

Toward a Multi-Dimensional ESG Framework for Enhancing Firm Value in Commercial Banks: A Systematic Literature Review

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ABSTRACT

Environmental, Social, and Governance (ESG) has become a prominent issue in the banking sector due to the increasing emphasis on sustainability and responsible finance. This study aims to systematically review the literature on the relationship between ESG and firm value in the banking sector and identify research trends, gaps, and future research directions. The study follows the PRISMA guidelines for article identification and selection using the scopus database. In addition, bibliometric analysis was conducted using VOSviewer to map publication trends, dominant themes, and the intellectual structure of ESG and firm value research. The findings indicate a significant increase in publications during the 2020-2025 period, with major themes focusing on ESG, financial performance, corporate governance, and sustainability. ESG has been operationalized through various dimensions, including ESG disclosure, ESG performance, ESG score, sustainability reporting, and CSR expenditure. While most studies report a positive association between ESG and firm value, inconsistencies in findings and limited consideration of mediating and moderating variables remain evident. Therefore, this study proposes a Multi-Dimensional ESG Framework to guide future research and support the development of sustainable business practices in the banking industry.

Keywords: ESG, Firm Value, Banking Sector, Systematic Literature Review, Bibliometric Analysis, Sustainability

1. INTRODUCTION

Environmental, Social, and Governance (ESG) has emerged as one of the leading paradigms in modern business and financial practices, interest in ESG has increased alongside the growing emphasis on sustainable development, which highlight the importance of balancing economic growth, social responsibility, and environmental protection [1]. The rise of responsible investment has also encouraged investors to incorporate sustainability considerations into their investment decision-making processes [2]. Furthermore, the integration of ESG into the sustainable finance framework has prompted companies to focus not only on achieving economic profitability but also on addressing environmental impacts, social responsibilities, and the quality of corporate governance [3]. [4] argued that ESG has become one of the key indicators for evaluating corporate quality and long-term business sustainability. Changes in investor preferences, increasing regulatory pressure, and growing demand for transparency from various stakeholders have further strengthened the role of ESG as a strategic element in the modern business environment [5].

The growing attention to ESG is also reflected in the increasing volume of sustainable investment across various countries. [6] found that institutional investors are increasingly utilizing ESG information to assess corporate risk and growth prospects. [2] demonstrated that companies with strong ESG performance tend to receive more favorable perceptions from the market. [7] explained that sustainability factors are becoming increasingly important in capital allocation decisions due to their association with corporate stability and resilience. Meanwhile, [8] emphasized that the development of regulation related to sustainability reporting and ESG disclosure has encouraged compa-

nies to improve the quality of them to sustainability reporting as a means of accountability to stakeholders. These developments indicate that ESG is no longer viewed as a voluntary initiative but has become an essential component of modern corporate reporting and governance systems.

In the financial sector, particularly within the banking industry, ESG implementation has become increasingly important due to the strategic role of banks as financial intermediaries that allocate resources across various sectors of the economy. [9] argued that the banking sectors play a significant role in achieving sustainable development goals through its financing and investment activities. [3] found that the adoption of ESG practices in the banking sector contribute to improved risk management quality and long-term business sustainability. According to [10], the integration of ESG strengthens bank reputation and enhances the confidence of investors and other stakeholders. [11] demonstrated that effective ESG practices also contribute to greater operational efficiency and financial stability. Therefore, ESG is increasingly regarded as a strategic instrument for creating sustainable value within the banking industry.

Recent literature suggests that ESG implementation in the banking sectors can generate a wide range of strategic benefits. [4] found that strong ESG practices are associated with improved bank performance and financial stability. [7] demonstrated that ESG contributes to enhancing investor confidence and strengthening corporate competitiveness. [12] Argued that ESG transparency can reduce information asymmetry and improve the quality of relationships with stakeholders. [5] emphasized that the integration of ESG into corporate strategy has the potential to create more sustainable long-term value. The findings have contributed to the growing body of research seeking to explain how ESG implementation influences corporate performance and firm value within the banking industry.

However, despite the rapid growth of ESG-related literature the understanding of the mechanisms through which ESG create firm value remains subject to ongoing debate. [3] found that ESG implementations positively contribute to firm value by enhancing [13] found that ESG implementation positively contributes to firm value enhancing corporate reputation and reducing business risk. [14] demonstrated that companies with higher ESG quality tend to receive favorable market valuations. In contrast, [15] reported that the impact of ESG on firm value may vary across countries and institutional environments. [16] explained that inconsistencies in research findings can also be attributed to differences in ESG measurement approaches. [17] further argued that corporate governance quality and firm-specific characteristics may influence the strength of the relationship between ESG and firm value, moreover, most existing studies have operationalized ESG only partially through ESG disclosure, ESG score, ESG Rating, ESG performance, or sustainability reporting, thereby failing to provide a comprehensive understanding of ESG as a multidimensional construct. Therefore, this study aims to synthesize the development of ESG and firm value literature in the banking sector and to advance the understanding of a multi-dimensional ESG framework consisting of ESG disclosure, ESG reporting intensity, ESG performance, and CSR expenditure as a foundation for future research agendas.

To address the identified research gaps, this study formulates the following research questions (RQs):

RQ1: How has research on ESG and firm value evolved within the banking sector?

RQ2: How has ESG been operationalized in previous studies?

RQ3: What is the relationship between ESG and firm value?

RQ4: what mediating and moderating variables have been employed in the ESG- firm value relationship?

RQ5: what research gaps can be identified to support the development of a multi-dimensional ESG framework?

This study employs a Systematic Literature Review (SLR) approach combined with bibliometric analysis to address the formulated research questions. The SLR approach was selected because it enables the systematic, transparent, and structured synthesis of existing literature, thereby providing a more comprehensive understanding of the development of ESG and firm value research within the banking sector. Meanwhile, bibliometric analysis is utilized to map publication trends, research themes, intellectual structures, and future research directions. By using the Scopus database as the primary data source, this study aims to provide a comprehensive overview of the evolution of ESG and firm value research, identify existing research gaps, and serve as a foundation for the development of a Multi-Dimensional ESG Framework for commercial banks, particularly in the Emerging Asia region.

2. LITERATURE REVIEW

2.1 *Theory Environmental, Social, and Governance (ESG)*

Environmental, Social, and Governance (ESG) is a framework used to evaluate corporate sustainability performance based on environmental, social, and governance dimensions. In recent years, ESG has evolved into one of the most important non-financial indicators for assessing corporate quality, the ability to create long-term value, and resilience against various business and environmental risks [3]; [4]; [5]; [6]; [18]. The growing attention to ESG has been driven by the development of sustainable finance, responsible investment, and stakeholder capitalism, which position sustainability as an integral component of corporate strategy. Investors, regulators, and other stakeholders increasingly consider ESG performance as a basis for investment decision-making, risk management, and the evaluation of corporate sustainability [7]; [8]; [12]; [19].

The environmental dimension refers to a company's ability to manage its environmental impacts through carbon emission reduction, energy efficiency, waste management, and the sustainable use of natural resources. The social dimension reflects a company's relationships with employees, customers, communities, and other stakeholders through corporate social responsibility practices, diversity initiatives, occupational health and safety programs, and the protection of human rights. Meanwhile, the governance dimension is associated with the quality of corporate governance, including transparency, board independence, business ethics, monitoring effectiveness, and the protection of shareholders' rights [10]; [20]; [5]; [6]; [21] these three dimensions are considered complementary and mutually reinforcing in creating competitive advantages and enhancing corporate legitimacy in the eyes of stakeholders.

