

**ESG'S RISE AND FALL: A SCOPING REVIEW OF PEER-REVIEWED RESEARCH
RECENTLY PUBLISHED**

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Abstract

Environmental, Social, and Governance (ESG) factors have become increasingly important in corporate governance, investment strategies, and regulatory frameworks. However, recent critiques have highlighted significant challenges, including greenwashing, inconsistent reporting standards, and shifting investor sentiment, which raise concerns about the long-term viability of ESG. This study conducts a scoping review of recently published peer-reviewed research to explore trends, drivers, and potential decline of ESG. It aims to identify recurring key themes and knowledge gaps, informing future research and guiding policy recommendations. Following the framework for scoping reviews, we systematically searched ScienceDirect for peer-reviewed articles published between 2021 and March 2025. Eligible articles included empirical and theoretical studies analyzing ESG trends, investment impacts, regulatory responses, and corporate adoption. Data were synthesized to identify recurring themes, research methodologies, and emerging challenges. The review highlights three dominant themes: (1) the rapid rise of ESG due to regulatory support and investor demand; (2) emerging criticisms, including greenwashing, fragmented ESG rating systems, and financial performance concerns; and (3) growing skepticism and regulatory shifts that may potentially signal a decline in ESG's influence. Additionally, the findings reveal methodological gaps, particularly the lack of longitudinal studies assessing ESG's long-term financial and social impact. While ESG remains a key consideration for businesses and investors, its future sustainability faces challenges related to regulatory, financial, and ethical issues. This study emphasizes the significance of standardized ESG metrics, enhanced transparency, and empirical research in assessing the actual and tangible effects of ESG.

Keywords: ESG; sustainability; corporate governance; responsible investment; greenwashing; regulatory challenges.

Highlights

- The scoping review reveals ESG's rapid growth, driven by regulations and investor demand, but it also faces significant challenges, including greenwashing, inconsistent standards, and financial concerns.
- A central methodological gap identified is the lack of longitudinal studies on the long-term financial and social impact of ESG.
- Europe leads in ESG adoption, while North America, Asia, and Latin America have made mixed progress.
- Regulatory shifts, growing skepticism, and economic pressures may weaken ESG's influence.

1. Introduction

Environmental, Social, and Governance (ESG) principles have emerged as pivotal frameworks for assessing corporate sustainability and ethical investment practices. Over the past two decades, ESG has gained significant traction among investors, businesses, and policymakers, driven by increasing regulatory demands, stakeholder activism, and a global push for responsible business practices. Companies that adopt ESG principles are often viewed as more resilient, sustainable, and attractive to investors seeking long-term value. The

expansion of sustainable finance has further accelerated the rapid rise of ESG, alongside the implementation of reporting frameworks such as the Global Reporting Initiative (GRI) and the Task Force on Climate-related Financial Disclosures (TCFD), which have amplified the emphasis on corporate accountability.

However, despite this momentum, ESG has recently come under scrutiny. Critics have questioned its effectiveness, consistency, and measurable impact in the real world. Allegations of greenwashing, inconsistencies in ESG ratings, and the underperformance of ESG-driven portfolios in terms of financial returns have sparked skepticism among investors and regulators. Additionally, some governments and financial institutions have begun reevaluating their ESG commitments, expressing concerns that ESG integration may compromise financial returns or impose excessive regulatory burdens. These developments suggest a potential shift in ESG's trajectory, raising questions about its long-term viability and credibility.

Given these emerging challenges, it is essential to systematically examine how recent academic literature has addressed the evolution of ESG, particularly its rapid rise and potential decline. This study conducts a scoping review of peer-reviewed research. It reviews articles published between 2021 and March 2025 to examine the main drivers behind ESG's growth, the factors contributing to its current criticisms, and the potential implications for businesses, investors, and policymakers. By identifying key themes and gaps in the literature, this research aims to provide a comprehensive understanding of ESG's evolving landscape and offer insights into its future direction.

The study is structured as follows: the next section details the methodology employed for the scoping review, followed by an analysis of the key themes emerging from recent ESG research. The discussion section highlights the implications for various stakeholders and suggests areas for future research. Finally, the conclusion summarizes the findings and provides recommendations for enhancing ESG's credibility and sustainability.

2. Theoretical background

The theoretical background of ESG's rise and fall is based on multiple key frameworks that explain its adoption, success, and growing skepticism. Stakeholder theory emphasizes: the pressure for corporate responsibility; institutional theory clarifies the role of regulatory influences; signaling theory illustrates how firms communicate their ESG commitment; legitimacy theory demonstrates the importance of maintaining credibility; the theory of the Natural Resource-Based View (NRBV) focuses on efficient resource utilization; and agency theory posits that ESG practices help align the interests of managers and shareholders by reducing information asymmetry, thereby facilitating the efficient use of capital. A comprehensive understanding of these theories provides a foundation for analyzing the key themes emerging in recent ESG research and assessing its future trajectory.

