Does Mediation Matter in Explaining the Relationship between ESG and Bank Financial Performance? A Scoping Review

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Abstract: This study identifies and synthesizes patterns and trends in the emerging body of literature of environmental, social, and corporate governance (ESG) endeavors on the financial performance (FP) of banking firms. It specifically aims to highlight the relationship of ESG–FP. The scoping review analysis is based on 1856 journal articles from two online databases, namely Scopus and Web of Science (WoS) for the period of 2015 to 2023. The analysis reveals inconsistent results regarding the ESG–FP relationship, with some studies reporting positive impacts, others negative, and several showing no significant relationship. Notably, non-linear studies consistently identify an inverted U-shaped relationship, suggesting that there is a threshold level of ESG investment beyond which additional investments do not yield proportional benefits. This indicates that threshold-based policies may be more effective at maximizing ESG benefits. The study also found that numerous studies suggested exploring the indirect effect or mediating variables in the ESG–FP relationship to better explain the FP variance. Thus, the study identifies a need for future research to explore indirect relationships by testing potential moderators or mediators, particularly bank risk-taking, to better understand the ESG–FP dynamics. Policymakers and regulators should adopt non-linear analytical approaches and set threshold-based ESG investment policies, while bank management should strategically invest in ESG activities, integrating ESG considerations into risk management frameworks. Continuous monitoring and evaluation, along with stakeholder engagement, are crucial for optimizing ESG investments. By adopting these strategies, banks can enhance financial performance and contribute to sustainable and responsible banking practices.

Keywords: environmental; financial performance; governance; social; scoping review

JEL Classification: G19; G21; G32; M14; Q56

1. Introduction

Environmental, social, and corporate governance (ESG) is a set of standards first developed by the United Nations (UN) in collaboration with the finance industry Miralles-Quirós et al. (2019) to screen potential investments or third parties (Gutiérrez-Ponce and Wibowo 2023). From the UN officials’ perspective, ESG could safeguard firms from financial risks involving worker disputes, human rights issues, poor governance, and climate change (Menicucci and Paolucci 2023). In this vein, ESG considers how a firm (i) protects the environment and associated policies and (ii) manages its relationships with the community, customers, employees, and business suppliers (Chang et al. 2021). Organizational leadership, internal controls, audits, and shareholder rights are also regarded in ESG.

Pillar E (environmental) of the ESG proves beneficial from an environmental standpoint. This concept sheds light on different climate issues and promotes the organizational adoption of eco-friendly practices and policies (Kolsi et al. 2023). On social grounds i.e., Pillar S (social), employees and shareholders are treated equally in terms of health and safety (El Khoury et al. 2023), whilst Pillar G (corporate governance) prevents ineffective
business practices while stimulating organizational innovativeness for diverse opportunities and employment. Overall, firms could be a part of the solution or problem based on ESG developments (Liu et al. 2022).

In response to stakeholder concerns over organizational consequences at the environmental and social levels, the relationship between ESG and financial institutions (banks) has become inextricably linked. ESG activities now encompass economic considerations in addition to ethical ones because of their direct relationship on economic stability (Friede et al. 2015). Financial institutions may find it difficult to meet client and investor expectations on the incorporation of ESG activities into their lending, investing, and product portfolios (Liu et al. 2022). Because of the increasing demand from investors for sustainable goods and the pressure from regulatory agencies, banks are required to take ESG risks into account in their risk management frameworks (DasGupta 2021). According to Chen and Xie (2022), financial institutions ought to be seen as drivers of sustainable development and sound financial principles. To meet the requirements and assist banks and government agencies, several financial intermediaries have started integrating ESG activities into their business plans, risk management procedures, and credit policies (Belasri et al. 2020).

For researchers as well as practitioners, the conflicting results on how ESG activities affect banks financial performance provide a serious obstacle. Understanding the link between ESG activities and financial performance indicators is complicated since some research results indicate a linear relationship, while others imply a non-linear association. Moreover, the existence of contradictory data emphasizes the necessity of investigating plausible moderating or mediating factors that can impact the relationship between ESG activities and financial performance in the banking industry. To encourage sustainable and ethical banking practices, legislators, investors, and bank executives must have a thorough understanding of these linkages and the variables that might affect them.

This study focuses on the banking sector for several reasons. In the global economy, the banking industry acts as a vital intermediate, distributing funds, controlling risk, and promoting economic expansion. The banking industry is subject to increased regulatory control and scrutiny in relation to ESG concerns because of its systemic significance. Furthermore, banks affect many stakeholders directly and indirectly, such as shareholders, clients, staff members, and society at large. To ensure long-term sustainability, resilience, and value generation, it is crucial to comprehend the link between ESG activities and financial performance in the banking industry. Furthermore, the type and strength of the link between ESG activities and financial performance may be influenced by banks’ particular business models, risk profiles, and stakeholder dynamics, which call for special consideration in the study literature.

