

Exploring the relationship between environmental performance and financial performance: a systematic review approach

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Abstract

Purpose – This paper systematically examines and synthesizes the literature concerning the impact of environmental performance (EP) on financial performance (FP) within corporate settings, spanning the years 2004–2024. Significantly, the study undertakes a comparative analysis between two distinct periods: 2004–2014 and 2015–2024, aiming to discern the evolution of this relationship over time.

Design/methodology/approach – Drawing from a meticulous review of 424 papers sourced from the Web of Science database, the study employs the lens of two prominent theoretical frameworks: legitimacy theory and stakeholder theory. Empirical findings are systematically synthesized to elucidate the determinants and consequences of corporate EP on financial outcomes using the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) approach.

Findings – Interestingly, the analysis reveals a significant lack of agreement in the theoretical foundations across research examining this empirical occurrence. Leveraging these discoveries, the research proposes interesting directions for further investigation with the goal of expanding our knowledge of the complex interplay between EP and FP in organizational settings.

Originality/value – This study contributes to the literature by providing a comprehensive two-decade synthesis of the environmental performance–financial performance relationship. Its originality lies in comparing two distinct periods (2004–2014 and 2015–2024), thereby revealing how the field has evolved over time. By integrating evidence from 424 studies, it also highlights the fragmentation and lack of consensus in the theoretical foundations of this research stream. These insights provide a foundation for developing more theoretically coherent future research.

Keywords Environmental performance (EP), Financial performance (FP), Environmental disclosures, Firm value

Paper type Literature review

1. Introduction

In recent years, the relationship between environmental performance (EP) and financial performance (FP) has gained significant attention in the corporate world (Eccles *et al.*, 2011). Companies are being driven to adopt sustainable practices not only due to moral imperatives but also due to strategic considerations, as environmental sustainability becomes critical to business operations (Neeveditah *et al.*, 2017). Issues such as resource scarcity, climate change and environmental degradation have forced businesses to rethink their long-term strategies

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(Gupta and Ingle, 2020). At the same time, stakeholders are increasingly demanding transparency and accountability in environmental reporting (Elijido-Ten *et al.*, 2020), seeing it as a key indicator of a company's long-term resilience (Porter and Kramer, 2011).

As a result, there has been a growing body of literature aimed at understanding how EP affects FP. Scholars have investigated how sustainability initiatives can generate financial returns through mechanisms, like cost savings, operational efficiency, enhanced brand reputation and access to new markets (Konar and Cohen, 2001; King and Lenox, 2002). Evidence suggests that firms with robust environmental practices tend to experience superior financial outcomes, which in turn attract investors with an interest in Environmental, Social and Governance (ESG) factors (Friede *et al.*, 2015). Hart and Ahuja (1996), for instance, found that reductions in emissions improved financial metrics such as return on assets (ROA) and return on equity (ROE), while Konar and Cohen (2001) demonstrated that firms reducing toxic emissions saw gains in Tobin's *q*, a key FP indicator.

Despite this evidence, the relationship between EP and FP is not universally clear. Some studies, like those by Brammer and Pavelin (2006), show that the impact varies significantly across industries, and McWilliams and Siegel (2000) argue that when factoring in the costs of implementing Corporate Social Responsibility (CSR) programs, the net financial impact may be neutral. Furthermore, King and Lenox (2001) suggest that industry-specific factors play a substantial role in shaping this relationship, making it difficult to generalize across all sectors.

The inconsistencies in findings reflect the complexity of the EP–FP relationship. Some research indicates positive outcomes, while other studies point to limited or inconsequential effects, necessitating further investigation into the factors that determine whether environmental sustainability leads to financial rewards. To date, there has been a lack of comprehensive reviews that systematically assess this relationship across various corporate settings and industries.

Existing reviews tend to focus on specific sectors, such as manufacturing or emphasize environmental reporting metrics without adequately addressing their financial implications. Moreover, these reviews are often narrative in nature and provide limited quantitative synthesis (Ali *et al.*, 2017).

To address these gaps, our study employs a systematic review using the PRISMA framework to analyze existing literature on the relationship between EP and FP. Specifically, we differentiate findings based on geographical context, focusing on both developed and developing countries. This allows us to answer two critical research questions: (1) What is the current state of research on the EP–FP relationship in different economic settings? (2) What are the key areas for future research in this field?

Through our analysis of 424 studies, we highlight significant differences in the EP–FP relationship between developed and developing economies. We categorize the results into positive, negative, mixed and neutral relationships, revealing distinct patterns based on regional and industry-specific factors. From a theoretical perspective, we focus on Legitimacy Theory (Lindblom, 1993) and Stakeholder Theory (Freeman, 1984), which have been widely used to explain how EP can affect a firm's financial outcomes. Legitimacy Theory suggests that businesses benefit from aligning with societal expectations, reducing regulatory risks and strengthening their social license to operate. Stakeholder Theory, meanwhile, emphasizes the importance of balancing the interests of various groups, including customers, employees, suppliers and the broader community, by integrating environmental considerations into business strategies.

Our review also underscores the need for diverse methodological approaches in studying the EP–FP relationship. While different scholars have employed a range of analytical techniques, there is a growing call for more standardized methods to ensure comparability across studies. The variation in findings highlights the importance of contextual factors, such as industry type and regional regulations, in shaping the impact of EP on financial outcomes.

The remainder of this paper is organized as follows: Section 2 outlines the research method used to collect and analyze the relevant literature. Section 3 presents the findings of the review.

Section 4 presents discussions and future research suggestions, and Section 5 offers conclusions and recommendations for future research. Ultimately, this study contributes to the growing literature by providing a clearer understanding of the mechanisms through which EP influences FP and vice versa, while identifying key gaps for future exploration. These insights can help inform both policy and corporate decision-making as businesses strive to balance environmental sustainability with financial objectives.

2. Research method

2.1 Overview

Our key objectives are to assess the current state of research regarding the relationship between EP and FP and to provide informed recommendations for future research directions. To achieve these objectives, we employed Denyer and Tranfield's (2009) multistep approach, a robust framework designed for conducting systematic literature reviews. This approach ensures rigor and minimizes subjectivity in the data collection and analysis processes, providing a structured methodology for our review. The systematic review process was executed through a four-step iterative approach, as depicted in Figure 1. These steps are: (1) Identifying the Research Questions; (2) Defining the Study's Boundaries and Scope; (3) Identifying, Screening and Selecting Studies; and (4) Analyzing and Synthesizing the Results.