In the banking sector, ESG has gained increasing attention due to strategic role of bank as financial financial intermediaries that influence the direction of economic development through financing and investment activities. Numerous studies have shown that ESG implementation can enhance bank reputation, strengthen financial stability, reduce credit risk, and increase the confidence of investor and other stakeholders [22]; [23]; [4]; [24]; [1]. Furthermore, the adoption of ESG practices has been increasingly

driven by the development of regulations related to sustainable finance and sustainability reporting across various countries. Consequently, ESG is no longer viewed as a voluntary initiative but has evolved into a strategic element that contributes to corporate value creation and long term business sustainability [8]; [6]; [25]; [19].

Table 1. Defining Elements of ESG

No	Definition ESG	Reference
1	ESG is a set of criteria used to evaluate a company's sustainability performance based on environmental, social, and governance dimensions [3].	Azmi et al. (2021)
2	ESG is widely used as a tool for assessing sustainability-related risks and opportunities in investment decision-making processes [4].	Menicucci & Paolucci (2023)
3	ESG reflects a company's ability to manage environmental and social impacts while maintaining high standards of corporate governance and organizational accountability [10].	Galetta et al. (2023)
4	ESG Disclosure refers to the extent to which a company transparently communicates sustainability-related information to its stakeholders [20].	Buallay (2020)
5	ESG Performance represents a company's actual achievements and outcomes in environmental, social, and governance dimensions [6].	Liaqat et al. (2026)
6	ESG is a multidimensional construct that encompasses disclosure, reporting, performance, and sustainability initiatives undertaken by a company [26].	Mohammad & Wasiuzzaman (2021)
7	ESG serves as a long-term value creation mechanism by enhancing corporate reputation, improving risk management practices, and promoting effective corporate governance [4].	Menicucci & Paolucci (2023)

2.2 Multi-Dimensional ESG Perspective

The Literature indicates that ESG has evolved from a sustainability concept into a multidimensional construct and encompassing various aspects of corporate disclosure, reporting, performance, and governance. According to [27], ESG is no longer viewed merely as a sustainability reporting tool but has developed into a strategic mechanism that explained that ESG measurement in contemporary research is conducted through various approaches, including ESG Disclosure, ESG Rating, ESG Score, ESG Performance. Meanwhile, [28] emphasized that the diversity of ESG measurement approaches reflects the complexity of ESG as a construct composed of multiple interacting dimensions. A similar perspective was proposed by [29], who argued that ESG should be understood as a combination of environmental, social, and governance activities that collectively contribute to corporate value creation. Therefore, relying on a single indicator is often insufficient to comprehensively capture the implementation of ESG [18].

In the banking sector, the multidimensional ESG perspective has become increasingly relevant because each ESG dimension influences corporate value creation through different mechanism. [11] demonstrated that ESG Disclosure plays an important role in enhancing transparency and reducing information asymmetry between firms and investors. [30] found that ESG Reporting Intensity reflects a company's level of commitment to communicating its sustainability activities to stakeholders. [31] explained that ESG Performance represents a firm's actual achievements in environmental, social, and governance dimensions, which may influence market perception of corporate quality. Furthermore, [8] emphasized that CSR Expenditure serves as a form of sustainability investment that contributes to enhancing corporate reputation and legitimacy. Collectively,

these dimensions have the potential to influence firm value through increased transparency, risk reduction, operational efficiency, and greater investor confidence. Based on these findings, this study adopts a Multi-Dimensional ESG perspective that integrates ESG Disclosure, ESG Reporting Intensity, ESG Performance, and CSR Expenditure as a conceptual framework for understanding the relationship between ESG and firm value in commercial banks [32].

2.3 Firm Value and ESG

Firm value reflects market perceptions of a company's ability to create economic value and sustain long-term business viability [33]. From the perspective of modern finance, firm value is often used as an indicator of a company's success in meeting the expectations of investors and other stakeholders [31]. In the banking sector, ESG implementation is increasingly regarded as a strategic factor that can enhance firm value. Through improvements in corporate reputation and legitimacy [3], [4] found that effective ESG Practices can strengthen bank stability and performance, thereby contributing to higher firm value. [12] demonstrated that ESG disclosure can reduce information asymmetry and enhance investor confidence in a company. [8] explained that high ESG performance reflects superior corporate management quality, which is likely to generate a positive response from the market. Meanwhile, [7] found that the implementation of green banking practices contributes to improved competitiveness and financial performance within the banking sector.

Nevertheless, the relationship between ESG and firm value has not produced entirely consistent findings in the existing literature. [20] found that the impact of ESG on firm value may vary across countries and institutional environments. [16] explained that variations on research findings can also be attributed to differences in the ESG measurement approaches adopted by individual studies. [17] demonstrated that the quality of corporate governance may either strengthen or weaken the relationship between ESG and firm value. Furthermore, [11] emphasized that firm-specific characteristics and market conditions play an important role in determining the effectiveness of ESG implementation in creating corporate value. Therefore, the relationship between ESG and firm value remains an evolving area of research that requires a more comprehensive synthesis of the literature to achieve a deeper understanding of its underlying mechanism.

3. METHODS

3.1 Research Design

This study employs a Systematic Literature Review (SLR) approach combined with bibliometric analysis to synthesize and map the development of research related to Environmental, Social and Governance (ESG) and firm value in the banking sector. The SLR approach has been widely adopted in sustainability research because it enables the systematic integration of findings from multiple studies and facilitates a more comprehensive synthesis of existing knowledge[34]. According to [35], the combination of SLR and bibliometric analysis allows researchers not only to identify dominant research findings but also to map the intellectual structure and development trajectory of a research field. [36] Bibliometric analysis is also considered an affective approach for identifying publication trends, major research themes, and the relationships among concepts within a scientific literature domain [36]. Therefore, the integration of these two methods has become increasingly common in management, finance, and sustainability research [37].

This study adopts the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines to ensure that the processes of article identification, screening, and selection are conducted in as systematic and transparent manner [13]; [38]. The PRISMA framework has become a widely accepted standard in literature-based research because it enhances the equality of reporting and improves the reproducibility of research findings [38]. The article identification process was carried out using the Scopus database, which is recognized as one of the largest and most widely utilized scientific database in bibliometric and systematic review studies [39]. The use of the Scopus Database also enables researchers to access high-quality publications across a broad range of academic disciplines [25].

The research process of article searching, screening, eligibility assessment, data extraction, and bibliometric analysis using VOSviewer software. According to [40]. VOSviewer is one of the most widely used software tools for visualizing bibliometric networks and keyword relationships within a particular research field [13]. The visualization to identify the development of research themes related to ESG and firm value in the banking sector. This approach enables the systematic identification of research trends, research gaps, and opportunities for future research agenda development based on empirical evidence [35].

3.2 Search Strategy and Search String

The literature search was conducted using the Scopus database, as it is one of the largest scientific databases providing internationally recognized and high-quality publications and is widely used in Systematic Literature Review studies [41]. The search was performed in June 2026 using the Advanced Search feature available in Scopus.