Stakeholder theory (Freeman, 1984) posits that companies should consider the interests of various stakeholders, including investors, customers, employees, suppliers, lenders, regulators, and communities, in addition to shareholders. Besides, it explains how companies are affected by the interests of individuals or groups with a direct stake in the organization, intermediaries who safeguard these stakeholder interests, and regulators who enforce controls within the company. ESG aligns with this theory by promoting corporate accountability and sustainable business practices, emphasizing the importance of managing stakeholder relationships to create value for all parties involved.

The rapid rise of ESG can be primarily attributed to increasing pressure from stakeholders (Yuan et al., 2022). However, as ESG implementation has become more widespread, challenges have emerged regarding the sincerity of corporate commitments, the absence of standardized ESG metrics, and concerns about which companies prioritize

stakeholder interests over financial performance. Yuan et al. (2022) demonstrate that enterprises should adopt a social responsibility approach and foster sustainable relationships with all stakeholders to enhance long-term firm value.

The institutional theory (DiMaggio and Powell, 1983) explains how organizations adopt ESG practices under the influence of regulatory, normative, and mimetic pressures. Social choices are guided and shaped by the broader institutional environment. Governments, international organizations, and financial institutions have promoted the adoption of ESG by introducing policies, disclosure requirements, and investment incentives. For instance, Foley et al. (2024) note that the Paris Agreement and the European Union's Sustainable Finance Disclosure Regulation (SFDR) have reinforced ESG integration practices. Dmuchowski et al. (2023) highlight the 2008 financial crisis, the Paris Agreement in 2015, and the Covid-19 pandemic as catalysts for transformation.

As regulatory expectations evolve and specific political movements push back against ESG mandates, businesses face increasing hesitation regarding the long-term stability of ESG frameworks. This shift in institutional pressures may contribute to ESG's perceived decline as companies reassess the costs and benefits of compliance. The potential decline of ESG practices seems inevitable, particularly given the uncertainty in the United States of America (U.S.A.) political landscape, where the new administration has withdrawn from the Paris Agreement signed in 2015 and is fostering skepticism about the "climate change crisis."

The signaling theory developed by Spence (1973) illustrates that companies use ESG disclosures to signal their sustainability and ethical commitment to investors, consumers, and other stakeholders. This theory proposes mechanisms through which one party conveys information to another to address information asymmetries. Generally, strong ESG performance is associated with enhanced brand reputation, lower capital costs, and access to sustainable investment funds. Zhang et al. (2024) promoting ESG disclosure can enhance capital allocation efficiency, lower corporate financing costs, improve environmental performance, and optimize the structure of green innovation.

However, recent criticisms of ESG, including allegations of greenwashing and inconsistencies in ESG ratings, have weakened the credibility of these signals (Xie, 2024a). According to Xie (2024b), ESG factors contribute to companies' stability by enhancing risk control, boosting employee confidence, attracting talent, and increasing productivity. As shown by Avramov et al. (2022), investors are increasingly questioning whether ESG metrics accurately reflect a company's actual impact or are being used as marketing tools. Growing skepticism may diminish the effectiveness of ESG signals and undermine corporate legitimacy.

Legitimacy theory proposed by Suchman (1995) argues that organizations adopt practices like ESG to gain social acceptance and maintain legitimacy within their industry and society. This theory suggests that companies sustain their legitimacy by aligning with societal values and norms, particularly regarding environmental practices, to fulfill the implicit social contracts with the communities in which they operate. Traditionally, ESG has been viewed as a means for corporations to align with societal expectations of sustainability and corporate responsibility.

Nevertheless, as scrutiny regarding the effectiveness of ESG policies increases, companies may struggle to maintain their legitimacy. For Avramov et al. (2022), the growing perception that ESG initiatives lack transparency, fail to produce measurable impact, or serve political purposes has led to a backlash against ESG investing and corporate sustainability commitments. Companies that fail to demonstrate genuine accountability risk losing legitimacy, which may further erode their ESG efforts.

Hart (1995) asserts that the NRBV enhances the traditional resource-based view by emphasizing not just the efficient use of resources but also the strategic integration of sustainability to drive long-term competitive advantage and superior performance. Unlike

conventional approaches that focus solely on cost reduction and efficiency, the NRBV highlights how firms can develop distinctive capabilities that create lasting value while addressing environmental challenges. This theory identifies three critical strategic capabilities: pollution prevention, which reduces waste and inefficiencies, lowering costs and regulatory risks; product stewardship, which integrates sustainability into the entire product lifecycle to enhance brand reputation and market differentiation; and sustainable development, which fosters innovation and long-term viability by aligning business growth with ecological and social responsibility. By embedding these capabilities into their core strategies, companies can not only mitigate environmental risks but also unlock new opportunities for differentiation and market leadership.

