance stakeholder expectations with sustainable value creation. This study shows that several essential factors, such as innovation, governance structure, board effectiveness, ESG awareness, and strategic motivation, strongly influence the success of ESG integration. These factors form the foundation for long-term, sustainability-oriented decision-making. The implementation of ESG also produces measurable strategic impacts. ESG contributes to improving company performance through alignment between business operations and sustainability goals, strengthening risk mitigation capacity, and building investor trust. Stakeholder trust in companies with strong ESG performance drives long-term loyalty, strengthens brand image, and increases market resilience. Over time, ESG has become a relevant strategic differentiator for companies looking to sustain growth in an increasingly volatile market.

Finally, a company's reputation becomes a key element that plays a role as feedback in the ESG and risk management framework. The company's credibility in implementing ESG principles attracts investors' interest and becomes a signal of managerial competence and ethical governance. Just as trust drives investment decisions, reputation strengthens a company's position in the eyes of the market. In this context, ESG is not just a reporting obligation, but a strategic investment in risk resilience, corporate legitimacy, and future value creation.

b. Recommendation

To strengthen the implementation and understanding of ESG integration, it is necessary to expand the study to various geographical contexts and industry sectors and adopt more diverse research methods, such as longitudinal and mixed-methods. This approach is essential for capturing complex and contextual ESG dynamics, particularly in an ever-changing business environment. Meanwhile, ESG should be an integral part of business strategy, not just administrative compliance. This includes an emphasis on innovation, transparency in governance, and diversity and board independence, to build investor trust while strengthening the company's competitiveness in the long term. In addition, the role of governments and regulators is critical in creating an ecosystem that supports ESG adoption, especially in developing countries and the small and medium-sized enterprises (SMEs) sector. Precise regulation, the right incentives, and a reporting system integrated with risk management and sustainability will encourage more companies to implement ESG strategically and sustainably.

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