To identify articles relevant to the objectives of this study, the following search string was employed: TITLES-ABS-KEY(("ESG" OR "Environmental Social Governance" OR "ESG Disclosure" OR "ESG Performance" OR "Sustainability Reporting" OR "Corporate Social Responsibility") AND ("Firm Value" OR "Market Value" OR "Shareholder Value" OR "Financial Performance" OR "Bank Performance") AND (bank* OR banking OR "commercial bank*"))

The search string was designed to capture studies that simultaneously address ESG, firm value, and the banking sector. The initial search yielded 548 documents. Subsequently, a screening process was conducted based on publication year (2020 – 2025), document type (article), and language (english), resulting in 302 articles that met the preliminary criteria for further screening and eligibility assessment.

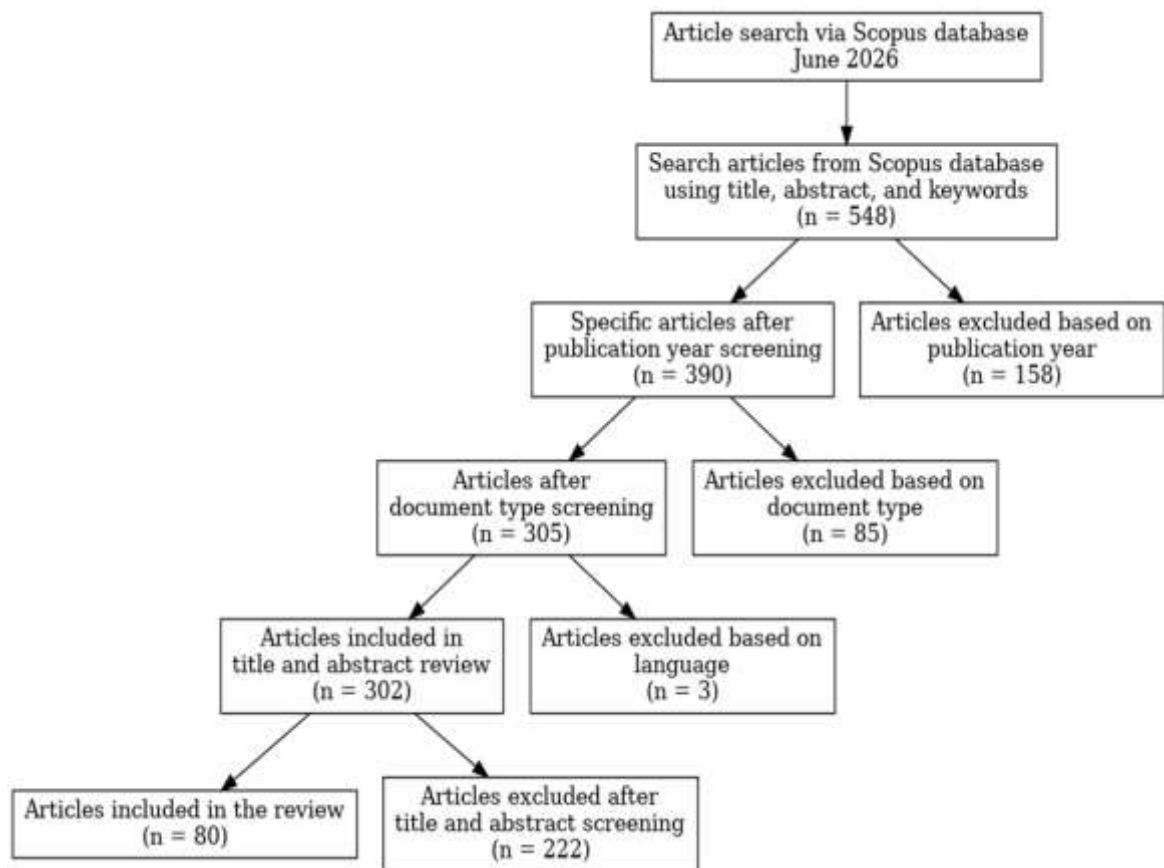


Figure 1. Systematic Literature Review information flow using PRISMA by Draw.io

Based on the search conducted in June 2026 using the Scopus database and keywords related to Environmental, Social, and Governance (ESG), firm value, and the banking sector within the title, abstract, and keywords fields, a total of 548 initial documents were identified (see Figure 1). Subsequently, a screening process was performed based on the publication period (2020-2025), reducing the number of documents to 390 articles. In the next stage, the screening was refined by retaining only research articles, resulting in 305 articles. Articles published in languages other than English were then excluded, leaving 302 articles that met the preliminary inclusion criteria.

A further screening stage was conducted through a review of article titles and abstracts to ensure alignment with the study's focus on the relationship between ESG and firm value in the banking sector. At this stage, articles that were not relevant, did not focus on the banking industry, or did not adequately address ESG or firm value were excluded from the selection process. The final screening process resulted in 80 articles that were included as the sample for this study. These articles were subsequently analyzed to address the research questions concerning the development of ESG and firm value in the banking sector, the operationalization of ESG in previous studies, the relationship between ESG and firm value, the mediating and moderating variables employed in this relationship, and the research gaps that can be utilized to develop a Multi-Dimensional ESG Framework.

3.3 Bibliometric Analysis

Bibliometric analysis was conducted to map the development of ESG and firm value research within the banking sector. Bibliographic data retrieved from the Scopus database were exported in CSV format and analyzed using VOSviewer software [36]. The analysis included cooccurrence analysis, citation analysis, and keyword mapping to identify dominant research themes, relationships among research topics, and the evolution of the field over time. The results of the bibliometric analysis were visualized through network visualization, overlay visualization, and density

visualization techniques. This approach enables researchers to obtain a more comprehensive understanding of the intellectual structure of ESG and firm value research while also identifying potential avenues for future research.

4. RESULTS AND DISCUSSION

The findings of this study are based on 80 articles selected through a Systematic Literature Review (SLR) process using the Scopus database. These articles were analyzed to identify the development of research on Environmental, Social, and Governance (ESG) and firm value within the banking sector during the 2020-2025 period.

RQ1: How has research on ESG and firm value evolved within the banking sector?

Based on the analysis of 80 articles that met the study's inclusion criteria, the number of publications was found to exhibit a significant upward trend over recent years. As illustrated in Table 3 and Figure 2, the number of publications reached 4 articles in 2020, increased to 6 articles in 2021, remained at 4 articles in 2022, rose substantially to 13 articles in 2023, and further increased to 16 articles in 2024. The highest level of publication activity occurred in 2025, with a total of 37 articles, representing approximately 46.25% of all articles included in the analysis. These findings indicate that ESG and firm value have become increasingly prominent topics within the banking and finance literature.