As a result, the aim of this research topic is to analyze the relationship between ESG activities and bank financial performance. It does so by exploring in both linear and non-linear connections as well as possible moderators or mediators within the banking industry. This aim will be achieved by examining past literature on the ESG–FP relationship and pave the path for further research. Specifically, the emerging body of knowledge was synthesized via a scoping review to identify gaps that require further examination regarding the non-linear as well as indirect relationships that explain how ESG affect banks financial performance. This study also emphasized the theories underpinning past empirical work on ESG and financial performance. The diversity of research areas has gradually expanded since 2015 to become the current trend. The year 2015 also marked the commencement of the UN Sustainable Development Goals (SDG) (2015–2030), which significantly drive the global sustainability agenda, including ESG. As such, this study outlined the research trend of ESG and banks financial performance for the past seven years (2015–2022) by highlighting past study measurements, methods, conclusions, and recommendations.

The findings of this scoping review reveal several critical insights into the relationship between ESG activities and financial performance in banking firms. The review highlights significant inconsistencies in the literature regarding the ESG–FP relationship. While some
studies report positive impacts of ESG activities on financial performance, others find negative effects or no significant relationship at all. This inconsistency suggests a complex and multifaceted relationship that cannot be adequately captured by a one-size-fits-all approach. A key finding is the identification of non-linear dynamics in the ESG–FP relationship. Specifically, several studies report an inverted U-shaped relationship, indicating that there is an optimal level of ESG investment. Beyond this threshold, additional ESG investments may not yield proportional benefits and could even be detrimental. This suggests that a more nuanced understanding of the ESG–FP relationship is necessary, one that accounts for the diminishing returns of ESG investments. The review also emphasizes the importance of exploring indirect relationships in the ESG–FP nexus. It highlights the potential role of moderators and mediators, such as bank risk-taking, in influencing the impact of ESG activities on financial performance. This indicates that future research should focus on these indirect effects to provide a more comprehensive understanding of how ESG activities affect financial performance.

The implications of this study are profound for academics, business professionals, legislators, and investors. This research advances theoretical knowledge by elucidating the intricate connections between sustainable practices and financial outcomes, thereby synthesizing the body of research on the influence of ESG on bank financial performance. Methodologically, it provides an in-depth understanding of both linear and non-linear interactions between ESG and financial performance, offering valuable insights into the complex nature of these relationships. Additionally, the study highlights contextual elements that might affect the ESG–FP relationship by examining potential moderating or mediating mechanisms within the banking industry, such as risk-taking, risk management, regulatory frameworks, corporate governance structures, and stakeholder engagement strategies. These findings can inform the development of sustainable banking practices and investment strategies that incorporate governance, social, and environmental factors. For policymakers, the study suggests the need for flexible regulatory frameworks that recognize non-linear ESG impacts and support threshold-based ESG investment policies. For bank management, the research underscores the importance of strategically integrating ESG considerations into risk management frameworks and continuously monitoring and evaluating ESG investments to optimize financial performance. Overall, this study not only enriches the literature by summarizing current research areas, outcomes, and measurement methods used in examining ESG–FP relationships but also provides practical guidelines for fostering responsible banking and sustainable finance practices.

The paper is organized into several sections: Section 1 provides a brief overview of the subject matter; Section 2 discusses the scoping review methodology; Section 3 elaborates on the scoping review outcomes and synthesizes the answers to the research questions, presents in-depth analysis, and outlines the agenda for future research on ESG in banking firms; Section 4 concludes the study and provides the implications of findings.

2. Methodology

In this study, a scoping review is chosen as the preferred method over other types of reviews, such as systematic literature review (SLR), bibliometric analysis, narrative review, or critical review. This is because a scoping review is exceptionally well suited for investigating comprehensive research questions, mapping the existing literature across different study designs, and identifying areas that require further research. This approach’s adaptability allows for the integration of several sources of evidence, making it ideal for topics or themes that have an abundant and varied literature. Scoping review provides a comprehensive summary that may direct future research, policy, and practice, especially in fields where the body of information is always changing. Scoping review provide a more comprehensive viewpoint compared to bibliometric analysis, which focus more on quantitative method, or SLR, which often have a narrower focus.

This scoping review specifically examined the relationship between ESG activities and financial performance. The study used the approach developed by Arksey and O’Malley...
(2005), which systematically evaluates the extent and breadth of the available literature in a particular research field. Figure 1 depicts the scoping review process, which seeks to ascertain the characteristics and scope of research evidence, usually including current investigations (Grant and Booth 2009). The decision to use a scoping review for this project is carefully explained due to its distinct benefits over alternative review approaches. Unlike SLR, which have a rigid and limited scope, the scoping review method offers more flexibility in investigating a wide range of research enquiries and study designs. This makes it especially appropriate for emerging and rapidly developing fields such as ESG factors and financial performance in the banking industry. The narrative and critical reviews, however helpful, sometimes lack the systematic methodology necessary to thoroughly analyze and identify gaps in the available research. Bibliometric analyses, while they possess quantitative power, have limitations in their capacity to provide a comprehensive synthesis of many types of evidence.

Figure 1. The scoping review process. Source: Adapted from Arksey and O’Malley (2005).