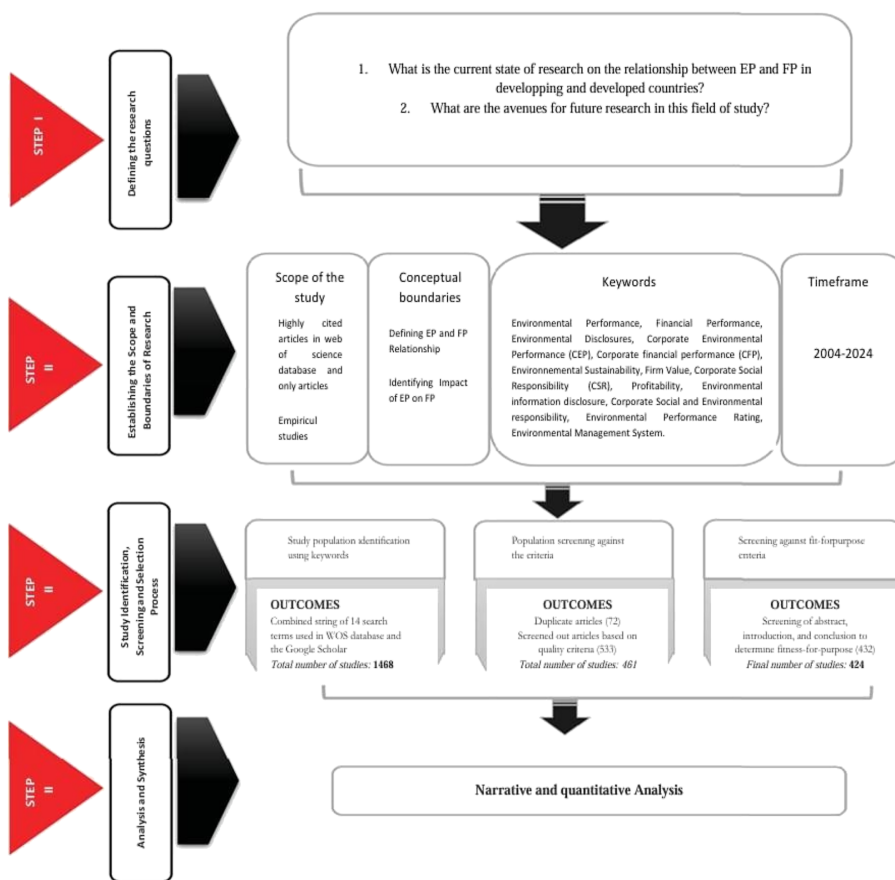


Figure 1. Snapshot of the systematic review methodology

In the initial phase, we identified the research questions guiding the review. These questions were developed to address critical gaps and emerging trends in the relationship between EP and FP and to provide a clear foundation for analyzing the existing literature. The second step involved defining the scope and boundaries of the study. We established a temporal scope from 2004 to 2024 and defined the conceptual boundaries around the relationship between EP and FP. Publications falling outside the substantive scope of the review or not addressing the research questions were excluded. The review retained relevant document types indexed in the Web of Science Core Collection, as reported in [Table 1](#). In the third step, studies were identified, screened and selected according to predefined eligibility criteria. The search was conducted using predefined keywords in the Web of Science Core Collection. The initial records were screened to remove duplicates and publications that did not meet the relevance and eligibility criteria, resulting in a final corpus of **424 documents**. This structured selection process ensured that the final dataset was aligned with the objectives and scope of the systematic review.

The final step involved analyzing and synthesizing the findings of the selected studies. The identification, screening, eligibility and inclusion process was reported in accordance with the PRISMA framework, while the findings of the included studies were synthesized using narrative content analysis. This approach enabled us to identify major empirical patterns, theoretical perspectives, geographical differences and research gaps in the EP–FP literature.

Our study’s detailed analysis and synthesis not only assess the current state of research but also identify key areas for further investigation, guiding future research efforts and helping to refine our understanding of how EP impacts financial outcomes.

Table 1. Main information about data

Description	Results
Timespan	2004:2024
Sources (Journals, Books, etc)	192
Documents	424
Annual Growth Rate %	13.23
Document Average Age	4.61
Average citations per doc	34.29
References	18,421
<i>Document contents</i>	
Keywords Plus (ID)	712
Author’s Keywords (DE)	1,114
<i>Authors</i>	
Authors	1,180
Authors of single-authored docs	35
<i>Authors collaboration</i>	
Single-authored docs	37
Co-Authors per Doc	3.06
International co-authorships %	30.56
<i>Document types</i>	
article	370
article; book chapter	1
article; early access	22
article; proceedings paper	2
correction	2
proceedings paper	31
review	4

2.2 Defining the review questions

The literature on the relationship between EP and FP has expanded significantly, yet the findings remain inconsistent and fragmented. Some studies, such as [Clark et al. \(2015\)](#) and [Hart and Ahuja \(1996\)](#), show a positive correlation, arguing that improved environmental practices lead to better financial outcomes through cost savings, operational efficiencies and enhanced corporate reputation. These studies highlight the competitive advantages companies gain from integrating environmental sustainability into their operations.

However, other research, including [Brammer and Pavelin \(2006\)](#) and [McWilliams and Siegel \(2000\)](#), suggests that the link between EP and FP is less straightforward and highly dependent on industry context, regulatory environments and the type of environmental initiatives undertaken. These studies emphasize that the financial benefits of environmental sustainability are not universal and may vary across sectors.

Previous reviews, such as those by [Zafar and Sulaiman \(2019\)](#) and [Rodrigues and Mendes \(2018\)](#), often focus narrowly on specific industries, environmental reporting practices or theoretical frameworks, lacking a comprehensive understanding of the EP–FP relationship across different contexts. Many reviews also employ narrative approaches, offering qualitative insights with limited quantitative analysis ([Ali et al., 2017](#); [Broccardo et al., 2018](#)).

Our study aims to address these gaps by offering a more comprehensive synthesis of the literature, incorporating industry- and region-specific variables to better understand how EP influences FP. This approach seeks to clarify the complexities of the EP–FP relationship, reconcile conflicting findings and provide direction for future research, ultimately contributing to a more nuanced understanding of how EP impacts financial outcomes across diverse contexts.

2.3 Systematic review methodology

The figure below provides a snapshot of our systematic review methodology, detailing the multistep approach used to examine the relationship between EP and FP. It outlines each phase, from defining research questions to synthesizing results, emphasizing the iterative nature of the process. The figure highlights the steps of setting study boundaries, screening and selecting relevant studies, as well as the rigorous criteria applied to ensure the reliability and relevance of the literature. This visual representation offers a transparent overview of how we collected, analyzed and synthesized data, clarifying the methodology behind our research.

2.4 Establishing the scope and boundaries of the review

In defining the scope and boundaries of our review on the relationship between EP and FP, we adopted a structured approach to ensure a comprehensive and focused examination of the literature. The first step in this process was to delineate the temporal scope of our review. We chose the period between 2004 and 2024 as our focus timeframe. This decision was grounded in the observation that literature prior to the early 2000s often lacked the depth and clarity required for a robust analysis. The year 2004 was specifically selected as the starting point to incorporate studies that are more recent and comprehensive, reflecting significant advancements in both theoretical frameworks and empirical methodologies related to EP and FP. This timeframe ensures that our review captures the evolution of research in this field and includes the most relevant and well-defined studies.

The range of the study timeframe of 2004–2024 was thoughtful. We have first considered the varying levels of data availability and environmental regulations across regions. It is obvious that data availability tends to be more comprehensive in advanced countries, particularly in Europe and North America, where environmental regulations are more rigorous and enforcement is stronger. In contrast, emerging countries, especially in Africa and Asia, may have limited data availability due to insufficient reporting mechanisms or absence of resources. This time-based range allows us to capture the reforms of environmental regulations and data availability across regions, which is important for confirming the reliability of our results.

Following the establishment of the temporal scope, we defined the conceptual boundaries of our research, focusing on the direct relationship between EP and FP. We targeted key dimensions of EP, such as Environmental Innovation, Emission Reduction and Resource Reduction, and their impacts on FP indicators like ROA, ROE and Tobin's Q ratio. This ensured our review stayed focused and relevant to the research questions.