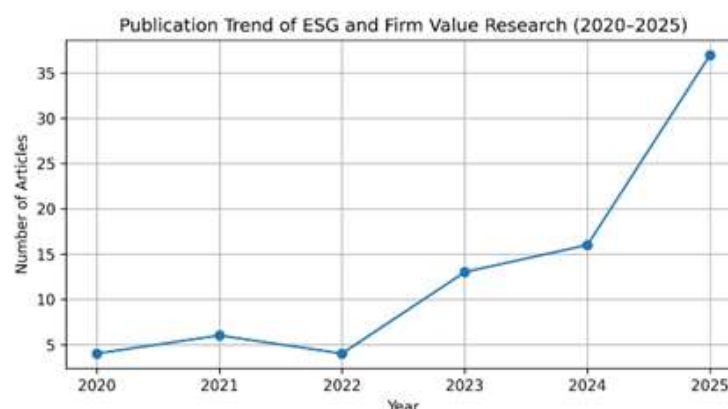


Figure 2. Trend Publication of ESG and Firm Value

Source: Scopus Database

The increasing number of publications is consistent with the growing attention devoted to sustainability practices, sustainable finance, and ESG disclosure within the banking industry. [3] argued that ESG implementation has become increasingly important for the banking sector because it contributes to risk management and long-term business sustainability. [7] found that stronger ESG practices enhance corporate resilience and competitiveness in response to changing business environment. [42] demonstrated that ESG disclosure plays a significant role in improving transparency and strengthening investor confidence. [43] emphasized that ESG has become an important consideration for investors and stakeholders when evaluating corporate quality and sustainability. Furthermore, [44] showed that integrating ESG into corporate strategy can support long-term value creation. These findings are further supported by [10], who argue that ESG is no longer viewed as a voluntary activity but has evolved into an integral component of business strategy aimed at promoting sustainability and enhancing firm value.

The network visualization generated using VOSviewer from 302 articles reveals that research on ESG and firm value in the banking sector forms a highly interconnected thematic network. As illustrated in Figure 3, the most dominant keywords include financial performance, banking, banking sector, corporate governance, ESG, and sustainability. The prominence of these keywords

suggests that ESG research in the banking sector continues to focus primarily on how sustainability practices and corporate governance mechanisms influence financial performance and corporate value creation. This finding is consistent with [40], who found that ESG activities are associated with bank value and operational performance through improvements in efficiency and cash flow generation. Furthermore, [4] demonstrated that ESG dimensions are closely Linked to various indicators of bank performance from both operational and market perspective.

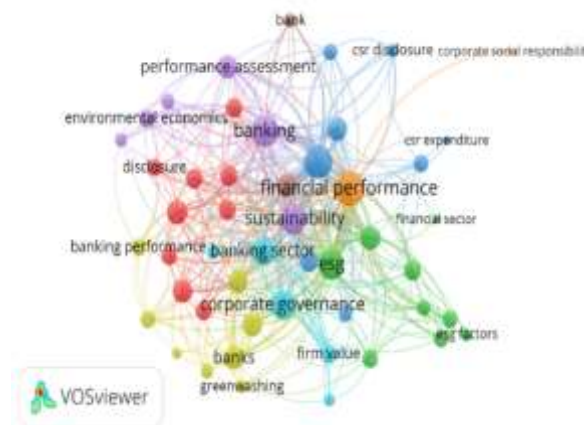


Figure 3. Network Visualization of Research Themes on ESG and Firm Value in the Banking
Source: Output VOSviewer software

The overlay visualization presented in Figure 4 illustrates the evolution of research themes over time. Keywords that appeared more prominently in earlier studies include disclosure, CSR disclosure, CSR expenditure, and performance assessment. In contrast, more recent themes are represented by keywords such as ESG, corporate governance, financial performance, banking sector, environmental economics, and greenwashing. This shift indicates that the focus of research has evolved from examining corporate social responsibility disclosures toward a more comprehensive evaluation of how ESG contributes to corporate value creation and the sustainability of the banking sector [45]. Such developments are consistent with the growing interest among academics and practitioners in integrating ESG considerations into business strategy, risk management, and investment decision-making within the banking industry. Moreover, the emergence of themes such as greenwashing and environmental economics suggests an increasing emphasis on assessing the credibility, effectiveness, and long-term implications of sustainability initiatives in financial institutions.

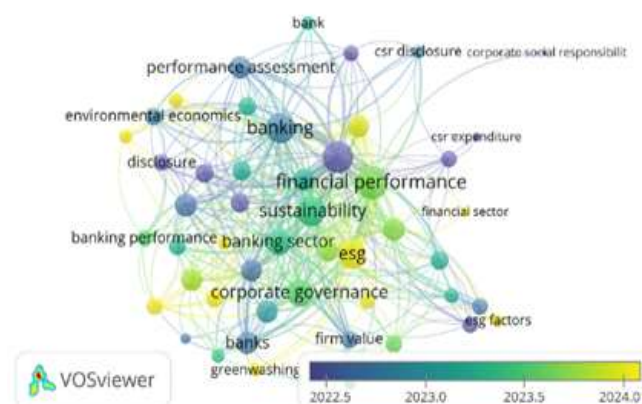


Figure 4. Overlay Visualization of Research Trends on ESG and Firm Value in the Banking Sector
Source: Output VOSviewer software

The increasing number of publications and the dominance of keywords such as ESG, financial performance, corporate governance, and sustainability indicate that sustainability-related issues have become a central focus within contemporary banking literature. Furthermore, the emergence of newer topics such as greenwashing, ESG factors, and environmental economics suggest an expansion of research direction toward more specific and multidimensional sustainability issues. These developments reflect the glowing recognition of ESG as a strategic mechanism for enhancing corporate value, strengthening stakeholder trust, and supporting long-term business sustainability. Therefore, RQ1 can be answered by concluding that research on ESG and firm value in the banking sector continues to evolve dynamically and offer substantial opportunities for further investigation in the future.

RQ2: *How has ESG been operationalized in previous studies?*

Based on the analysis of the 80 reviewed articles, ESG was found to be measured using a variety of approaches rather than a single standardized indicator. The most frequently employed ESG measures include Corporate Social Responsibility (CSR), ESG Performance, ESG Score, and ESG Disclosure. In addition, several studies utilized Sustainability Reporting, CSR Disclosure, Corporate Governance, CSR Expenditure, ESG Activities, and ESG Controversies as proxies for ESG. These findings suggest that ESG has evolved into a complex and multidimensional construct that cannot be adequately represented by a single indicator alone.

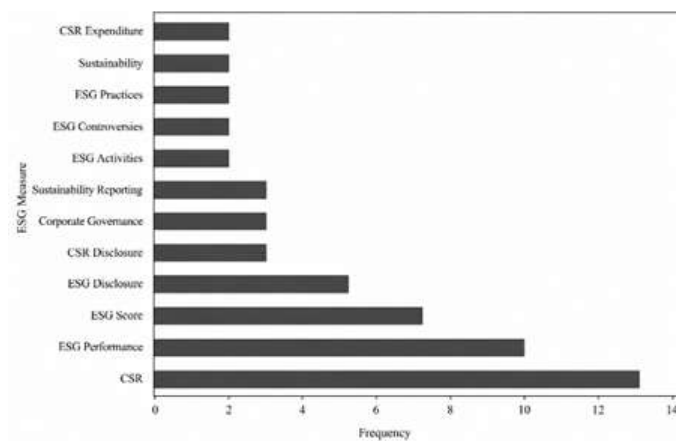


Figure 5. ESG Operationalization Measures Used in Previous Research

Source: Authors' own elaboration based on Scopus data (2026).