Jensen and Meckling (1979) introduced agency theory as a framework for structuring contractual arrangements that effectively govern the relationship between managers and shareholders, minimizing information asymmetries, agency costs, and inefficient capital allocation. This theory is particularly crucial in the context of ESG performance, as aligning the interests of managers and shareholders fosters responsible corporate decision-making, enhances transparency, and mitigates risks associated with sustainability practices (Med bechir and Jouirou, 2021). By ensuring that management is incentivized to prioritize long-term ESG goals, agency theory serves as a foundation for sustainable value creation and ethical corporate governance.

The intersection of these theoretical perspectives highlights a central paradox in ESG adoption: While businesses and investors initially embraced ESG for its potential to create long-term value and positive societal impact, new challenges have emerged. These include regulatory complexities, concerns over greenwashing, and financial trade-offs. Without reliable measures of proper ESG performance, any attempts at quantification should navigate incomplete, opaque data and unstructured methodologies (Avramov et al., 2022).

3. Methodology

The methodology is based on Arksey and O'Malley's (2005) framework for conducting scoping reviews. We also adhere to the PRISMA-ScR (Preferred Reporting Items for Systematic Reviews and Meta-Analyses Extension for Scoping Reviews) guidelines. Systematic or scoping reviews are common in experimental studies within the health field and have proven essential for advancing knowledge in other areas, including management. They have made significant contributions to better-informed and adequate decision-making in areas of knowledge and economic activity.

A scoping review was selected because it allows a broad exploration of the literature, identifying key themes, trends, and knowledge gaps without being limited by a predefined hypothesis. The review is guided by the following research question: What are the key drivers, challenges, and emerging criticisms of ESG as discussed in recently published peer-reviewed research? This approach is advantageous for assessing an evolving topic like ESG, where ongoing debates about its effectiveness, criticisms, and regulatory shifts require comprehensive mapping.

To ensure relevance, the specific inclusion and exclusion criteria were defined. We included peer-reviewed journal articles published between 2021 and March 2025 by Elsevier, a leading academic publisher known for its high-impact journals, which are indexed on ScienceDirect. Empirical, theoretical, and review studies published in English that addressed ESG's rise, challenges, criticisms, or evolving trends were considered eligible. Non-peer-reviewed sources (e.g., books, encyclopedias, reports, discussion, opinion pieces) and articles that focus solely on specific ESG components (e.g., environmental policies without reference to ESG as a framework) were excluded.

Boolean operators (AND/OR) were used to refine search results, ensuring a comprehensive dataset. The search terms included combinations of “ESG rise” OR “growth of ESG” (which resulted in 115 documents); “ESG criticism” OR “ESG backlash” (which resulted in three documents); “ESG investment trends” OR “ESG market performance” (which resulted in 10 documents). All these searches resulted in 128 documents, with two duplicates removed, leaving 126 documents for initial screening. After screening titles and abstracts for relevance, the final sample consisted of 35 peer-reviewed articles published between 2021 and March 2025. A further selection was made to ensure high-quality sources, considering the articles published in journals classified in the Scimago H-index with a rating of 50 or above, resulting in the same 35 articles.

Eligible studies were reviewed in full to confirm alignment with the research question. Key themes, methodologies, and findings were extracted using a standardized data extraction form. A content and thematic analysis approach was used to categorize the findings into recurring themes. Articles were coded into categories, including the rise of ESG (e.g., regulatory support, investor demand, sustainability commitments), criticism, challenges (e.g., greenwashing, inconsistent ratings, financial performance concerns), and the future of ESG (e.g., regulatory shifts, industry adaptation, alternative sustainability frameworks).

The results were synthesized to identify knowledge gaps, emerging methodological trends, and implications for future research. However, although efforts were made to ensure broad coverage, the selection of databases and searches, limited to English-language publications, may not encompass all relevant studies. This scoping review does not conduct a quantitative meta-analysis, focusing on mapping trends rather than determining statistical effect sizes.

4. Rise of ESG: market growth and institutional support

Both institutional stockholders and corporations have increasingly adopted ESG as part of a more significant movement towards sustainable investments and responsible corporate practices. This shift has been significantly driven by the preferences of institutional investors, particularly among millennials. The rising focus on sustainability is closely tied to a heightened awareness of environmental and social issues, as well as the potential for long-term value creation through responsible business practices, as noted by Donghui et al. (2025).

The growth of ESG investments has been significantly driven by the preferences of investors, particularly among large institutional asset managers who prioritize long-term sustainability. According to Wen et al. (2022), institutional investors recognize that long-term financial returns are increasingly linked to the integration of ESG factors into business operations. For these researchers, the generational shift influences corporate behaviors as companies increasingly align their strategies with ESG principles to meet investor expectations and attract capital. As noted by Avramov et al. (2022), ESG has become a central focus in management and portfolio strategies.