To conduct the literature search, we developed a comprehensive set of keywords based on the defined concepts and relevant literature. These keywords were combined into a structured search string and systematically applied to the Web of Science Core Collection. Web of Science was selected because of its broad coverage of peer-reviewed scholarly literature and its established use in systematic literature reviews.

For quality control, predefined eligibility criteria were applied to ensure that the selected publications were relevant to the objectives of the review. Records were assessed based on their relevance to the EP–FP relationship, their empirical or conceptual contribution and their inclusion in the Web of Science Core Collection. Publications falling outside the substantive scope of the review were excluded. The final corpus retained the relevant document types represented in the Web of Science dataset, as reported in [Table 1](#).

2.5 Study identification, screening and selection process

The aim of this step was to systematically identify, screen and select highly reliable studies to address the review question concerning the relationship between EP and FP. To begin, we initiated an exhaustive search using a comprehensive set of keywords related to EP and FP, as illustrated in [Figure 1](#).

This search was conducted within the Web of Science database, which is renowned for its extensive coverage and rigorous indexing of scholarly articles. The initial search identified a total of 1,468 potentially relevant records from the Web of Science Core Collection.

To ensure the relevance of the retrieved literature, the initial pool was further refined using the Web of Science filtering criteria, reducing the dataset to 533 records. A subsequent screening stage resulted in 461 records that met the preliminary eligibility criteria for further assessment.

Subsequently, these 461 records were imported into Zotero for systematic organization and reference management. Duplicate records were identified and removed, resulting in 432 unique publications. These publications were then subjected to further eligibility and quality assessment based on the predefined review criteria.

Following this stage, the 432 publications were evaluated using fit-for-purpose criteria to confirm their relevance to the review question. Specifically, we assessed whether each publication substantively examined the relationship between EP and FP. This involved a manual review of the abstract, introduction, methodology, results and conclusion, where applicable. Publications that did not sufficiently address the EP–FP relationship were excluded. This process resulted in a final corpus of 424 documents for analysis.

As shown in [Table 1](#), the final dataset comprises 424 documents and provides an overview of the main bibliometric characteristics of the reviewed literature. The data presented provide a comprehensive overview of the results from our systematic review of the relationship between EP and FP over the period from 2004 to 2024. The table captures various key metrics and trends observed during the review process. With a total of 424 documents analyzed out of an initial 432, we achieved a robust dataset that reflects a significant body of research. The average annual growth rate of the literature is 13.23%, indicating a dynamic and expanding field. The average age of documents is 4.61 years, suggesting a relatively recent and relevant body of work. On average, each document has garnered 34.29 citations, highlighting the influence and recognition of the studies within the field.

The dataset comprises 1,180 authors, including 35 authors of single-authored documents, with an average of 3.06 co-authors per document. International co-authorship accounts for 30.56% of the corpus, indicating substantial cross-country research collaboration. In terms of

document types, the corpus is dominated by journal articles (370), alongside early-access articles, proceedings papers, reviews, corrections and hybrid document categories. The dataset further contains 712 Keywords Plus and 1,114 author keywords, together with 18,421 cited references.

2.6 Quality of the studies reviewed

All publications included in the review were retrieved from the Web of Science Core Collection. Nevertheless, differences in institutional settings, environmental regulation, data availability, reporting standards and research methodologies across countries may affect the comparability of the evidence. Studies conducted in different economic contexts may rely on different data sources and EP measures. These variations were therefore considered when interpreting and synthesizing the findings. Particular attention was given to methodological quality, data sources, measurement approaches and geographical context to reduce the risk of drawing conclusions from incomparable evidence.

2.7 Analysis and synthesis

A transparent process was crucial for investigating and synthesizing the findings from the **424 documents included in the final corpus**, ensuring that no single study was overly relied upon while others were neglected. Narrative content analysis was used to systematically organize and synthesize evidence from the heterogeneous and dispersed body of literature. The identification, screening and selection of studies were reported in accordance with the PRISMA framework, while the findings of the included studies were synthesized using narrative content analysis. We developed separate sheets to record the measurements of EP and FP, carefully scrutinizing them to avoid errors. These sheets enabled us to synthesize various results, including the theoretical perspectives. Additionally, we conducted an in-depth analysis of the findings to provide valuable insights for future research on the impact of these two terms.

This task was particularly challenging due to the complexity of the field and the diverse theoretical perspectives used in the studies. Thus, we used a stable framework to link our review questions and draw logical conclusions, allowing readers to thoroughly understand the relationship between EP and FP.

3. Review results

This section provides a comprehensive analysis and synthesis of the reviewed studies on the relationship between EP and FP. It presents an integrative framework that outlines the interplay between key antecedents, underlying theories and outcomes of EP. Central to the framework is EP, influenced by various antecedents such as corporate digitalization, environmental policies and market conditions. The framework also incorporates theoretical perspectives including Legitimacy Theory, Stakeholder Theory and the resource-based view (RBV), which offer context and depth to the analysis. Measurement of EP is examined through dimensions like environmental innovation, emission reduction and resource reduction, while FP metrics such as ROA, ROE and Tobin's Q Ratio represent the outcomes.

The narrative content analysis of the reviewed studies reveals significant variations in methodologies and theoretical approaches. Studies from developed economies predominantly employed agency and stakeholder theories, whereas research from different contexts frequently utilized legitimacy theory. This divergence in theoretical frameworks highlights important areas for future research. Additionally, the analysis emphasizes how geographical location influences research methods and theoretical justifications, showcasing the diverse approaches to understanding the EP–FP relationship. The detailed quantitative analysis of the reviewed studies is provided below, offering further insights into these variations and trends.

3.1 Journal- and year-wise publications on the relationship between EP and FP

3.1.1 Overview of publication trends and growth in volume. The analysis of journal- and year-wise publications on the relationship between EP and FP from 2004 to 2024 highlights the growing academic focus on sustainability and its financial implications. Initially, between 2004 and 2014, there was steady growth in publications, reflecting a rising interest in corporate environmental practices. However, after 2015, there was a significant surge in research output, driven by global climate agreements, the rise of ESG investing and increased corporate accountability for sustainable practices. This shift indicates a deeper academic commitment to addressing environmental issues in business.

3.1.2 Key journals and thematic focus. Certain academic journals have emerged as key platforms for publishing research on EP and FP. Journals such as *Journal of Business Ethics*, *Ecological Economics* and *Corporate Social Responsibility and Environmental Management* have consistently published studies exploring the nuanced interactions between corporate environmental initiatives and financial outcomes. These journals have become pivotal in shaping the discourse, often serving as the main source of cutting-edge research that bridges sustainability and FP.

The thematic focus of these publications has also evolved. Early studies often concentrated on the direct financial impacts of specific environmental practices, such as pollution control and energy efficiency. In contrast, more recent publications have expanded to include broader themes like sustainable supply chain management, the role of digitalization in enhancing environmental outcomes and the integration of sustainability into corporate strategy. This shift reflects a more holistic understanding of how EP intersects with various aspects of corporate operations and financial health.

3.1.3 Temporal shifts in theoretical approaches. The period from 2004 to 2014 was predominantly guided by theories such as the RBV and the Natural Resource-Based View, focusing on how unique environmental capabilities could be leveraged for competitive advantage. Post-2015, there has been a noticeable shift toward incorporating Legitimacy Theory and Stakeholder Theory, driven by a growing emphasis on how external pressures and stakeholder expectations influence corporate behavior. This theoretical evolution highlights the dynamic nature of research in this field, as it adapts to changing corporate practices and societal demands.