The diversity of ESG measurement approaches is consistent with the view that ESG encompasses multiple dimensions of corporate disclosure, reporting, performance, and sustainability-related activities. [4] argued that ESG is a complex Construct that cannot be adequately represented by a single indicator. [3] demonstrated that ESG research in the banking sector commonly employs ESG scores and ESG disclosure measures to evaluate the relationship between sustainability practices and corporate performance. [5] emphasized that differences in ESG measurement approaches reflect variations in research focus across environmental, social, and governance dimensions. [46] found that ESG disclosure is among the most widely used measures because it captures the level of corporate transparency toward stakeholders. Meanwhile, [10] showed that ESG dimensions can also be assessed through various indicators reflecting corporate governance quality, social responsibility, and sustainability performance. Similar findings were reported by [47], who argued that the diversity of ESG measurements reflects the inherently multidimensional nature of the ESG concept. Therefore, finding of RQ2 confirm that ESG has been operationalized multidimensionally within the bank-

ing literature, providing the foundation for the development of a Multi-Dimensional ESG Framework that integrates ESG Disclosure, ESG Reporting Intensity, ESG Performance, and CSR Expenditure.

RQ3: *What is the relationship between ESG and firm value?*

Based on the synthesis of the 80 reviewed articles, 46 studies reported a positive relationship between ESG and firm value, 29 studies produced insignificant or mixed findings, and only 4 studies identified a negative relationship. These findings suggest that ESG implementation is generally perceived as a factor that enhances firm value through improvements in corporate reputation, transparency, governance quality, and investor confidence. This result is consistent with [48]; [3], who found that ESG practices contribute to higher bank value and performance through better risk management and enhanced corporate legitimacy among stakeholders.

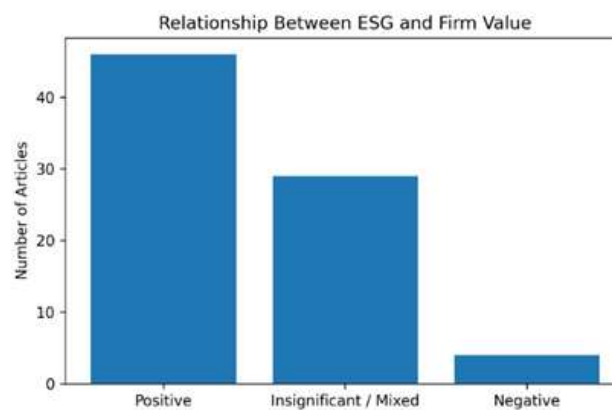


Figure 6. Relationship Between ESG and Firm Value

Source: Authors' own elaboration based on the reviewed literature (2026).

The predominance of positive finding is further supported by [4], who demonstrated that ESG implementation in the banking sector is associated with improved corporate stability and performance. In addition, [10] argued that companies with stronger ESG quality are more likely to receive favorable responses from Investors, thereby enhancing their market valuation. Similar evidence was reported by Khan et al. (2023), who found that greater ESG transparency strengthens investor confidence and reduces information asymmetry. Furthermore, [7] highlighted that ESG practices contribute to corporate resilience and competitiveness, which ultimately support long-term value creation. These findings provide support for Stakeholder Theory, which posits that firms capable of meeting the expectations of diverse stakeholder groups are more likely to achieve superior economic benefits and sustainable competitive advantages over the long term [49].

Nevertheless, the presence of 29 studies reporting insignificant or mixed findings and 4 studies reporting negative relationships indicates that the association between ESG and firm value remains far from conclusive. [22] argued that such inconsistencies may be attributed to differences in ESG measurement approaches, industry characteristics, institutional environments, corporate governance quality, and varying economic conditions. Similarly, [15] found that the impact of ESG on firm value differs across countries and regulatory contexts. [16] further suggested that variations in ESG operationalization can lead to different empirical outcomes. Moreover, [17] emphasized that firm-specific characteristics and governance mechanisms may influence the strength of the ESG-firm value relationship. Therefore, the findings of RQ3 suggest that ESG generally exerts a positive influence on firm value within the banking sector; however, the magnitude and direction of this relationship remain contingent upon various contextual factors that warrant further investigation through the incorporation of mediating and moderating variables.

RQ4: *What mediating and moderating variables have been employed in the ESG-firm value relationship?*

Based on the synthesis of the 80 reviewed, it was found that the majority of studies continue to focus on the direct relationship between ESG and firm value without incorporating mediating variables. As illustrated in figure 7, approximately 81.25% of the studies did not employ mediators, whereas only 18.75% integrated mediating variables into their research models. This finding indicates that the mechanisms through which ESG contributes to firm value creation remain relatively underexplored in the banking literature. However, [18]; [24] argued that the impact of ESG on corporate performance and firm value often occurs through indirect pathways, such as improvements in operational efficiency, risk management, corporate reputation, and stakeholder relationship. Similarly, [12] suggested that ESG practices may enhance firm value by reducing information asymmetry and strengthening investor confidence. These findings imply that the value-creation process associated with ESG is likely to be more complex than a simple direct relationship and may involve multiple intermediate mechanisms that have not yet received sufficient attention in the existing literature.

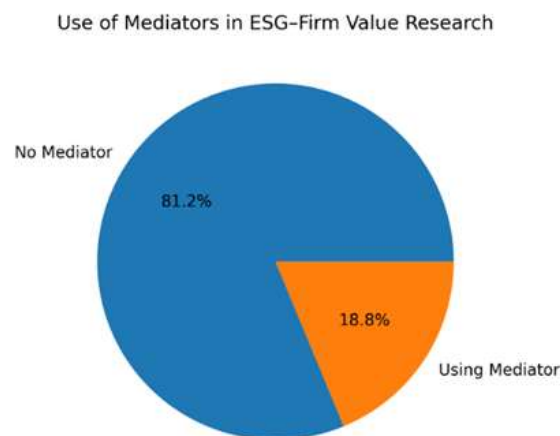


Figure 7. Use of Mediating Variables in ESG and Firm Value Research

Source: Authors' own elaboration based on the reviewed literature (2026)

The mediating variables identified in previous studies include credit risk governance, environmental innovation, employee productivity, organizational trust, technology investment, bank performance, and CSR expenditure. These variables suggest that the benefits of ESG are not always realized directly by firms but may be transmitted through improvements in operational effectiveness and organizational management quality. Meanwhile, the moderator analysis reveals a relatively similar pattern. As illustrated in Figure 8, approximately 56.25% of the studies did not employ moderating variables, whereas 43.75% incorporated moderators into their research models. The most frequently identified moderators include ownership structure, institutional quality, corporate governance, financial stability, green credit, and ESG controversies. These findings are consistent with [23], who argued that the effectiveness of ESG implementation is strongly influenced by organizational characteristics, corporate governance quality, and the institutional environment in which firms operate.