This scoping review uses Arksey and O’Malley’s (2005) methodology to systematically and transparently evaluate the extent and comprehensiveness of research on ESG and financial performance. This approach allows for the identification of any existing gaps in the literature and provides guidance for future research gaps. This technique is especially beneficial in the field of ESG, where the literature is not only varied but also continuously changing. It necessitates a system that can incorporate different kinds of studies and new information. Therefore, the scoping review is the most appropriate technique for this study, since it offers a thorough and inclusive summary that may guide policy, practice, and future research in an area that is constantly evolving and highly intricate.

2.1. Identifying the Research Questions

The current study topic, which involves the effect of ESG on banks’ financial performance, has not been extensively reviewed given its relative novelty and ongoing developments. Comprehensive research question(s) are necessary to perform further examination. In line with Table 1, this research used the PICOC approach to develop the following research questions: (i) “What is the relationship between ESG and banks’ financial performance?” and (ii) “What is the future research regarding the ESG and banks’ financial performance?” Table 2 depicts the research questions for the scoping review.

Table 1. Research questions based on PICOC.

<table>
<thead>
<tr>
<th>PICOC</th>
<th>Rule of Thumb</th>
<th>Study Context</th>
</tr>
</thead>
<tbody>
<tr>
<td>Problem (P)</td>
<td>What is the problem to be addressed?</td>
<td>Banks financial performance</td>
</tr>
<tr>
<td>Intervention (I)</td>
<td>What is the relevant treatment or exposure?</td>
<td>Change/improvement in financial performance with ESG</td>
</tr>
<tr>
<td>Comparison (C)</td>
<td>What is the alternative to intervention?</td>
<td>Country and banks</td>
</tr>
<tr>
<td></td>
<td>Alternative theories or methods.</td>
<td></td>
</tr>
<tr>
<td>Outcome (O)</td>
<td>What is the relevant impact?</td>
<td>ESG impacts banks’ financial performance</td>
</tr>
<tr>
<td>Context (C)</td>
<td>Type of study (optional) or scope.</td>
<td>Banking institutions worldwide</td>
</tr>
</tbody>
</table>
Table 2. Research questions and objectives based on PICOC.

<table>
<thead>
<tr>
<th>No.</th>
<th>Research Question (RQ)</th>
<th>Research Objective (RO)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>What is the relationship between ESG activities and banks’ financial performance?</td>
<td>To analyze the relationship between ESG activities and banks’ financial performance.</td>
</tr>
<tr>
<td>2.</td>
<td>What is the future research gap regarding ESG activities and banks’ financial performance?</td>
<td>To identify future research gaps regarding ESG activities and banks’ financial performance.</td>
</tr>
</tbody>
</table>

2.2. Identifying Relevant Studies

Peters et al. (2022) claimed that at least two databases are necessary to perform a scoping review. Hence, this study utilized relevant articles from Web of Science and Scopus. A four-step process was employed to form the main search string and keywords. Step 1 involves searching for ESG synonyms from websites resembling Saurus, while Step 2 entails collecting synonymous keywords from WOS. Meanwhile, Step 3 involves eliciting expert opinions on the proper keywords to be used for the topic of interest. Step 4 entails collecting synonymous keywords from other articles on the same topic. The main author prepared and refined the search string for the topic’s relevant keywords with the co-authors’ supervision to maximize the topic coverage.

Several keywords in the search string, such as (“ESG” OR “environment*” OR “governan*” OR “social” OR (“environment*” AND “governan*” AND “social”)) AND (“bank* performance” OR “bank* efficiency” OR “bank* financial performance”) were used to search through the databases. Given the significant increase in global research on ESG and sustainability following the launch of the UN’s SDGs in 2015, only titles published from 2015 onwards were selected. Table 3 depicts the strategy used to search terms on the impact of ESG on banks’ financial performance.

Table 3. Research search string.

<table>
<thead>
<tr>
<th>Search Directory</th>
<th>Search String</th>
<th>Total Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>WoS</td>
<td>TS = (((“ESG” OR “ESG integration” OR “ESG practices” OR “environment*” OR “governan*” OR “social” OR (“environment*” AND “governan*” AND “social” AND “corporate social responsibility”)) AND (“bank* performance” OR “bank* efficiency” OR “bank* financial performance”)))</td>
<td>901</td>
</tr>
<tr>
<td>Scopus</td>
<td>TITLE-ABS-KEY(“ESG” OR “ESG integration” OR “ESG practices” OR “environment*” OR “governan*” OR “social” OR (“environment*” AND “governan*” AND “social” AND “corporate social responsibility”)) AND (“bank* performance” OR “bank* efficiency” OR “bank* financial performance”))</td>
<td>955</td>
</tr>
</tbody>
</table>

Note: Search period: As of June 2023.