Figure 2 illustrates the evolution of annual scientific production on the relationship between EP and FP over the study period.

First, the growing number of publications reflects the increasing importance of sustainability in the corporate sector, signaling a shift in business priorities. However, the literature presents divergent empirical findings, with some studies showing a positive impact of EP on FP, while others indicate no significant relationship. This inconsistency highlights the complexity of the EP–FP relationship and suggests the need for more nuanced research that considers industry-specific factors, temporal dynamics and the moderating role of emerging digital technologies.

Additionally, the geographical distribution of research remains uneven, leaving important gaps in our understanding of how the EP–FP relationship operates across different economic, regulatory and institutional contexts. Future research should therefore broaden geographical coverage and examine whether the relationship varies systematically across different institutional environments. These findings underscore the importance of expanding the geographical scope of future studies and integrating digitalization as a critical factor in sustainability strategies. Addressing these areas will not only enhance theoretical understanding but also provide practical insights for businesses aiming to balance environmental stewardship with FP.

The findings from previous research on the relationship between EP and FP reveal an evolving and complex landscape. Some studies indicate a positive relationship between EP and financial outcomes, consistent with the natural resource-based view, suggesting that firms integrating environmental sustainability into their core strategies may enhance their FP.

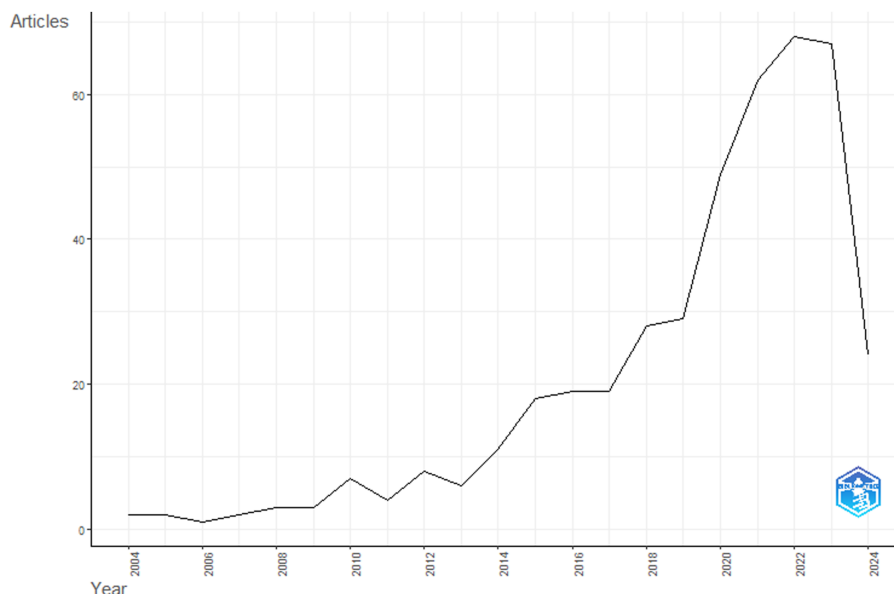


Figure 2. Annual scientific production

However, other evidence suggests that the financial effects of EP may be limited, neutral or context-dependent (Brammer and Pavelin, 2006; McWilliams and Siegel, 2000), highlighting substantial variability across industries and institutional settings.

This variation in findings reflects the broader societal context in which companies operate, as consumers, stakeholders and employees increasingly expect firms to reduce their environmental impact (Wang and Bian, 2022). Consequently, businesses are increasingly encouraged to consider the financial implications of their environmental sustainability efforts (Tang *et al.*, 2022). In response to these pressures, a wide range of environmental management strategies has emerged, contributing to growing scholarly interest in the relationship between EP and FP. The divergent findings across studies underscore the need for further investigation into how contextual factors, such as industry type, geographical location and digitalization, shape the EP–FP relationship.

3.2 Geographical distribution of EP and FP relationship studies

The geographical distribution of studies examining the relationship between EP and FP reveals substantial variation across economic and institutional contexts. The reviewed literature covers both developed and developing economies, although geographical representation is uneven. This distribution is particularly relevant because differences in environmental regulation, corporate reporting requirements, institutional development and data availability may influence the methodologies adopted and the reported EP–FP relationships.

The uneven geographical distribution of the reviewed studies constitutes an important consideration when interpreting the findings. Differences in country representation may affect the generalizability of the conclusions and contribute to heterogeneity in the reported EP–FP relationship. We therefore examined the geographical composition of the literature in greater detail, considering both country-level representation and development status. As summarized in Table 2, differences in regulatory environments, disclosure requirements, reporting practices and data accessibility may contribute to variations in research design and empirical findings across countries.

Table 2. Regions and countries breakdown

Regions	Countries	Remark(s)
Developed	Australia, all European countries, New Zealand, Canada, the United Kingdom and the USA	More data disclosure requirements/Corporate reporting practices/More accessibility of reliable data
Developing	Malaysia, India, South Africa and others	Less data disclosure requirements/Self-reported data/Less accessibility of reliable data

Studies from developed economies include research conducted in Australia, New Zealand, Canada, the United Kingdom, the USA and several European countries. These contexts generally provide well-established corporate reporting systems and data infrastructures that facilitate quantitative analysis. Research conducted in developing economies, including China, India, Malaysia, South Africa and other emerging markets, operates within different regulatory, institutional and data environments. These differences should be considered when comparing empirical findings across geographical contexts.

3.2.1 Distribution of articles by country and development status. The table on the distribution of articles examining the relationship between EP and FP offers a detailed country-by-country breakdown, distinguishing between developed and developing nations. It classifies the articles into Standard Country Papers (SCP) and Modified Country Papers (MCP), showing the percentage frequency of publications from each country. China ranks highest with 103 publications, while countries such as Benin, Cameroon and Morocco each have just one, illustrating varying levels of research activity. This global distribution underscores regional disparities in the emphasis on the EP–FP relationship.

3.2.2 Studies on EP and FP relationship by country. The country-level distribution provides a detailed overview of research examining the relationship between EP and FP across different economic contexts. Table 3 distinguishes countries according to development status and reports the number and relative frequency of publications associated with each country. China represents the largest share of the corpus, with 103 publications (24.29%), followed by the USA with 35 publications (8.25%). At the other end of the distribution, several countries are represented by only one publication, highlighting substantial geographical concentration within the literature.

The geographical analysis demonstrates that research on the EP–FP relationship spans diverse economic and institutional contexts, although its distribution remains uneven across countries. This geographical variation is important because differences in regulatory frameworks, environmental policies, reporting practices, market structures and data availability may influence both research design and the reported relationship between EP and FP.

Studies conducted across developed and developing economies therefore provide complementary insights into the EP–FP relationship. Rather than assuming that findings from one economic context are directly transferable to another, the evidence should be interpreted in light of country-specific institutional and regulatory conditions. Differences in measurement approaches and data availability may also affect comparability across studies, highlighting the need for broader geographical coverage and greater methodological consistency in future research.

The analysis of the geographical distribution of studies on the relationship between EP and FP extends to examining the countries of the corresponding authors who have contributed to this body of research. This dimension provides additional insights into regional research leadership and influences within the field.