Use of Moderators in ESG-Firm Value Research

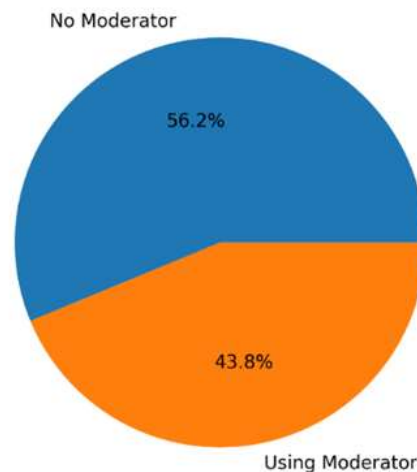


Figure 8. Use of Moderating Variables in ESG and Firm Value Research

Source: Authors' own elaboration based on the reviewed literature (2026)

The findings of RQ4 indicate that the use of mediating and moderating variables in ESG and firm value research within the banking sector remains relatively limited. The majority of studies continue to rely on direct relationship models, thereby providing only a partial understanding of the mechanisms and conditions that influence the relationship between ESG and firm value. This finding is consistent with [50], who emphasized that the impact of ESG on firm value may vary depending on organizational context, corporate governance quality, and business environment conditions. Therefore, future research should develop more comprehensive models by integrating mediating and moderating variables to explain the inconsistencies that continue to characterize the ESG – firm value relationship in the existing literature. These findings also provide the foundation for identifying research gaps and developing the Multi-Dimensional ESG Framework presented in the following section.

RQ5: *What research gaps can be identified to support the development of a Multi-Dimensional ESG Framework?*

Based on the literature synthesis, several limitations remain evident in the existing ESG and firm value research. First, ESG has been operationalized using a wide variety on indicators, including CSR, ESG Disclosure, ESG Performance, ESG Score, Sustainability Reporting, and CSR Expenditure. This finding suggests that there is still no consensus regarding the most appropriate approach for measuring ESG within the banking sector. Furthermore, empirical evidence concerning the relationship between ESG and firm value remains inconclusive, with studies reporting positive, insignificant, mixed, and even negative results. These inconsistencies indicate that the relationship between ESG and firm value requires a more comprehensive explanation.

Second, the analysis reveals that the majority of studies continue to employ direct relationship models between ESG and firm value without considering mediating or moderating mechanisms. However, the impact of ESG on firm value is unlikely to occur directly and may instead be transmitted through various mechanisms, such as enhanced corporate reputation improved operational efficiency, more effective risk management, and stronger corporate governance practices. In addition, factors such as firm characteristics, institutional environment, regulatory quality, and ownership structure may influence the strength of the relationship between ESG and firm value. These findings suggest that ESG research in the banking sector still requires more comprehensive conceptual models to explain the variations in empirical results reported across the existing literature.

Based on these findings, the study purposes a Multi-Dimensional ESG Framework that integrates ESG Disclosure, ESG Reporting Intensity, ESG Performance and CSR Expenditure as a more comprehensive representation of ESG. The Framework is developed on the premise that ESG is a multidimensional construct that cannot be adequately captured by a single indicator. By integrating multiple ESG dimensions, future research is expected to provide a more comprehensive explanation of the relationship between ESG and firm value, particularly within commercial banks in the Emerging Asia region, which has received relatively limited attention in the existing literature. The conceptual framework proposed in the study is presented in Figure 9.

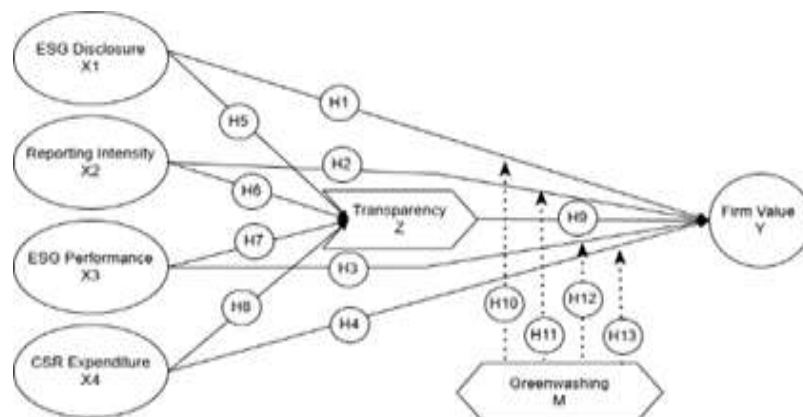


Figure 9. Proposed Multi-Dimensional ESG Framework

Source: Authors' own elaboration based on the reviewed literature (2026)

As illustrated in Figure 9, ESG Disclosure, ESG Reporting Intensity, ESG Performance, and CSR Expenditure are positioned as the multidimensional components of ESG that influence firm value. This relationship is explained through the mediating role of transparency, which serves as a mechanism linking ESG practices to corporate value creation. In addition, greenwashing is positioned as a moderating variable that may strengthen or weaken the effect of transparency on firm value. The proposed model is developed based on the literature synthesis, which revealed that previous studies have largely relied on partial ESG measurements and have made limited use of mediating and moderating variables. Therefore, the proposed framework is expected to serve as a future research agenda for providing a more comprehensive explanation of the relationship between ESG and firm value within the banking sector.

5. CONCLUSION

This study aimed to synthesize the literature on the relationship between Environmental, Social, and Governance (ESG) and firm value in the banking sector through a systematic Literature Review (SLR) and Bibliometric Analysis approach. Based on the analysis of 80 articles that met the inclusion criteria, the findings reveal that research on ESG and firm value has experienced significant growth during the 2020-2025 period. The bibliometric results indicate that the literature is primarily dominated by themes related to ESG, financial performance, corporate governance, sustainability, and the banking sector. Furthermore, the literature synthesis demonstrates that ESG has been operationalized through various indicators, including ESG Disclosure, ESG Performance, ESG Score, Sustainability Reporting, and CSR Expenditure, suggesting that ESG should be viewed as a multidimensional construct. The majority of studies reported a positive relationship between ESG and firm value, although some studies produced insignificant or negative findings. This study provides important theoretical implications by demonstrating that ESG cannot be adequately represented by a single indicator but should instead be understood as a multidimensional construct encompassing disclosure, reporting, performance, and corporate social activities. Furthermore, the findings reveal

that the use of mediating and moderating variables in the ESG-firm value relationship remains relatively limited, indicating that the mechanisms through which ESG creates corporate value have not yet been fully understood. Based on these findings, this study proposes a Multi-Dimensional ESG Framework that integrates ESG Disclosure, ESG Reporting Intensity, ESG Performance, and CSR Expenditure as a more comprehensive approach to explaining the relationship between ESG and firm value in the banking sector.

From a practical perspective, the findings suggest that ESG implementation can serve as an important strategy for enhancing firm value and strengthening investor confidence. Therefore, bank management should pay close attention to the quality of ESG disclosure, the intensity of sustainability reporting, ESG performance, and the effectiveness of CSR expenditure as integral components of corporate sustainability strategy. Future research is encouraged to empirically test the proposed framework, particularly within the banking sector in the Emerging Asia region. In addition, further studies should explore the roles of mediating variables such as transparency and moderating variables such as greenwashing, corporate governance, ownership structure, and institutional quality in order to develop a more comprehensive understanding of the relationship between ESG and firm value.