2.3. Screening of Studies

According to Arksey and O’Malley (2005), studies should be screened and selected based on clear criteria. The study findings were presented following the PRISMA guidelines. Two research team members independently screened the article titles and abstracts based on pre-determined inclusion and exclusion criteria. Two different databases (WoS and Scopus) were used to extract relevant articles that provide key insights and a sound understanding of the topic under study (Peters et al. 2022). Utilizing both the Web of Science (WoS) and Scopus databases in a scoping review guarantees thorough coverage and improves the research’s reliability. This dual method reduces the constraints and prejudices that are naturally present in each database, enables the verification of data across different sources, and guarantees the incorporation of a diverse array of literature, including non-traditional publications and multidisciplinary research. Therefore, this approach offers a more dependable and comprehensive comprehension of the subject, as shown by the research conducted by Peters et al. (2022).
The extracted articles were filtered based on five inclusion criteria: (i) published between 2015 and 2023; (ii) published in the English language; (iii) emphasis on ESG; (iv) focus on financial performance; (v) prioritization of banking firms. Other articles were excluded based on the following criteria: (i) the unavailability of a full text; (ii) the articles did not reflect ESG–FP; (iii) systematic studies, such as bibliometric research or scoping reviews, books or overview studies, hypothetical views, proceeding papers, and overlapping studies.

Notably, 1856 titles were extracted and exported to the EndNote 21 software based on the inclusion criteria and screened thrice by two authors independently. A total of 400 duplicate articles were removed in the first round, while 1254 counterparts were disregarded in the second round. Meanwhile, 157 full-text articles were screened in the third round to finalize eligible articles that complied with the inclusion criteria (see Figure 2). Overall, 18 journal articles were finalized for the scoping review.

Figure 2. PRISMA flow diagram. Source: Moher et al. (2009).
2.4. Charting the Data

The data derived from the selected studies were summarized. Specifically, information on financial performance measures, the studies applying the measures, author, samples, underpinning theories, and key findings were tabulated.

3. Reporting the Results

The key findings derived from the charting process were summarized, synthesized, and reported. The first author who filtered and screened the titles only found 18 titles that could address the previously developed research questions post-inclusion and exclusion criteria. Meanwhile, the co-authors performed quality appraisals for the final sample. Table 4 presents the finalized titles selected for discussion.

Table 4. Summary of literature on the relationship of ESG–FP in banking firms.

<table>
<thead>
<tr>
<th>Author (Year)</th>
<th>Region/Country</th>
<th>Period of Study</th>
<th>Underlying Theory</th>
<th>Relationship of ESG and Financial Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Al-Jalahma et al. (2020)</td>
<td>GCC</td>
<td>2016–2019</td>
<td>✓</td>
<td>Stakeholder Theory</td>
</tr>
<tr>
<td>Buallay et al. (2020)</td>
<td>MENA</td>
<td>2008–2017</td>
<td>✓</td>
<td>Stakeholder Theory</td>
</tr>
<tr>
<td>Buallay (2020)</td>
<td>Developed and developing countries</td>
<td>2009–2016</td>
<td>✓</td>
<td>Social</td>
</tr>
<tr>
<td>Kolsi et al. (2023)</td>
<td>U.S.</td>
<td>2010–2019</td>
<td>✓</td>
<td>Neoclassic Theory</td>
</tr>
<tr>
<td>Menicucci and Paolucci (2023)</td>
<td>Italy</td>
<td>2016–2020</td>
<td>✓</td>
<td>Agency Theory</td>
</tr>
<tr>
<td>Miralles-Quirós et al. (2019)</td>
<td>Commercial banks listed on 20 different stock markets</td>
<td>2002–2015</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Tunio et al. (2021)</td>
<td>China</td>
<td>2008–2019</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Chang et al. (2021)</td>
<td>60 Asian developed economies and 85 developing economies</td>
<td>2015–2018</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>
As most studies focus on the positive impact of ESG–FP and use stakeholder theory to explain the ESG–FP relationship, this study provides a segregation of theories presented, whereby Table 4 presents stakeholders’ theory and other theories to compare studies that used other theories than the very broadly used theory of stakeholders. The aim of this is to compare the theories that expected a negative impact. Furthermore, in examining the relationship between ESG and financial performance in banking firms, it is crucial to understand the theoretical foundations that underpin these studies. Different theories provide distinct expectations about the ESG–FP relationship. For instance, in Table 4a, Stakeholder Theory posits that ESG activities should positively impact financial performance by addressing the needs of various stakeholders, thereby enhancing the firm’s reputation and operational efficiency. In contrast, theories such as Managerial Opportunism Theory suggest that ESG activities may negatively impact financial performance due to potential costs and inefficiencies associated with managers pursuing their own interests under the guise of ESG initiatives. Understanding these theoretical perspectives is essential to contextualize the mixed results observed in empirical studies and to develop a comprehensive under-
standing of the ESG–FP relationship. This justification for segregating the theories helps to clarify why different studies report varying impacts of ESG on financial performance.

3.1. Identified Literature on Esg and Bank Financial Performance

The literature search led to the identification of 1856 titles via WoS and Scopus. Both WoS and Scopus contributed to 901 and 955 titles, respectively. A total of 1654 irrelevant studies were excluded, with 356 of them constituting duplicated articles. The remaining 157 papers were then screened by title and abstract, of which 138 were removed. Notably, 67 unrelated titles, 8 review papers, 7 books or overview studies, 28 hypothetical views, 5 articles without access, 5 proceeding papers, and 18 redundant titles were also omitted. The pre-defined inclusion and exclusion criteria established in the study protocol (see Figure 2) determined the exclusion of these articles. The final selection of articles depended on their relevance and suitability in addressing the current research question. Summarily, 18 studies were deemed appropriate for this review.