As shown in Figure 3, the distribution of corresponding authors’ countries reveals substantial geographical diversity alongside concentration in several countries. Researchers

Table 3. Studies on EP and FP Relationship by country

Country	Development status	Articles	SCP	MCP	Freq (%)
China	Developing	103	74	29	24.29%
USA	Developed	35	26	9	8.25%
Indonesia	Developing	25	18	7	5.89%
Malaysia	Developing	22	11	11	5.19%
United Kingdom	Developed	22	9	13	5.19%
India	Developing	20	19	1	4.72%
Italy	Developed	15	11	4	3.54%
Pakistan	Developing	14	5	9	3.30%
Spain	Developed	14	11	3	3.30%
France	Developed	12	5	7	2.83%
Korea	Developed	11	7	4	2.59%
Australia	Developed	10	9	1	2.36%
Canada	Developed	10	10	0	2.36%
Germany	Developed	9	7	2	2.12%
Brazil	Developing	8	8	0	1.89%
Japan	Developed	7	6	1	1.65%
Romania	Developing	7	7	0	1.65%
Russia	Developing	5	3	2	1.18%
Vietnam	Developing	5	5	0	1.18%
Egypt	Developing	4	4	0	0.94%
Greece	Developed	4	3	1	0.94%
Netherlands	Developed	4	1	3	0.94%
Bangladesh	Developing	3	2	1	0.71%
Belgium	Developed	3	0	3	0.71%
Finland	Developed	3	3	0	0.71%
Ghana	Developing	3	0	3	0.71%
Nigeria	Developing	3	3	0	0.71%
Poland	Developed	3	2	1	0.71%
Portugal	Developed	3	3	0	0.71%
Thailand	Developing	3	1	2	0.71%
United Arab Emirates	Developed	3	1	2	0.71%
Cyprus	Developed	2	1	1	0.47%
Czech Republic	Developed	2	2	0	0.47%
Israel	Developed	2	2	0	0.47%
Kenya	Developing	2	2	0	0.47%
Kuwait	Developed	2	0	2	0.47%
Oman	Developing	2	0	2	0.47%
Qatar	Developed	2	0	2	0.47%
South Africa	Developing	2	2	0	0.47%
Tunisia	Developing	2	2	0	0.47%
Turkey	Developing	2	2	0	0.47%
Benin	Developing	1	0	1	0.24%
Cameroon	Developing	1	1	0	0.24%
Colombia	Developing	1	0	1	0.24%
Croatia	Developed	1	1	0	0.24%
Iraq	Developing	1	0	1	0.24%
Ireland	Developed	1	1	0	0.24%
Jordan	Developing	1	0	1	0.24%
Mexico	Developing	1	1	0	0.24%
Morocco	Developing	1	0	1	0.24%
Philippines	Developing	1	0	1	0.24%
Peru	Developing	1	0	1	0.24%

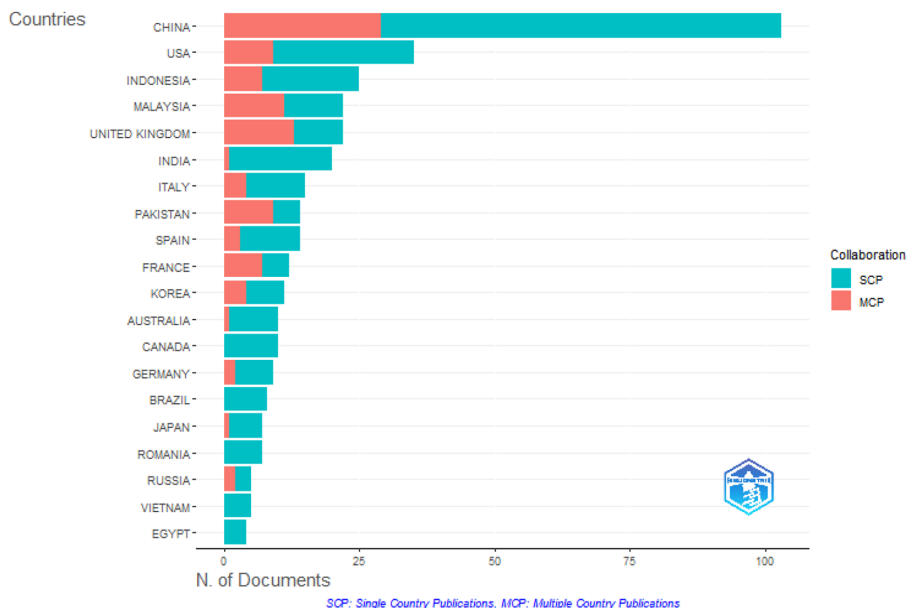


Figure 3. Corresponding author's countries

from the USA and European countries, including the United Kingdom, Germany and France, contribute substantially to the literature, while corresponding authors from developing economies, particularly China, India and Brazil, also have a notable presence. This distribution demonstrates the international scope of EP–FP research while highlighting differences in research participation across geographical contexts.

The geographical diversity of corresponding authors provides complementary perspectives on the EP–FP relationship across different economic and institutional settings. Differences in regulatory frameworks, environmental policies, corporate reporting practices, market structures and data availability may influence both the methodological approaches adopted and the findings reported across studies. These contextual differences should therefore be considered when comparing and interpreting evidence from different geographical settings.

3.3 Existing theories in EP and FP relationship research

Following the examination of geographical settings, our study delves into the theoretical frameworks used to analyze the relationship between EP and FP. The literature reveals a diverse range of theoretical approaches, each contributing distinct insights into this complex relationship. Legitimacy theory is the most prevalent, appearing in 34.78% of the studies. Stakeholder theory is utilized in 15.22% of the studies, while 10.87% incorporate a combination of legitimacy and stakeholder theories. Additionally, 8.70% of the studies use combinations of agency theory with other frameworks, such as legitimacy and stakeholder theory.

The prominence of legitimacy theory underscores its significance in explaining how companies adopt environmental practices to gain or maintain legitimacy within societal and regulatory frameworks. This theory highlights how firms seek approval and legitimacy through their environmental actions, which aligns with societal expectations and regulatory requirements. Stakeholder theory, while less prevalent, provides important insights into how firms address the diverse interests of stakeholders, influencing their environmental strategies

and decisions. The combination of legitimacy and stakeholder theories aims to offer a more comprehensive view by addressing both legitimacy concerns and stakeholder interests. This approach reflects an effort to capture the multifaceted nature of the EP–FP relationship by integrating different theoretical perspectives.

The use of agency theory, though less common, introduces an additional dimension of complexity. Agency theory, which focuses on aligning managerial actions with shareholder interests, often contrasts with the broader approach of stakeholder theory, which considers multiple stakeholder needs. Studies incorporating both theories highlight this theoretical tension. For example, while agency theory suggests that EP initiatives should align with shareholder value maximization, stakeholder theory argues for a broader consideration of various stakeholder interests.

This divergence is evident in the literature, where some studies propose that corporate social responsibility (CSR) initiatives, related to EP, can mitigate agency problems by aligning managerial actions with shareholder interests. In contrast, other research indicates that CSR could create agency problems if it conflicts with shareholder value maximization (Hussaini *et al.*, 2021).

These theoretical inconsistencies suggest important directions for future research. There is a need to explore how different theoretical perspectives interact and complement each other in explaining the EP–FP relationship. Future studies could benefit from developing integrated theoretical models that bridge these diverse viewpoints, providing a more nuanced understanding of how EP influences financial outcomes.