As more investors demand greater transparency and alignment with ESG principles, corporations are pressured to disclose their sustainability efforts and integrate them into their strategies. These trends reflect a significant change in the investment landscape. ESG performance is increasingly regarded as a measure of corporate responsibility and a potential driver of financial returns, offering high rewards with low risks (Xie, 2024a).

Wen et al. (2022) emphasize that the quality of ESG disclosures influences the relationship between companies’ ESG performance and market value, risks, and financial returns. When the quality of ESG disclosure exceeds a critical threshold, it enhances long-term market value and returns while reducing financial risks. Countries with mandatory Corporate

Social Responsibility reporting experience tend to see a more significant expansion in ESG investments and broader participation from companies than those without such requirements.

Yuan et al. (2022) demonstrate that investors should pay close attention to companies with high ESG disclosure, as they are associated with a lower risk of financial irregularities. Improved regulatory policies regarding ESG disclosure are necessary to promote market development through standardized emission regulations, such as those mandated by the International Financial Reporting Standards Foundation (IFRS, 2023a; 2023b). The International Sustainability Standards Board (ISSB) issued the standards IFRS S1 and S2, which each country can choose to make mandatory, adaptable, and applicable. In any case, a company can choose to adopt them voluntarily.

Almaqtari et al. (2023) indicate that transparency regarding emissions, environmental controversies, innovations, proactive environmental investments, expenses, eco-friendly products, and fines from authorities significantly enhance companies' environmental and ESG performance. Board tenure, size, independence, and meeting frequency are associated with higher environmental disclosure and reporting scores. Furthermore, companies with strong revenue growth, larger size, higher market capitalization, and superior overall performance tend to disclose environmental and sustainability issues more extensively and comprehensively.

Regulatory frameworks, particularly in the European Union (EU), have significantly accelerated the adoption of ESG principles. Regulations such as the SFDR improve transparency for sustainable financial products (Foley et al., 2024). According to Martiny et al. (2024), the EU Taxonomy of Sustainable Activities is being expanded to encompass a broader range of actions beyond its initial scope. This will address inconsistencies in ESG performance measurement and encourage companies to disclose detailed information, ensuring transparency and comparability. These regulations have set a clear ESG reporting standard and integrated sustainability into the broader financial market.

The SFDR, for instance, mandates financial market participants disclose how they consider ESG risks and opportunities in their investment strategies. Simultaneously, the EU Taxonomy Regulation establishes a classification system that defines which economic activities are considered environmentally sustainable (Martiny et al., 2024). These initiatives aim to establish a standardized framework that enhances the reliability of ESG data, enabling investors to easily compare companies' sustainability practices and ultimately foster sustainable investment decisions. The expanding regulatory landscape in the EU suggests that ESG considerations have become crucial for businesses seeking to remain competitive in a rapidly evolving global economy (Dmuchowski et al., 2023).

Reputational considerations have a significant impact on corporate engagement with ESG factors, as stakeholders increasingly expect companies to effectively manage their environmental and social impacts. Corporate sustainability has a direct impact on organizational processes and performance, underscoring the importance of ESG in enhancing long-term shareholder value. Zou et al. (2025) reveal a strong preference among investors for high-ESG stocks, driven by reduced legal and operational risks, improved profitability, and enhanced reputations. According to these researchers, in China, independent investors are particularly drawn to high-ESG companies, especially those in non-state-owned sectors.

Chen et al. (2024b) examined the risk-mitigating role of corporate ESG activities in the context of economic uncertainty. They found that ESG performance tends to improve during periods of increasing economic uncertainty, a phenomenon that is more pronounced in developed countries than in developing ones. Moreover, in developed countries, heightened competition indirectly strengthens the relationship between economic uncertainty and ESG performance, whereas, in developing countries, this competition directly weakens it. The study revealed that the environmental pillar of ESG sees the most significant improvement, followed by the social pillar. Companies with larger sizes and more substantial financial resources are

more inclined to adopt ESG strategies. Overall, the findings suggest that managers prioritizing their businesses' well-being tend to become more risk-averse during periods of economic uncertainty.

Silva (2022) argues that disclosing ESG information helps reduce crash risk by diminishing opacity and information asymmetry between managers and external investors. Enhanced ESG reporting improves predictive power, thereby lowering risk. Additionally, ESG transparency can reduce capital costs, guide investor decisions, and reinforce corporate governance. However, the impact of ESG disclosure varies by region: companies in developed countries benefit from governance disclosure, while in emerging markets, ESG disclosure does not consistently mitigate crash risk.