3.2. Country Evidence

This scoping review aimed to examine and discuss the ESG impacts on financial performance worldwide to provide a clear depiction of the existing literature via the Arksey and O’Malley (2005) framework and facilitate future works. The study included global studies between 2015 and 2023. Only articles on ESG and financial performance in the banking sector were included. Numerous locations and contexts, including Europe, the Middle East, and North Africa (MENA), the US, China, and developing economies, were the subject of studies. This suggests that there is a widespread desire to comprehend the link between ESG and financial performance in various banking systems, regulatory frameworks, and economic situations. Various research publications have varied study periods, ranging from 2002 to 2023.

3.3. Underlying Theory

Research utilizes many theoretical frameworks, including Stakeholder Theory, Legitimacy Theory, Scientific Management Theory, Cost of Capital Reduction, Agency Theory, Managerial Opportunism Theory, Neoclassic Theory, and Trade-off Theory, to understand the connection between ESG activities and financial performance. These theoretical stances offer lenses through which researchers evaluate and make sense of the empirical data, so influencing the questions they pose, the theories they put out, and the methods of analysis they use.

In explaining the dynamics of ESG and shareholder value, the stakeholder theory underpinned the ESG–FP relationship in this study (Dimson et al. 2020) (see Table 4). Banks should perform business activities that consider and fulfill the interest of shareholders, who are key stakeholders in banks. Consumers who boycott bank products and services may decrease shareholder value, incur fines (Bătae et al. 2021), and impact the overall bank financial performance. The legitimacy theory and resource-based view empirically justified the positive ESG–FP relationship.

The inconclusive outcomes on the ESG impact on financial performance led to theoretical contradictions. For example, the cost of capital reduction and managerial opportunism theory perceive ESG activities as a cost-reducing liquidity, which adversely affects bank financial performance and increases bank risk-taking (Chang et al. 2021). Other theories proposed a positive impact of ESG on financial performance. This inconsistency led the authors to suggest a more specific theory that outlines ESG from managerial and economic perspectives and the criteria that could enable ESG to affect banks financial performance positively or negatively.

The suggestion of the developing theoretical framework aims to bring these opposing points of view closer together by providing a more context-specific understanding of the interactions between economic and managerial elements and environmental factors. This suggested theory seeks to offer a more precise and thorough explanation of how ESG affects
banks financial performance by outlining certain criteria that take into consideration the complex and multidimensional character of ESG activities. This theoretical viewpoint could provide insightful guidance for future research projects and strategic decision-making for the banking sector as well as academia, as academics continue to develop and polish it.

3.4. Studies Analysis

This scoping review only included past quantitative works on the ESG impact on banking firms’ financial performance. All 18 finalized articles used panel data for analysis. Table 4a summarizes 14 studies using static panel data methods, while 4b depicts four studies with dynamic panel data. Overall, the ESG impacts were inextricably linked to bank financial performance, albeit with variances at national and regional levels. Scholars utilize an array of analytical techniques, including static and dynamic panel data analysis, to investigate the link between ESG and financial success. While dynamic panel data analysis uses time-series data to capture temporal dynamics and potential lagged effects, static panel data analysis looks at cross-sectional data over a certain period.

3.5. Static Panel Data Analysis

There were 14 studies that applied quantitative static panel analysis research design to determine the comparative results on ESG and financial performance (Al-Jalahma et al. 2020; Birindelli et al. 2018; Buallay et al. 2020; Buallay 2020; Daszyńska-zygadło et al. 2021; Fatemi et al. 2018; Kolsi et al. 2023; Menicucci and Paolucci 2023; Miralles-Quirós et al. 2019; Rossi et al. 2021; Shakil et al. 2019; Tunio et al. 2021; Chang et al. 2021; Buallay 2019; Gutiérrez-Ponce and Wibowo 2023; Di Tommaso and Thornton 2020). Despite using a similar research design, the instruments employed to support their conclusions varied based on the study objectives.

The above studies that applied static panel data analysis revealed that ESG significantly and positively affected financial performance (Buallay et al. 2020; Buallay 2020; Buallay 2019). The studies were primarily conducted in developed nations, such as the United States and the European Union. Meanwhile, empirical works performed in emerging economies, such as Indonesia and the Gulf Cooperation Council (Al-Jalahma et al. 2020; Buallay 2020; Gutiérrez-Ponce and Wibowo 2023) disclosed a negative and direct effect of ESG and sustainability reporting on financial performance. Inconsistent results are palpable for each pillar.

3.6. Dynamic Panel Data Analysis

Four out of the 18 articles applied quantitative dynamic panel analysis as a study design (Azmi et al. 2021; El Khoury et al. 2023; Ersoy et al. 2022; Nizam et al. 2019). All four studies that applied quantitative dynamic panel data analysis revealed a non-linear impact of ESG on financial performance.