Additionally, investigating the applicability of these theories across various industries and regional contexts could enhance theoretical knowledge and offer more practical insights into the interplay between EP and FP.

As shown in Table 4, legitimacy theory is the most frequently applied theoretical perspective, followed by stakeholder theory and combinations of multiple theoretical frameworks. The application of legitimacy theory and stakeholder theory in this study underscores the critical role these frameworks play in analyzing the relationship between EP and FP. Legitimacy theory, applied in 34.90% of the cases, emphasizes the importance of aligning corporate activities with societal expectations, a concept that has gained prominence as awareness of environmental issues has increased. The study shows that firms must maintain legitimacy by adhering to environmental standards and responding to stakeholder demands, a necessity reflected equally across developed and developing economies.

Table 4. Theoretical perspectives used in studies focusing studies on EP and FP relationship

Sr	Theories	Developed Economies	%	Developing Economies	%	Total	%
1	Legitimacy theory	74	17.45%	74	17.45%	148	34.90%
2	Stakeholder theory	46	10.85%	19	4.48%	65	15.33%
3	Legitimacy and stakeholder theory	9	2.12%	38	8.96%	47	11.08%
4	Agency, legitimacy and stakeholder theory	17	4.00%	17	4.00%	34	8.02%
5	VDT theories	17	4.00%	8	1.89%	25	5.89%
6	Agency theory	8	1.89%	8	1.89%	16	3.77%
7	Signaling theory	8	1.89%	8	1.89%	16	3.77%
8	Institutional theory	0	0.00%	17	4.00%	17	4.00%
9	Resource-based view theory	0	0.00%	8	1.89%	8	1.89%
10	Not applied	17	4.00%	17	4.00%	34	8.02%
	<i>Total</i>	196	46.23%	214	50.47%	424	100.00%

Stakeholder theory, utilized in 15.33% of the studies, illustrates how various stakeholders, such as customers, investors and regulatory bodies, shape corporate environmental practices. The combined application of legitimacy and stakeholder theories, which accounts for 11.08% of the studies, further strengthens the understanding of how companies engage in environmental initiatives and the consequent impact on their FP.

The comparative analysis between developed and developing economies highlights a nuanced theoretical landscape. While legitimacy theory dominates in both contexts, its application is slightly more prominent in developing economies, which reflects the increasing importance of societal and stakeholder pressures in these regions. Moreover, the evolving use of these theories over time, as evidenced by the shift from framing environmental initiatives as costs to recognizing them as strategic opportunities, signals broader changes in corporate strategies, regulatory environments and stakeholder expectations globally. This dynamic shift emphasizes the growing recognition of sustainability as a driver of value creation rather than merely a compliance or risk management issue.

The alternative theories that can explain the link between EP and FP include the RBV and Institutional Theory. RBV suggests that firms with valuable resources and capabilities may be more likely to prioritize EP due to their capability to acclimatize and invent while Institutional Theory suggests that firms' EP is influenced by institutional pressures, such as regulatory requirements, stakeholder prospects and industry standards. While these alternative theories offer valuable perceptions into the EP–FP connection, we focused on Legitimacy Theory and Stakeholder Theory for two reasons. First, Legitimacy Theory and Stakeholder Theory have been widely established and applied in the field of sustainability and corporate social responsibility. Concentrating on these theories allowed us to build upon prevailing research and provide a more nuanced understanding of the complex relationships between legitimacy, stakeholder pressure and sustainable performance.

Second, our literature review was limited to a specific set of databases and search terms. While we may have missed some relevant studies that applied RBV or Institutional Theory, our focus on Legitimacy Theory and Stakeholder Theory allowed us to sustain a manageable scope and ensure a high level of reliability in our analysis.

Apart from the above theories that influence the relationship between EP and FP, other important mediating factors such as firm size, industry characteristics and market dynamics affect the relationship under different theoretical frameworks. For example, larger firms prefer EP under the Legitimacy Theory, while smaller firms tend to be more exposed to regulatory pressures. Industry characteristics, such as ecological regulation or stakeholder engagement, can shape the relationship between EP and FP, with firms in high-regulation industries prioritizing EP and those in high-stakeholder engagement industries prioritizing reputation. Market dynamics, such as competition and transparency, can also impact the relationship between firms in competitive markets prioritizing differentiation and those in transparent markets prioritizing disclosure.

3.4 Widely explored dimensions of EP and FP

In examining the relationship between EP and FP, it is essential to understand the focus and methodologies employed across different geographic contexts. [Tables 5](#) and [6](#) provide a detailed breakdown of how frequently various dimensions of EP are studied and the methods used to measure these dimensions in relation to FP. These tables offer insights into the emphasis placed on specific environmental initiatives and the consistency of measurement practices across developed and developing countries, shedding light on the global landscape of EP–FP research.

The investigation into the relationship between EP and FP provides a nuanced understanding of how various dimensions of environmental initiatives impact financial outcomes. This study delves into three critical dimensions of EP: Environmental Innovation, Emission Reduction and Resource Reduction; examining their effects on financial indicators such as ROA, ROE and Tobin's Q ratio.

Table 5. Overview of the frequency with which three key dimensions of EP are examined in relation to FP across various geographic contexts

Sr. No.	EP dimensions studied	Developed countries	%	Developing countries	%	Total
1	Environmental Innovation	63	30.29%	60	28.30%	123
2	Emission Reduction	76	36.55%	71	33.49%	147
3	Resource Reduction	70	33.16%	84	39.25%	154
Total		209	100%	215	100%	424

Emission Reduction emerges as the most frequently studied dimension, accounting for 36.55% of studies in developed countries and 33.49% in developing countries, totaling 34.67% overall. This predominant focus underscores the significant role of emission reduction strategies in both mitigating environmental impact and achieving financial efficiency. Emission reduction encompasses a range of practices aimed at decreasing pollutants and greenhouse gases, which can lead to substantial cost savings through improved energy efficiency, reduced waste disposal expenses and enhanced compliance with environmental regulations. Firms that effectively implement emission reduction measures often experience a more favorable public image and can benefit from regulatory incentives, such as tax credits or grants for adopting cleaner technologies.

Resource Reduction also receives substantial attention, with 33.16% of studies in developed countries and 39.25% in developing countries, reflecting its overall importance of 36.32%. This dimension focuses on optimizing the use of natural resources, such as water, raw materials and energy, to minimize waste and environmental impact. Effective resource reduction strategies, including recycling, reusing materials and improving resource management systems, contribute to operational efficiencies and cost savings. This focus on resource efficiency highlights its critical role in enhancing a firm's profitability and operational performance, especially in resource-constrained environments typical of developing countries.

Environmental Innovation, though slightly less emphasized compared to Emission Reduction and Resource Reduction, remains a crucial area of study, representing 30.29% of studies in developed countries and 28.30% in developing countries, totaling 29.01% overall. Environmental innovation involves the development and adoption of new technologies and practices designed to reduce environmental impact. This dimension often leads to operational efficiencies and cost reductions, such as through energy-efficient manufacturing processes or sustainable product lines. Companies that lead in environmental innovation can gain a competitive edge by differentiating their products and services, improving brand reputation and achieving better compliance with regulatory standards.