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REFERENCES

- [1] K. Szegedi, Y. Khan, dan C. Lentner, "Corporate Social Responsibility and Financial Performance: Evidence from Pakistani Listed Banks," *Sustainability*, vol. 12, no. 10, hlm. 4080, Mei 2020, doi: 10.3390/su12104080.
- [2] G. Birindelli, H. Chiappini, dan R. N.-U.-D. Jalal, "Greenwashing, bank financial performance and the moderating role of gender diversity," *Res. Int. Bus. Finance*, vol. 69, hlm. 102235, Apr 2024, doi: 10.1016/j.ribaf.2024.102235.
- [3] W. Azmi, M. K. Hassan, R. Houston, dan M. S. Karim, "ESG activities and banking performance: International evidence from emerging economies," *J. Int. Financ. Mark. Inst. Money*, vol. 70, hlm. 101277, Jan 2021, doi: 10.1016/j.intfin.2020.101277.
- [4] E. Menicucci dan G. Paolucci, "ESG dimensions and bank performance: an empirical investigation in Italy," *Corp. Gov. Int. J. Bus. Soc.*, vol. 23, no. 3, hlm. 563–586, Apr 2023, doi: 10.1108/CG-03-2022-0094.
- [5] L. Ivascu, W. Ali, R. Khalid, dan M. Raza, "The Impact of Competitive Strategies on Performance of Banking Sector; The Mediating Role of Corporate Social Responsibility and Operational Excellence," *Energies*, vol. 16, no. 1, hlm. 297, Des 2022, doi: 10.3390/en16010297.
- [6] I. Liaqat, J. Floreani, dan M. M. Naseer, "ESG performance and Bank stability: The role of national culture and formal institutions," *Res. Int. Bus. Finance*, vol. 81, hlm. 103214, Jan 2026, doi: 10.1016/j.ribaf.2025.103214.
- [7] M. H. Shakil, M. Tasnia, dan M. I. Mostafiz, "Board gender diversity and environmental, social and governance performance of US banks: moderating role of environmental, social and corporate governance controversies," *Int. J. Bank Mark.*, vol. 39, no. 4, hlm. 661–677, Jul 2021, doi: 10.1108/IJBM-04-2020-0210.
- [8] K. Q. T. Nguyen, "Corporate Social Responsibility and Bank's Performance under the Mediating Role of Customer Satisfaction and Bank Reputation," *Emerg. Sci. J.*, vol. 6, no. 6, hlm. 1409–1429, Sep 2022, doi: 10.28991/ESJ-2022-06-06-012.
- [9] A. Buallay, "Is sustainability reporting (ESG) associated with performance? Evidence from the European banking sector," *Manag. Environ. Qual. Int. J.*, vol. 30, no. 1, hlm. 98–115, Jan 2019, doi: 10.1108/MEQ-12-2017-0149.
- [10] S. Galletta, J. W. Goodell, S. Mazzù, dan A. Paltrinieri, "Bank reputation and operational risk: The impact of ESG," *Finance Res. Lett.*, vol. 51, hlm. 103494, Jan 2023, doi: 10.1016/j.frl.2022.103494.
- [11] Z.-H. Chen, Q. Ren, X. Gao, M. Kaakeh, dan K. G. Koedijk, "Can ESG performance shape dynamic risk spillovers? Evidence from Chinese carbon and equity markets," *Finance Res. Lett.*, vol. 72, hlm. 106547, Feb 2025, doi: 10.1016/j.frl.2024.106547.
- [12] V. Khandelwal, P. Sharma, dan V. Chotia, "ESG Disclosure and Firm Performance: An Asset-Pricing Approach," *Risks*, vol. 11, no. 6, hlm. 112, Jun 2023, doi: 10.3390/risks11060112.
- [13] M. J. Page dkk., "The PRISMA 2020 statement: an updated guideline for reporting systematic reviews," *BMJ*, hlm. n71, Mar 2021, doi: 10.1136/bmj.n71.