Different viewpoints on the connection between ESG and financial performance in banking organizations are shown by the literature review’s findings. The findings of El Khoury et al. (2023) and Azmi et al. (2021) provide evidence in favor of the existence of non-linear connections between bank value and ESG operations. El Khoury et al. (2023) contend that incremental ESG investments are beneficial up until they reach a tipping point, in contrast to Azmi et al. (2021), who show a clear non-linear link with bank value positively influenced by low levels of ESG engagement but diminishing returns observed at higher levels.

Ersoy et al. (2022) observed an intriguing inverted U-shaped association between market value and ESG. This suggests that there is a positive correlation between market value and ESG up to a certain threshold, beyond which there may be diminishing benefits to further rises in ESG. On the other hand, Nizam et al. (2019) presented an alternative viewpoint, emphasizing the positive influence of financing availability on banks’ financial outcomes, specifically with return on equity (ROE). This implies that although ESG vari-
ables could be important, financial success results are also strongly influenced by other factors including financial availability and managerial caliber.

These results emphasize how intricate the link between ESG and financial performance is and how crucial it is to take contextual elements like geographical variances, theoretical frameworks, and methodological methods into account. Non-linear connections indicate that the influence of ESG issues on financial success might differ according to the degree of involvement, and that there could be tipping points beyond which more expenditures could result in decreasing benefits.

Furthermore, the various results from different research highlight the necessity of a complex and situation-specific comprehension of the relationship between ESG and financial success. To give a thorough knowledge of sustainable banking practices and their consequences for organizational performance, future studies should carry out more exploration of these dynamics, considering the interaction between ESG variables, financial performance measurements, and other contextual elements.

3.7. In-Depth Analysis of the Relationship between ESG and Financial Performance in Banking Firms

3.7.1. Direct Relationship of ESG–FP

There is a mixture of evidence in the literature on the direct relationship—both positive and negative—between ESG and financial performance in banking firms. A quantity of research demonstrates a favorable correlation between financial performance and ESG performance (Cohen 2023). In the MENA region, Buallay et al. (2020) discovered that ESG activities had a positive impact on performance and shareholders’ economic advantages. Similarly, Daszyńska-Żygadło et al. (2021) noted that governance performance had a positive influence on banks financial performance globally. Shakil et al. (2019) also found that financial performance in developing market banks was positively correlated with environmental and social performance. These results imply that robust ESG can improve financial performance indicators in banking companies, including profitability, market performance, and operational effectiveness.

On the other hand, other studies indicate that there is a negative correlation between ESG activities and financial performance (Anderson et al. 2023). According to Gutiérrez-Ponce and Wibowo (2023), ESG variables have a detrimental effect on financial measures in Indonesian banks, such as return on equity (ROE) and return on assets (ROA), with governance issues having a significant influence on these metrics. Furthermore, Di Tommaso and Thornton (2020) discovered a negative correlation between high ESG ratings and decreased bank value, suggesting a possible drawback to an over-fixation on ESG indicators. These results highlight the significance of considering the complex interactions between ESG and financial performance, as well as the necessity of more studies to clarify the fundamental processes underpinning these correlations.

3.7.2. Linear Relationship of ESG–FP

A more complex interpretation of the linear influence is suggested by this research on the link between ESG activities and financial performance in banking firms. A linear link between ESG activities and financial performance has been demonstrated in some research; however, other studies show variable degrees of linearity. Buallay (2020), for example, found a linear relationship between ESG and market performance in both established and developing nations, underscoring the ongoing beneficial impact of ESG activities on financial performance results. Chang et al. (2021), on the other hand, discovered that the linear model indicated that the governance score had a significant impact on banking performance, indicating a linear relationship between financial performance measures and governance activities.

These results suggest that there could be linear correlations between some ESG activities such as governance and financial performance metrics. However, according to the setting, underlying ideas, and methodological techniques used in the studies, the existence
and degree of linear influences may differ. To confirm the existence of linear correlations between ESG activities and financial performance in banking firms, more research is required to investigate these dynamics. The above studies were unable to explain ESG and its relationship to banks financial performance as the empirical results were inconclusive. Essentially, the outcomes may vary across countries.

3.7.3. Non-Linear Relationship of ESG–FP

The results of studies using dynamic panel data analysis point to a nonlinear link between banking firms’ ESG activities and financial performance. In emerging economies, Azmi et al. (2021) found unmistakable evidence of a non-linear relationship between bank value and ESG activities. The bank value was positively impacted by modest levels of ESG activities; however, a non-linear pattern of declining benefits to scale was seen. Likewise, El Khoury et al. (2023) discovered that increasing ESG activities were beneficial until a particular threshold, at which time increasing ESG activity resulted in declining returns. The analysis revealed notable patterns in many ESG pillars, such as the convex association between market returns and the environmental pillar and the concave relationship between accounting performance and the governance pillar. These results demonstrate the complexity of the link between ESG and financial performance and emphasize how crucial it is to pinpoint “ESG tipping moments” or essential thresholds to maximize investment choices and predict efficient returns for banking companies. Ersoy et al. (2022) revealed an inverse U-shaped correlation between ESG activities and market value. According to this research, while raising ESG activities initially increases market value, there can be a threshold that must be crossed before additional improvements in ESG performance result in declining returns or even adverse effects. The necessity for banks to carefully balance their ESG activities with financial goals to maximize market value while abiding by ESG standards is shown by this non-linear trend. Furthermore, by indicating a non-linear link between financial outcomes and financial access to financing, Nizam et al. (2019) emphasized the significance of financial access in favorably influencing banks financial performance. When taken as a whole, these studies offer insightful information on the non-linear dynamics of the link between ESG and financial performance in banking companies, highlighting the necessity of strategic management and nuanced methods for ESG activities to maximize financial performance.