Companies demonstrating strong ESG performance often benefit from enhanced brand loyalty, greater employee satisfaction, and improved relationships with regulatory bodies. These factors contribute to sustainable long-term growth. Companies are increasingly integrating ESG factors into their business models to maintain and enhance their reputational capital, as they are recognized for their ethical and sustainable growth (Xie, 2024b). According to Zhang et al. (2024), substantive green innovation is necessary for sustainable development. These researchers emphasize that ESG performance is a strategic driver for promoting corporate green technology innovation, thereby paving the way for sustainable and comprehensive green development.

5. Challenges and criticism: ESG backlash

The main criticism surrounding the expansion of ESG practices is the lack of standardization. A significant barrier to the effectiveness of ESG initiatives is the inconsistency in ratings and metrics. Different rating agencies, such as Morgan Stanley Capital International (now MSCI), Sustainalytics, and Refinitiv, employ varying methodologies, making it challenging for investors to compare and evaluate companies' ESG performance. This inconsistency in reporting and rating systems undermines investor confidence. Foley et al. (2024) address the ethical challenge in corporate decision-making, noting that dishonesty can undermine ESG practices. They argue that ethical considerations, such as just transition ethics, are crucial for guiding the pursuit of a just, sustainable world and a low-carbon economy with long-term objectives.

Millar, Mueller and Carter (2024) examined how fund managers and investment analysts in Edinburgh, UK, respond to ESG investing. They found an ESG's contested space, where diverse interests seek to shape ESG according to their perspectives. This hinders progress driven by a backlash against ESG's rising prominence.

Another significant concern is greenwashing. The growing popularity of ESG has led to an increase in greenwashing, where companies exaggerate or misrepresent their ESG efforts. This practice undermines the trustworthiness of ESG investments, prompting regulators to consider stricter verification standards. Lee and Suh (2022) define greenwashing as the deliberate practice of deceiving consumers through false or exaggerated claims about a company's environmental efforts and impact. For Xie (2024a), greenwashing hinders committed companies from obtaining essential funding, consequently restricting their pursuit of green innovation. Lee and Suh (2022) differentiate between greenwashing and categorizing firms into green and brown. Green firms exhibit strong environmental performance, regardless of their communications, while brown firms perform poorly and do not actively communicate about their environmental impact.

The increase in greenwashing cases has raised concerns about the adequacy of current ESG reporting standards, which often lack the rigor required to ensure transparency and accountability. Xie (2024a) suggests that banks and other relevant entities should evaluate a

company's funding requests in conjunction with assessing its ESG performance and commitment to sustainability. This includes regular monitoring of energy conservation and carbon reduction efforts. Governments should leverage tax incentives and fiscal support to achieve effective carbon reduction.

The issues of greenwashing and the absence of standardized metrics contribute to the ongoing debate regarding financial performance. There is also a discussion about the correlation between strong ESG performance and financial returns. While some studies suggest that strong ESG performance can lead to superior financial outcomes, others note that this relationship may not always be straightforward. Researchers, such as Chen et al. (2024a), argue that the financial benefits of ESG initiatives can be context-dependent, varying based on local government priorities, company characteristics, geographical location, and the specific ESG factors considered.

Chen et al. (2024a) subscribe that the Chinese central government has developed an ecological and environmental protection strategy. This strategy encompasses policies aimed at fostering harmonious economic growth alongside environmental sustainability. A key component is the implementation of environmental performance reviews for local government officials. These measures aim to stabilize funding for the environmental sector and encourage green innovation in urban areas.

Wang and Chu (2024) focus on the A-shared listed Chinese firms and find that ESG ratings promote a shift in corporate green innovation from end-of-pipe solutions to proactive source control. Companies operating in regions with stricter legal frameworks, a higher proportion of independent directors, and advanced digitalization capabilities demonstrate superior performance. Therefore, governments should strengthen ESG rating systems, improve digital infrastructure, and enforce environmental justice practices. Meanwhile, corporations are encouraged to adopt ESG principles as value-driven investments, utilize ESG ratings for informed strategic decision-making, and leverage digitalization to facilitate progress.

Research by Zheng and Zhang (2024) indicates that Network Public Opinion (NPO), primarily driven by retail investors on stock forums, can have a negative impact on ESG ratings. This trend is often correlated with the level of anxiety experienced by company managers. Therefore, several crucial improvements can be made, including expanding the channels through which the media and analysts communicate corporate information, the relationship between management and investors, and strengthening regulatory mechanisms.

The backlash against ESG underscores the growing tensions between its rapid adoption and the challenges that accompany its implementation. Critics argue that ESG initiatives can be superficial, hindered by greenwashing, and often lack clear, standardized metrics, which leads to skepticism among investors and stakeholders. Additionally, political polarization and the varying regulatory environments across regions further complicate the widespread integration of ESG practices.