- [14] M. Miralles-Quirós, J. Miralles-Quirós, dan L. Valente Gonçalves, "The Value Relevance of Environmental, Social, and Governance Performance: The Brazilian Case," *Sustainability*, vol. 10, no. 3, hlm. 574, Feb 2018, doi: 10.3390/su10030574.
- [15] A. Mohamed Buallay, M. Al Marri, N. Nasrallah, A. Hamdan, E. Barone, dan Q. Zureigat, "Sustainability reporting in banking and financial services sector: a regional analysis," *J. Sustain. Finance Invest.*, vol. 13, no. 1, hlm. 776–801, Jan 2023, doi: 10.1080/20430795.2021.1978919.
- [16] M. S. Khamisu dan R. A. Paluri, "Emerging trends of environmental social and governance (ESG) disclosure research," *Clean. Prod. Lett.*, vol. 7, hlm. 100079, Des 2024, doi: 10.1016/j.clpl.2024.100079.
- [17] B. Buchetti, F. R. Arduino, dan S. Perdichizzi, "A literature review on corporate governance and ESG research: Emerging trends and future directions," *Int. Rev. Financ. Anal.*, vol. 97, hlm. 103759, Jan 2025, doi: 10.1016/j.irfa.2024.103759.
- [18] N. Naeem, S. Cankaya, dan R. Bildik, "Does ESG performance affect the financial performance of environmentally sensitive industries? A comparison between emerging and developed markets," *Borsa Istanbul. Rev.*, vol. 22, hlm. S128–S140, Des 2022, doi: 10.1016/j.bir.2022.11.014.
- [19] G. Zhou, L. Liu, dan S. Luo, "Sustainable development, ESG performance and company market value: Mediating effect of financial performance," *Bus. Strategy Environ.*, vol. 31, no. 7, hlm. 3371–3387, Nov 2022, doi: 10.1002/bse.3089.
- [20] A. Buallay, S. M. Fadel, J. Y. Al-Ajmi, dan S. Saudagaran, "Sustainability reporting and performance of MENA banks: is there a trade-off?," *Meas. Bus. Excell.*, vol. 24, no. 2, hlm. 197–221, Mar 2020, doi: 10.1108/MBE-09-2018-0078.
- [21] A. Mahmood, A. Mehmood, dan S. Terzani, "The effect of ESG disclosure on firm value in the European context".
- [22] G. Friede, T. Busch, dan A. Bassen, "ESG and financial performance: aggregated evidence from more than 2000 empirical studies," *J. Sustain. Finance Invest.*, vol. 5, no. 4, hlm. 210–233, Okt 2015, doi: 10.1080/20430795.2015.1118917.
- [23] A. Karim, M. S. W. ., Hassan, M. K. ., Houston, R., "ESG activities and banking performance: International evidence from emerging economies".
- [24] C.-H. Lee, R. C. Y. Chen, S.-W. Hung, dan C.-X. Yang, "Corporate Social Responsibility and Firm Value: The Mediating Role of Investor Recognition," *Emerg. Mark. Finance Trade*, vol. 56, no. 5, hlm. 1043–1054, Apr 2020, doi: 10.1080/1540496X.2018.1501676.
- [25] P. Mongeon dan A. Paul-Hus, "The journal coverage of Web of Science and Scopus: a comparative analysis," *Scientometrics*, vol. 106, no. 1, hlm. 213–228, Jan 2016, doi: 10.1007/s11192-015-1765-5.
- [26] W. M. W. Mohammad dan S. Wasiuzzaman, "Environmental, Social and Governance (ESG) disclosure, competitive advantage and performance of firms in Malaysia," *Clean. Environ. Syst.*, vol. 2, hlm. 100015, Jun 2021, doi: 10.1016/j.cesys.2021.100015.
- [27] G. Sariyer dan D. Taşkın, "Clustering of firms based on environmental, social, and governance ratings: Evidence from BIST sustainability index," *Borsa Istanbul. Rev.*, vol. 22, hlm. S180–S188, Des 2022, doi: 10.1016/j.bir.2022.10.009.
- [28] M. N. Nordiansyah, P. I. M. Susilowati, A. Amiruddin, dan D. Darmayanti, "Examining the Relationship between ESG Disclosure, Financial Performance, and Company Value," *Amkop Manag. Account. Rev. AMAR*, vol. 5, no. 1, hlm. 105–115, Mei 2025, doi: 10.37531/amar.v5i1.2453.
- [29] X. Bai, J. Han, Y. Ma, dan W. Zhang, "ESG performance, institutional investors' preference and financing constraints: Empirical evidence from China," *Borsa Istanbul. Rev.*, vol. 22, hlm. S157–S168, Des 2022, doi: 10.1016/j.bir.2022.11.013.
- [30] S. Sulaiman dkk., "How ESG Disclosure Shapes Financial Resilience and Market Value of Indonesian Banks?," *Owner*, vol. 10, no. 1, hlm. 212–233, Jan 2026, doi: 10.33395/owner.v10i1.2851.
- [31] Moch. Rusli, A. Wati, dan H. M. H. Habibie, "Do Sustainability Disclosures Matter? An Empirical Analysis of Banks' Financial Performance in Indonesia and Malaysia," *MALIA J. Islam. Bank. Finance*, vol. 9, no. 1, hlm. 67–82, Agu 2025, doi: 10.21043/malia.v9i1.33735.
- [32] F. K. Putra dan M. A. Budastra, "THE MEDIATING ROLE OF FINANCIAL PERFORMANCE IN ENVIRONMENTAL, SOCIAL, AND GOVERNANCE (ESG) AND FIRM VALUE," *J. Akunt. Bisnis*, vol. 17, no. 1, hlm. 1, Feb 2024, doi: 10.30813/jab.v17i1.4931.
- [33] A. B. Morales, M. P. Laurini, dan A. Vrieling, "Risk assessment from space: Integrating satellite-derived insights for ESG financial decisions," *Finance Res. Lett.*, vol. 76, hlm. 106951, Apr 2025, doi: 10.1016/j.frl.2025.106951.
- [34] F. J. García-Peñalvo, "Desarrollo de estados de la cuestión robustos: Revisiones Sistemáticas de Literatura," *Educ. Knowl. Soc. EKS*, vol. 23, hlm. e28600, Apr 2022, doi: 10.14201/eks.28600.
- [35] N. Donthu, S. Kumar, D. Mukherjee, N. Pandey, dan W. M. Lim, "How to conduct a bibliometric analysis: An overview and guidelines," *J. Bus. Res.*, vol. 133, hlm. 285–296, Sep 2021, doi: 10.1016/j.jbusres.2021.04.070.
- [36] M. Aria dan C. Cuccurullo, "bibliometrix : An R-tool for comprehensive science mapping analysis," *J. Informetr.*, vol. 11, no. 4, hlm. 959–975, Nov 2017, doi: 10.1016/j.joi.2017.08.007.
- [37] S. Kraus dkk., "Literature reviews as independent studies: guidelines for academic practice," *Rev. Manag. Sci.*, vol. 16, no. 8, hlm. 2577–2595, Nov 2022, doi: 10.1007/s11846-022-00588-8.
- [38] H. Snyder, "Literature review as a research methodology: An overview and guidelines," *J. Bus. Res.*, vol. 104, hlm. 333–339, Nov 2019, doi: 10.1016/j.jbusres.2019.07.039.
- [39] J. Baas, M. Schotten, A. Plume, G. Côté, dan R. Karimi, "Scopus as a curated, high-quality bibliometric data source for academic research in quantitative science studies," *Quant. Sci. Stud.*, vol. 1, no. 1, hlm. 377–386, Feb 2020, doi: 10.1162/qss_a_00019.
- [40] N. J. Van Eck dan L. Waltman, "Software survey: VOSviewer, a computer program for bibliometric mapping," *Scientometrics*, vol. 84, no. 2, hlm. 523–538, Agu 2010, doi: 10.1007/s11192-009-0146-3.

- [41] M.-H. Tsai, "A Peer Review System for BIM Learning," *Sustainability*, vol. 11, no. 20, hlm. 5747, Okt 2019, doi: 10.3390/su11205747.
- [42] M. Abu Hussain, M. F. Alsayegh, dan H. Boshnak, "The Role of ESG Disclosure in Enhancing Profitability and Market Value: Insights from Saudi Arabia's Corporate Landscape," 2024, SSRN. doi: 10.2139/ssrn.5002364.
- [43] A. A. López-Toro, E. M. Sánchez-Teba, M. D. Benítez-Márquez, dan M. Rodríguez-Fernández, "Influence of ESGC Indicators on Financial Performance of Listed Pharmaceutical Companies," *Int. J. Environ. Res. Public. Health*, vol. 18, no. 9, hlm. 4556, Apr 2021, doi: 10.3390/ijerph18094556.
- [44] A. M. Gerged, R. Salem, dan E. Beddewela, "How does transparency into global sustainability initiatives influence firm value? Insights from Anglo-American countries," *Bus. Strategy Environ.*, vol. 32, no. 7, hlm. 4519–4547, Nov 2023, doi: 10.1002/bse.3379.
- [45] S. E-Vahdati, W. N. Wan-Hussin, dan M. S. Mohd Ariffin, "Sustainability performance and board compensation in Japan and ASEAN-5 countries," *Borsa Istanb. Rev.*, vol. 22, hlm. S189–S199, Des 2022, doi: 10.1016/j.bir.2022.12.004.
- [46] I. Shaikh, "ENVIRONMENTAL, SOCIAL, AND GOVERNANCE (ESG) PRACTICE AND FIRM PERFORMANCE: AN INTERNATIONAL EVIDENCE," *J. Bus. Econ. Manag.*, vol. 23, no. 1, hlm. 218–237, Jan 2022, doi: 10.3846/jbem.2022.16202.
- [47] C. Zhang dan N. H. B. N. Azman, "Environmental Social and Governance (ESG) Performance of Corporate Value in Different Periods," *Bus. Manag. Strategy*, vol. 14, no. 2, hlm. 85, Okt 2023, doi: 10.5296/bms.v14i2.21233.
- [48] M. Li, "A Study of the Relationship Between ESG Performance and Firm Valuation," *Adv. Econ. Manag. Polit. Sci.*, vol. 74, no. 1, hlm. 259–267, Apr 2024, doi: 10.54254/2754-1169/74/20241564.
- [49] B. Yoon, J. H. Lee, dan R. Byun, "Does ESG Performance Enhance Firm Value? Evidence from Korea," *Sustainability*, vol. 10, no. 10, hlm. 3635, Okt 2018, doi: 10.3390/su10103635.
- [50] S. Galletta, J. W. Goodell, S. Mazzù, dan A. Paltrinieri, "Bank reputation and operational risk: The impact of ESG," *Finance Res. Lett.*, vol. 51, hlm. 103494, Jan 2023, doi: 10.1016/j.frl.2022.103494.

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