3.7.4. Indirect Relationship of ESG–FP

Several research papers in the literature suggest that there may be indirect links, mediated by different factors including bank risk-taking behavior, between ESG and financial performance in banking firms. For example, Buallay et al. (2020) discovered that social performance had a negative influence on banks’ profitability and value, whereas ESG positively affected performance and shareholders’ economic advantages. This points to a possible mediation effect of bank risk-taking, wherein banks that perform better in terms of ESG may also perform better financially by showing less risk-taking. Similarly, Menicucci and Paolucci (2023) found that while ESG laws had a detrimental effect on the market and operational performance of banks, emission and waste reductions had a large and beneficial influence on financial performance and operating performance. This suggests a potential channel of mediation by which bank risk-taking behavior is influenced by ESG laws, which in turn impacts financial results. A study by Ikram et al. (2020) demonstrates that firms with robust corporate governance mechanisms are better positioned to leverage their ESG activities to enhance financial performance. The study found that good governance practices, such as board independence, diversity, and transparency, strengthen the positive relationship between ESG activities and financial performance. Specifically, firms with independent and diverse boards are more likely to oversee ESG activities effectively, ensuring that these initiatives are not merely symbolic but contribute to sustainable business practices and improved financial outcomes.
Furthermore, a non-linear link between bank value and ESG activities was clearly demonstrated by Azmi et al. (2021), with eco-friendly efforts having the greatest impact on bank value. Given this, it is plausible that the implementation of ecologically sustainable practices by banks may influence their propensity for taking on risk, which in turn may have an effect on their financial performance. El Khoury et al. (2023) also emphasized the non-linear relationship between ESG and financial performance, emphasizing the significance of figuring out crucial cutoff points or “ESG tipping moments.” These “tipping moments” may be linked to shifts in risk-taking patterns, which might mediate the relationship between ESG and financial performance. Thus, several mediating and moderating variables can be taken into consideration to better investigate the relationship between ESG and financial performance, particularly bank risk-taking.

3.8. The Mediating Role of Bank Risk-Taking in the Relationship between ESG and Financial Performance

Based on the previous discussions, dynamic non-linear studies better explain the ESG impact on banks’ financial performance. Whereby the ESG–FP impact is positive till a certain point then turns negative, this decline explains the inconsistent results derived from past static-linear studies. Given this, it is plausible that the implementation of ESG activities by banks may influence their propensity for taking on risk, which in turn may influence their financial performance. Also, the analysis in the indirect relationships section shows a possible gap in an existing indirect relationship between ESG and banks’ financial performance through banks’ risk-taking, which leads us to suggest studying the mediating impact of bank risk-taking.

Di Tommaso and Thornton’s (2020) study is supporting same claim that mediacors are vital to be studied in the relationship between ESG-FP. Whelan et al. (2021) analyzed 1000 studies on ESG-proposed bank risk-taking as a mediator in the ESG–FP relationship to better estimate the financial performance variance. From a scholarly perspective, the direct impact of ESG on financial performance remained insufficient to achieve a valid estimation of financial performance. Whelan et al. (2021) further stated that the direct impact of ESG on financial performance did not provide a valid estimation. Thus, mediator variables prove necessary to achieve this goal (see Figure 3).

![Figure 3](image-url) The relationship between ESG and bank financial performance via mediation. Source: Whelan et al. (2021).

The direct impact of ESG on financial performance and bank risk-taking led the researchers of this study to propose investigating the indirect impact of ESG on financial performance throughout bank risk-taking as illustrated in Figure 4. According to Baron and Kenny (1986), the existence of a direct relationship between one DV and two independent variables along with a significant direct relationship between the two independent variables...
will lead to a gap to study the mediating impact. For this study, researchers found a direct impact of ESG on bank risk-taking, and an impact of ESG–FP as well as an impact of bank risk-taking on financial performance in the previous literature (Wanjohi 2013). These three steps are essential to assess and test for the mediating impact.

Figure 4. Proposed Conceptual Framework. Source: Author’s own (2024); Freeman (1984); Spence (1973); Sealey and Lindley (1977); Penrose (2009).

Mateev et al.’s (2022) examination of the CSR impact on bank risk-taking and profitability revealed a strong direct relationship between social reliability on bank risk-taking and financial performance. This finding provided the current work with a base ground to suggest investigating the indirect relationship, which could transition from ESG to banks’ financial performance throughout bank risk-taking.