The benefits of ESG—such as long-term sustainability, improved corporate governance, and positive social impact—are widely acknowledged. However, critics contend that its full potential cannot be realized without rigorous standards and accountability. Addressing these criticisms through stronger regulatory frameworks, transparent reporting, and consistent metrics will ensure that ESG remains a credible and effective tool for sustainable business exercises.

6. The future of ESG: adaptation or decline

As ESG criteria face growing scrutiny, future developments will likely focus on enhancing the standardization of ESG metrics and creating universal frameworks to ensure consistent ESG ratings. This is expected to improve the credibility and comparability of ESG

assessments. Wang et al. (2024) highlight that ESG ratings have become a crucial reference in investment decision-making. However, only 27 percent of global exchanges require companies to disclose their ESG practices, representing a quarter of all listed companies.

Furthermore, different ratings employ varying evaluation methodologies, leading to discrepancies in ESG assessments. To address these challenges, Wang et al. (2024) suggest that countries should develop standardized measures to enhance ESG rating transparency. Implementing globally unified ESG evaluation methods could improve rating accuracy and reliability, reducing disparities across regions and markets. International collaboration is essential in this endeavor to prevent unethical practices. Policymakers can also implement incentives. While cross-cultural dialogue is crucial, governments and financial institutions should collaborate to cultivate a strong culture of sustainable investment.

Almaqtari et al. (2023) emphasize the importance of policymakers establishing comprehensive guidelines for environmental and sustainability reporting. This should be based on a thorough assessment of institutional and regulatory frameworks, legislation, and the enforcement of sustainability scores across countries. Chen et al. (2024c) note that since the “Carbon Peak and Carbon Neutrality” declaration in 2020, China has placed greater emphasis on ESG performance. Their study reveals that climate risk has a substantial impact on ESG performance in China, with a more pronounced effect on state-owned enterprises.

Zhou and Liu (2023) discuss the connection between digitalization and ESG. Companies that adopt advanced technologies improve their resource efficiency and sustainability efforts. Conversely, high-energy expenditures can negatively affect ESG, underscoring the importance of implementing energy-efficient practices. Wen et al. (2022) emphasize the importance of managers maintaining high ESG disclosure quality to sustain market value and lower financial risks. Moreover, they emphasize the need for mandatory ESG reporting to enable policymakers to strengthen investment incentives and ensure long-term financial and market benefits.

Yang et al. (2024) examine how commodities such as gold and oil, market sentiment, and geopolitical risk significantly influence ESG stock returns. However, these commodities do not serve as safe havens for ESG stocks; instead, they act as diversifiers of risk. ESG stocks hedge against geopolitical and cryptocurrency-induced uncertainties during bearish markets. This resilience is likely due to strong brand loyalty, committed investors, and skilled management. That is why policymakers and regulators should consider asset dynamics to shape sustainable investment policies and monitor market trends.

Meng et al. (2023) demonstrate a highly positive relationship between ESG performance and corporate reputation, indicating that the benefits will increase as ESG performance improves. Investor attention plays a mediating role in this relationship, with more effect on non-state-owned companies, which amplifies the influence of ESG on reputation. Companies should strive to maintain ESG performance above market averages to maximize reputation and actively engage with investors. Meanwhile, investors should increasingly incorporate ESG factors into their valuations, and auditors should focus on verifying non-financial disclosures.

Avramov et al. (2022) recognize that when ESG ratings are uncertain, investors are less likely to allocate capital to ESG-focused investments or actively engage in corporate sustainability efforts. This hesitancy can increase the cost of capital for green companies, limiting their ability to pursue socially responsible initiatives and reducing their overall social impact. These alternative approaches address some criticisms of ESG, mainly concerning greenwashing and inconsistent reporting standards. Lee and Suh (2022) indicate that the relationship between ESG conduct and financial performance is inconclusive, as it depends on relatively unexplored model specifications; a significant challenge is finding an effective measurement method.

7. ESG implementation worldwide

Recent findings suggest that ESG initiatives are experiencing significant growth, but they are not without challenges. As companies and investors look toward the future, there will likely be a greater focus on ensuring materiality, enhancing the robustness of ESG metrics, and exploring alternative frameworks that may offer more direct impacts and measurable outcomes. Ma, Zhou and Chi (2025) propose that future ESG standards will probably require the integration of both global regulatory frameworks and sector-specific measures to ensure effectiveness. For instance, governments should adopt comprehensive policies that mandate disclosures, enhance transparency, and align with international standards to improve competitiveness and reduce information asymmetry.

In the U.S.A., the adoption of ESG has seen significant growth, driven by institutional investors, corporate sustainability commitments, and evolving regulatory frameworks. The Securities and Exchange Commission (SEC) has proposed climate disclosure rules to enhance transparency in corporate reporting. However, ESG initiatives have become increasingly politicized, with some states enacting laws to support ESG investing while others actively oppose it. This polarization presents challenges, including accusations of greenwashing and inconsistencies in ESG ratings. As noted by Shuwaikh et al. (2025), in the U.S.A., companies backed by Independent Venture Capital (IVC) demonstrate better environmental performance, as evidenced by higher ESG scores, than those funded by Corporate Venture Capital (CVC).