Table 6 provides insights into the measurement of EP and its dimensions in relation to FP. The extent of EP measurement is predominant, with 63.03% of studies in developed countries

Table 6. Measurement of EP and its dimensions in relation to FP across developed and developing countries

Sr. No.	Measurement of EP and its dimensions	Developed countries	%	Developing countries	%	Total
1	Extent of EP measurement and its dimensions	133	63.03%	124	58.77%	257
2	Quality of EP measurement and its dimensions	78	36.97%	89	41.23%	167
Total		211	100%	213	100%	424

and 58.77% in developing countries. This indicates a significant interest in assessing the breadth of environmental initiatives and their overall impact on FP. The focus on the extent of measurement reflects a broader effort to quantify and understand the scope of environmental practices within corporate settings.

Conversely, the quality of EP measurement is also an area of significant interest, accounting for 36.97% of studies in developed countries and 41.23% in developing countries. This highlights the growing emphasis on the depth and rigor of environmental assessments. High-quality measurements are crucial for accurately evaluating the effectiveness of environmental initiatives and their impact on financial outcomes. This emphasis on measurement quality, particularly in developing countries, suggests a focus on enhancing the precision and reliability of EP data.

The comparative analysis of EP dimensions and measurement approaches reveals that while all aspects are vital, Emission Reduction and Resource Reduction receive more attention due to their direct and measurable impacts on FP. The variation in focus between developed and developing countries likely reflects differences in regulatory environments, economic priorities and capacities for innovation. Developed countries might prioritize Emission Reduction due to stringent environmental regulations and advanced technological capabilities, while developing countries might focus more on Resource Reduction to address resource constraints and enhance operational efficiency.

Overall, this comprehensive approach to analyzing the dimensions and measurements of EP highlights the importance of strategically integrating environmental initiatives with FP objectives. It underscores the need for a nuanced understanding of how environmental strategies impact financial outcomes and emphasizes the role of technological advancements and rigorous measurement practices in achieving sustainable and profitable business practices. The study also highlights the dynamic nature of the relationship between EP and FP, offering valuable insights into how companies can leverage environmental initiatives for enhanced financial success.

4. Discussion and future research suggestions

The relationship between EP and FP is profoundly shaped by the dimensions of Environmental Innovation, Emission Reduction and Resource Reduction, with Corporate Digitalization playing a crucial moderating role. Environmental Innovation is a key driver of FP, as it often leads to the development of new, more efficient technologies and processes that can reduce operational costs and enhance productivity. For instance, firms investing in green technologies such as renewable energy solutions and energy-efficient systems typically realize significant cost savings through reduced energy consumption and lower utility bills. Additionally, environmental innovation can open new market opportunities by catering to a growing consumer base that values sustainability, thereby boosting revenues and market share.

Emission Reduction also has a substantial impact on FP. By adopting practices and technologies that minimize emissions, companies can avoid or reduce regulatory fines and compliance costs associated with environmental regulations. This not only helps in mitigating financial risks but also improves a company's public image and stakeholder relationships. Positive EP in terms of emissions can enhance brand reputation and customer loyalty, potentially leading to increased sales and profitability. Furthermore, proactive emission reduction strategies can position firms favorably in competitive markets where environmental standards are becoming increasingly stringent.

Resource Reduction focuses on optimizing the use of materials, energy and other resources, which directly affects FP by lowering operational costs. Efficient resource management reduces waste, lowers procurement expenses and minimizes the environmental impact associated with resource extraction and use. Companies that excel in resource reduction often benefit from enhanced operational efficiencies and cost savings, which can translate into improved FP.

Resource-efficient practices also support long-term sustainability goals and can result in favorable financial outcomes through reduced raw material costs and waste disposal expenses.

Corporate Digitalization plays a moderating role in enhancing the effectiveness of these environmental dimensions. Digital tools and technologies such as big data analytics, the Internet of Things (IoT) and artificial intelligence (AI) enable firms to monitor and manage their environmental impacts more effectively. For example, IoT sensors can provide real-time data on energy consumption and emissions, allowing companies to make informed decisions and implement timely interventions. Digitalization facilitates advanced resource management and optimization, improving the accuracy of EP tracking and reporting. Moreover, digital platforms can enhance transparency and communication with stakeholders, reinforcing the credibility of sustainability claims and improving corporate reputation.

In summary, the interplay between Environmental Innovation, Emission Reduction, Resource Reduction and Corporate Digitalization underscores the multifaceted nature of the EP–FP relationship. Firms that strategically invest in and integrate these dimensions are likely to experience enhanced FP through operational efficiencies, cost savings and improved market positioning.

We should also note the significance of local political, social and economic conditions in developing countries that shape corporate environmental strategies and, as a result, affect the EP–FP relationship. Some companies are operating in countries with weak regulatory contexts, which prioritize FP over EP to ensure their business endurance. On the other hand, social and economic factors, such as community confrontation and access to capital, can stimulate the adoption of environmental practices over financial concerns. Overall, the local political, social and economic circumstances can play a momentous role in shaping the EP–FP relationship in developing countries. Also, the current study reveals contradictions between the Legitimacy and Stakeholder theories. It is therefore crucial to establish why such conflicting results exist.

Based on the above discussions, there are several avenues for future research. First, upcoming research should explore the synergies between various dimensions and further investigate how digitalization can optimize environmental strategies and amplify their financial benefits across different industries and contexts. Researchers could use metrics such as digitalization scores, digital maturity indices or digitalization levels to assess the extent of digitalization in a company. These metrics could be used in combination with EP and FP data to examine the moderating effects of digitalization on the EP–FP relationship. Additionally, cloud computing could be used to analyze large datasets related to FP, such as financial statements or stock prices and examine how these datasets relate to EP.

Second, future research should consider local political, social and economic factors when exploring the link between EP and FP. Third, since the current study highlights the contradictions between the Legitimacy and Stakeholder theories, we propose future research directions to resolve such flaws. One alternative is to conduct industry-specific studies, for instance, analysing firms in the renewable energy sector, which might suggest that stakeholder pressure is more persuasive in shaping EP, while analysing firms in the manufacturing sector might suggest that legitimacy is more dominant. The other alternative is by investigating the influence of stakeholder power on the EP–FP relationship. This could involve scrutinizing the relative influence of different stakeholders such as employees, customers and investors or the level of stakeholder engagement and activism.

5. Concluding remarks and general conclusion

The systematic review of the EP and FP relationship reveals a complex, multi-dimensional interplay shaped by geographical and theoretical factors. Notably, research on this topic is predominantly concentrated in developed economies, driven by better data availability and stricter regulations, whereas developing countries contribute fewer studies, often due to regulatory and data challenges. This imbalance highlights the need for more research from

underrepresented regions to provide a global perspective on how environmental practices affect financial outcomes.

Theoretical frameworks such as Legitimacy Theory and Stakeholder Theory dominate EP–FP studies, reflecting the multifaceted nature of the relationship. However, inconsistencies arise between theories like Agency and Stakeholder Theory, suggesting the need for integrated models to better explain how managerial interests and stakeholder expectations influence financial outcomes from environmental initiatives.

The review also emphasizes key dimensions: Environmental Innovation, Emission Reduction and Resource Reduction; as pivotal to shaping the EP–FP relationship. Each contributes to cost savings, operational efficiencies and improved brand reputation. Corporate Digitalization further enhances these environmental efforts, optimizing data management and stakeholder engagement.