3.9. Future Research Agenda on ESG and Financial Performance of the Banking Firms

Further studies in this field ought to focus more intently on examining the subtleties of the link that exists between ESG and banking firms’ financial performance. This might entail tracking the direct effect of ESG activities on financial performance indicators such as returns on assets (ROAs), returns on equity (ROE), and market value through the conduct of longitudinal studies over various time periods and geographical locations. Researchers can also look at how certain ESG activities like social responsibility campaigns or environmental conservation programs drive linear increases in financial performance measures.

Studies on the non-linear dynamics between ESG activities and financial performance in banking organizations should be prioritized going forward, since they go beyond simple linear interactions. Research may examine how little adjustments to ESG activities result in different effects on financial performance indicators, maybe identifying crucial values or tipping points where the advantages of ESG activities increase or decrease. Furthermore,
comparative studies between various banking industries and geographical areas may provide insight into the variables influencing the nonlinear link between ESG activities and financial performance.

Future studies should also look at the indirect routes by which ESG activities impact financial performance via moderators or mediators to deepen our knowledge of the relationship between ESG activities and financial performance in banking firms. Studies might specifically look at the ways in which corporate governance procedures, stakeholder engagement strategies, and risk-taking behavior function as mediators in the link between ESG activities and financial performance measures. Through the identification and analysis of these mediation routes, scholars may unearth the fundamental processes that convert environmentally conscious activities into observable financial benefits for banking establishments.

Finally, given the theoretical inconsistencies in justifying and explaining the impact of ESG on bank financial performance and the absence of theories that explain the ESG activities’ impact on bank financial performance in two cases (positive and negative), establishing a new theory was recommended to specify the positive and negative impact of ESG on banks financial performance.

4. Conclusions

This scoping review sought to fill important knowledge gaps found in the body of existing research by offering a thorough overview of the connection between ESG and banks’ financial performance. Several significant insights were obtained through the integration of theoretical frameworks with past empirical research. The studies show that the direct impact of ESG and its pillars are inconsistent in different environments. Our analysis emphasizes the need for more investigation into the complex nature of this link. Secondly, the study also emphasizes the significance of considering the possibility of threshold effects or interaction effects influencing the connection, as well as non-linear interactions between ESG pillars and banks’ financial performance. Thirdly, our analysis shows that further research is required to fully understand the mediating or moderating mechanisms that can affect how ESG pillars and banks’ financial performance interact. The ESG performance and financial results of banks may be significantly influenced by both external and internal variables, including risk-taking.

This scoping assessment offers insightful information to bank executives. It also expands scholarly knowledge of the link between ESG and financial performance in banks. The study establishes the foundation for future research into sustainable banking practices and responsible investing strategies by addressing important information gaps and proposing opportunities for exploration. In the end, our research highlights how crucial it is to include ESG factors into banking operations and decision-making procedures to support financial performance.

Implication

According to the results of this research, there are various important actions and suggestions that may be suggested to improve the knowledge and management of the link between ESG and financial performance in banking firms. These activities have significant ramifications for legislators, regulators, and both economic and management practices within the banking industry. Policymakers and regulators should promote the use of non-linear models in ESG–FP research to effectively reflect the threshold impacts of ESG investments. It is essential to determine the threshold at which further ESG investments cease to provide positive returns or begin to have adverse effects to establish the most advantageous ESG investment levels. It is crucial to establish rules that integrate certain levels of ESG investments, offering incentives for investments up to a defined threshold. Once a certain limit is reached, companies should be advised to prioritize the maintenance of their ESG investments rather than unduly increasing them. This will ensure that the advantages are maximized while avoiding needless expenses.
Moreover, doing research that examines moderators and mediators in the link between ESG and financial performance may aid in the identification of supplementary aspects that affect the efficacy of ESG investments, hence enhancing our complete comprehension of the impact of ESG activities on financial performance. Regulatory frameworks need to acknowledge the non-linear characteristics of ESG repercussions and possess the adaptability to accommodate diverse degrees of ESG development and investment across various financial institutions. This enables the implementation of customized strategies that accurately account for the distinct conditions of every company.

Bank management should use a strategic approach to ESG activities investments, with the goal of attaining an optimum level of ESG activities that effectively enhance financial performance. This entails the identification and allocation of resources towards ESG projects that have a significant positive effect, while avoiding excessive investment in areas that do not provide commensurate advantages. Incorporating ESG factors into the bank’s comprehensive risk management framework would aid in mitigating the risks linked to excessive or insufficient investment in ESG activities. Allocating resources towards training programs for management and staff to augment their comprehension of ESG activities and their impact on financial performance would facilitate more knowledgeable decision-making and strategic planning for ESG activities investments.

It is essential to interact with stakeholders, including investors, customers, and regulators, to effectively convey the bank’s ESG strategy and performance. This is vital for establishing confidence and gaining support from important stakeholders. Implementing systems for ongoing surveillance and assessment of ESG activities investments and their financial effects will enable prompt modifications to the ESG strategy in response to new evidence and changing conditions.

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