Bagh et al. (2024) conducted a study on listed companies in the U.S.A. and China, finding that ESG performance has a significant impact on sustainable growth in different ways across the two countries. Factors related to environmental and social aspects play a crucial role as they enhance credibility among stakeholders. As a result, policymakers are encouraged to adopt a multifaceted approach, while investors should reason with the nonlinear ESG factors in their decisions. Companies are advised to implement balanced, long-term ESG strategies to avoid overinvestment and low returns. Given these non-linear effects, the key takeaway is the importance of a holistic approach to ESG.

Europe is a global leader in ESG implementation, driven by stringent regulations, including the EU Taxonomy, the Corporate Sustainability Reporting Directive (CSRD), and the SFDR. These frameworks have compelled European companies and investors to prioritize ESG integration, with a strong emphasis on climate action and corporate governance. The European Central Bank (ECB) and national regulators have enforced strict ESG reporting requirements, establishing the region as a benchmark for ESG adoption.

Abdelsalam et al. (2024) found that banks with higher ESG scores exhibit less procyclical behavior. This is primarily due to their responsible lending practices, which help prevent excessive credit expansion, and their risk strategies, which incorporate ESG factors, particularly climate risks. Additionally, banks prioritizing ESG considerations enjoy stronger stakeholder trust, a stable deposit base, and greater market resilience. This stability enables them to maintain lending during economic downturns, reinforcing their role in smoothing risks over time.

Gehrig, Iannino and Unger (2024) indicate that ESG enhances bank resiliency by stabilizing systemic risk through various exposures and measures. The impact of ESG measures differs between Europe and the U.S.A.; European banks tend to benefit from labor market institutions, where investments in workforce development, human rights, and training significantly reduce systemic risk. Dmuchowski et al. (2023) analyze global trends and Poland's perspective, revealing that ESG funds offer better downside protection than traditional funds during market crises, resulting in more favorable stock prices over the long term. On the other hand, Poland has lagged in ESG practices, primarily in the financial sector, due to a lack of legal, educational, and communication infrastructure, as well as a notable gap between

managers' and investors' knowledge. To expedite the development of ESG funds, collaboration among significant market players, regulators, and the government is crucial.

ESG adoption in Asia varies significantly across different countries. In China, ESG has been integrated into Green Finance, with a primary emphasis on environmental sustainability, while receiving comparatively less attention to social and governance aspects. According to Ye and Tian (2025), improvements in ESG performance are primarily driven by enterprises with limited financial resources, those located in economically developed regions, State-Owned Enterprises (SOEs), and major polluters. For Ma, Zhou and Chi (2025), governance emerges as the primary driver of green transformation. To Xie (2024a), ESG principles and green finance represent a step toward achieving carbon neutrality in China.

Research by Donghui et al. (2025) analyzes data from non-financial Chinese A-share listed firms. It shows that strong ESG performance reduces agency costs and alleviates financial constraints, effectively improving investment efficiency. Additionally, the presence of marketization and supportive legal frameworks amplify ESG's positive impact by reinforcing governance and optimizing resource allocation. In contrast, government intervention and financialization exhibit more limited or context-dependent effects. The positive impacts on investment efficiency are especially noticeable in regions with stronger institutional frameworks.

Wu, Deng and Gao (2024) analyze listed companies in China and argue for balancing ESG and financial performance. They caution against an excessive focus on ESG, as it can negatively impact financial performance. Therefore, improving corporate environmental and social scores while also growing risk-taking capacity and profitability is necessary. Zhu et al. (2024) establish a positive relationship between ESG investment and various factors in China, including board independence, the presence of a sustainability committee, gender diversity, managerial ownership, and the frequency of board meetings. Conversely, they identify some negative aspects of ESG, such as CEO duality, larger board sizes, the inclusion of foreign nationals on boards, and annual remuneration.

Almaqtari et al. (2023) show empirical evidence from Asia and Europe that border diversity has a limited impact on environmental disclosures, particularly in Asian countries. In addition, Asian companies tend to demonstrate inferior environmental disclosures compared to European companies, despite both continents experiencing a lack of transparency in emissions and innovation reporting. Regarding environmental disclosure and sustainability, the industrial and service sectors fall behind the trading sector.