This study synthesizes 424 papers, covering 2004 to 2024, with a particular focus on changes between two periods: 2004–2014 and 2015–2024. The analysis reveals a shift from early research on simple correlations to more recent, nuanced explorations of EP’s complex impact on FP, driven by innovation, regulatory shifts and digitalization. While substantial progress has been made, future research should address regional gaps, integrate diverse theoretical perspectives and explore the growing role of digitalization in shaping the EP–FP relationship. Advancing this understanding will help organizations better align sustainability efforts with financial success.

Supplementary material

The supplementary material for this article can be found online.

References

- Ali, W., Frynas, J.G. and Mahmood, Z. (2017), “Determinants of corporate social responsibility (CSR) disclosure in developed and developing countries: a literature review”, *Corporate Social Responsibility and Environmental Management*, Vol. 24 No. 4, pp. 273–294, doi: [10.1002/csr.1413](https://doi.org/10.1002/csr.1413).
- Brammer, S. and Pavelin, S. (2006), “Voluntary environmental disclosures by large UK companies”, *Journal of Business Finance and Accounting*, Vol. 33 Nos 7–8, pp. 1168–1188, doi: [10.1111/j.1468-5957.2006.00634.x](https://doi.org/10.1111/j.1468-5957.2006.00634.x).
- Broccardo, L., Truant, E. and Zicari, A. (2018), “Internal corporate sustainability drivers: what evidence from family firms? A literature review and research agenda”, *Sustainability*, Vol. 10 No. 4, p. 1180, doi: [10.3390/su10041180](https://doi.org/10.3390/su10041180).
- Clark, G.L., Feiner, A. and Viehs, M. (2015), *From the Stockholder to the Stakeholder: How Sustainability Can Drive Financial Outperformance*, Oxford University Press.
- Denyer, D. and Tranfield, D. (2009), “Producing a systematic review”, in Buchanan, D.A. and Bryman, A. (Eds), *The SAGE Handbook of Organizational Research Methods*, SAGE Publications, pp. 671–689.
- Eccles, R.G., Serafeim, G. and Ioannou, I. (2011), “The impact of corporate sustainability on organizational processes and performance”, *Management Science*, Vol. 60 No. 11, pp. 2835–2857, doi: [10.1287/mnsc.1110.1463](https://doi.org/10.1287/mnsc.1110.1463).
- Elijido-Ten, E., Kloot, L. and Clarkson, P. (2020), “Extending the application of stakeholder influence strategies to environmental disclosures: an exploratory study from a developing country”, *Accounting, Auditing and Accountability Journal*, Vol. 23 No. 8, pp. 1032–1059, doi: [10.1108/09513571011080560](https://doi.org/10.1108/09513571011080560).
- Freeman, R.E. (1984), *Strategic Management: a Stakeholder Approach*, Pitman, Boston.
- Friede, G., Busch, T. and Bassen, A. (2015), “ESG and financial performance: aggregated evidence from more than 2000 empirical studies”, *Journal of Sustainable Finance and Investment*, Vol. 5 No. 4, pp. 210–233, doi: [10.1080/20430795.2015.1118917](https://doi.org/10.1080/20430795.2015.1118917).

- Gupta, H. and Ingle, S. (2020), "Factors affecting the sustainability performance in Indian firms", *Journal of Cleaner Production*, Vol. 244, 118797, doi: [10.1016/j.jclepro.2019.118797](https://doi.org/10.1016/j.jclepro.2019.118797)
- Hart, S.L. and Ahuja, G. (1996), "Does it pay to be green? An empirical examination of the relationship between emission reduction and firm performance", *Business Strategy and the Environment*, Vol. 5 No. 1, pp. 30-37, doi: [10.1002/\(SICI\)1099-0836\(199603\)5:1<30::AID-BSE114>3.0.CO;2-E](https://doi.org/10.1002/(SICI)1099-0836(199603)5:1<30::AID-BSE114>3.0.CO;2-E).
- Hussaini, M., Hussain, N., Nguyen, D.K. and Rigoni, U. (2021), "Is corporate social responsibility an agency problem? An empirical note from takeovers", *Finance Research Letters*, Vol. 43, 102007, doi: [10.1016/j.frl.2021.102007](https://doi.org/10.1016/j.frl.2021.102007).
- King, A.A. and Lenox, M.J. (2001), "Lean and green? An empirical examination of the relationship between lean production and environmental performance", *Production and Operations Management*, Vol. 10 No. 3, pp. 244-256, doi: [10.1111/j.1937-5956.2001.tb00373.x](https://doi.org/10.1111/j.1937-5956.2001.tb00373.x).
- King, A.A. and Lenox, M.J. (2002), "Exploring the locus of profitable pollution reduction", *Management Science*, Vol. 48 No. 2, pp. 289-299, doi: [10.1287/mnsc.48.2.289.258](https://doi.org/10.1287/mnsc.48.2.289.258).
- Konar, S. and Cohen, M.A. (2001), "Does the market value environmental performance?", *The Review of Economics and Statistics*, Vol. 83 No. 2, pp. 281-289, doi: [10.1162/00346530151143872](https://doi.org/10.1162/00346530151143872).
- Lindblom, C.K. (1993), "The implications of organizational legitimacy for corporate social performance and disclosure", *Paper presented at the Critical Perspectives on Accounting Conference*, New York.
- McWilliams, A. and Siegel, D. (2000), "Corporate social responsibility and financial performance: correlation or misspecification?", *Strategic Management Journal*, Vol. 21 No. 5, pp. 603-609, doi: [10.1002/\(SICI\)1097-0266\(200005\)21:5<603::AID-SMJ77>3.0.CO;2-8](https://doi.org/10.1002/(SICI)1097-0266(200005)21:5<603::AID-SMJ77>3.0.CO;2-8).
- Neeveditah, P.-M., Karishma, A. and Devi, R.N. (2017), "Environmental management systems and financial performance: the case of listed companies in Mauritius", *Theoretical Economics Letters*, Vol. 7 No. 7, pp. 2054-2069, doi: [10.4236/tel.2017.77139](https://doi.org/10.4236/tel.2017.77139).
- Porter, M.E. and Kramer, M.R. (2011), "Creating shared value", *Harvard Business Review*, Vol. 89 No. 1/2, pp. 62-77.
- Rodrigues, M. and Mendes, L. (2018), "Mapping of the literature on social responsibility in the mining industry: a systematic literature review", *Journal of Cleaner Production*, Vol. 181, pp. 88-101, doi: [10.1016/j.jclepro.2018.01.163](https://doi.org/10.1016/j.jclepro.2018.01.163).
- Tang, Y., Yue, S., Ma, W. and Zhang, L. (2022), "How do environmental protection expenditure and green technology innovation affect synergistically the financial performance of heavy polluting enterprises? Evidence from China", *Environmental Science and Pollution Research*, Vol. 29 No. 59, pp. 89597-89613, doi: [10.1007/s11356-022-21908-1](https://doi.org/10.1007/s11356-022-21908-1).
- Wang, X. and Bian, W. (2022), "Analyzing the role of corporate social responsibility for sustainable environmental performance: mediating roles of environmental strategy and environmental outcomes", *Frontiers in Psychology*, Vol. 13, 906610, doi: [10.3389/fpsyg.2022.906610](https://doi.org/10.3389/fpsyg.2022.906610).
- Zafar, M.B. and Sulaiman, A.A. (2019), "Corporate social responsibility and Islamic banks: a systematic literature review", *Management Review Quarterly*, Vol. 69 No. 2, pp. 159-206, doi: [10.1007/s11301-018-0150-x](https://doi.org/10.1007/s11301-018-0150-x).

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