Zhang and He (2024) analyze the Guidance on Building a Green Financial System (GBGFS), published by the Chinese authorities in 2016, to promote sustainable development, social investment, and financial innovation. Their findings indicate that the GBGFS endorses ESG practices in environmental and social aspects but not governance. The policy has a more significant impact on companies with high ESG ratings than on those with lower levels; these effects are particularly pronounced in politically connected firms and extend to companies in both Western and Eastern regions of China. Since sustainable development is a long-term objective, policies should be continuously adapted based on observed outcomes.

Hluszko et al. (2024) note that the adoption of ESG in Latin America is growing. Regulatory frameworks and investor interest in sustainable practices are increasing, alongside pressure from stakeholders. To enhance ESG implementation, it is recommended that companies adopt improved indicators, invest resources to accelerate transitions, prioritize sustainable supplier engagement, enhance the materiality of reports, and collaborate on studies and social projects with local communities. Nevertheless, political instability, economic constraints, and low corporate transparency have impeded widespread ESG implementation.

According to Hluszko et al. (2024), Latin America is in the early stage of ESG maturity. The region prioritizes environmental aspects over social and governance considerations,

primarily focusing on climate change, energy efficiency, waste management, water usage, and biodiversity. Social aspects encompass human rights, labor practices, local community engagement, diversity, and inclusion. In contrast, governance issues include transparency, ethical behavior, and corporate governance structures. Nonetheless, the region has seen advancements in sustainable finance, with green bonds gaining traction, but many companies still struggle with ESG compliance and reporting.

Rojo-Suárez, Alonso-Conde and Gonzalez-Ruiz (2024) elucidate that ESG policies implemented by oil and gas companies in Latin America are associated with lower medium-term discount rates, which enhance corporate value for environment-responsible companies. This occurs through higher stock prices driven by increased discounted dividends and investors who prefer green investments. This implies that efforts by companies to enhance ESG performance are coupled with public policies that mitigate costs and reduce methane emissions.

Zhang et al. (2024) argue that all nations, particularly developing ones, should strengthen their ESG development frameworks and actively refine ESG evaluation processes. This would enhance corporate motivation for green innovation and sustainable competitiveness while balancing the integration of economic, social, and environmental benefits. Additionally, the success of these frameworks depends on resource support; therefore, financial institutions should offer backing incentives, and policymakers and regulators should consider the lending practices of financial institutions. Wang and Chu (2024) emphasize that all nations should promote innovation and ensure long-term sustainability by strengthening the development of rating systems and criteria for ESG. Local governments can create funding programs or grants to companies conducting research and technology development. Furthermore, they should establish collaborative platforms that bring together government, stakeholders, and academia to share knowledge, best practices, and initiatives.

ESG adoption varies significantly across continents and is influenced by regulatory frameworks, investor priorities, and economic conditions. While Europe remains a global leader, North America and Asia show mixed progress. Latin America continues to develop its ESG landscapes, facing region-specific challenges and opportunities. It is essential to consider the extreme volatility and sensitivity of this phenomenon. The unilateral decisions of leading countries can have a significant impact on ESG implementation worldwide.

8. Conclusion

This study presents a comprehensive scoping review of recent peer-reviewed research on the evolution of ESG, highlighting its rapid rise, emerging criticisms, and potential decline. The findings confirm that while ESG frameworks have gained momentum due to regulatory support and investor demand, they now face growing skepticism due to concerns over greenwashing, inconsistent reporting standards, and doubts about financial performance. The theoretical background, rooted in stakeholder, institutional, signaling, legitimacy, NRBV, and agency theories, underscores the importance of ESG for corporate governance and reveals significant challenges in maintaining credibility and transparency.

Despite its challenges, the core principles of environmental responsibility, social impact, and governance transparency are likely to persist, albeit in an evolving form. The study emphasizes the urgent need for standardized ESG metrics, robust regulatory oversight, and empirical research to assess the long-term viability of this approach. Future research should investigate shifting regulatory oversight, investor confidence, and sector-specific applications to understand whether it will remain a dominant paradigm or transition into a more refined sustainability framework. Addressing these knowledge gaps will help ensure that ESG principles translate into meaningful corporate and financial outcomes.

Our study reveals a significant lack of longitudinal research to evaluate sustained financial, social, and environmental impacts across companies and regions. While existing literature often focuses on short-term trends and market reactions, there is a pressing need for an in-depth analysis of ESG's effectiveness over extended periods. Comparative studies across jurisdictions with varying regulatory approaches can also yield valuable insights into how policy interventions shape ESG adoption and outcomes. Additionally, research should explore sector-specific ESG challenges, particularly in industries where sustainability goals, such as energy and finance, may conflict with profitability pressures.

Moreover, integrating emerging technologies such as artificial intelligence, big data analytics, and blockchain presents a promising opportunity to enhance ESG transparency, mitigate greenwashing, and standardize reporting frameworks. Future studies should investigate how these tools can improve ESG measurement and accountability. Furthermore, investigating changing investor behavior, particularly among institutional investors, managers, and regulators, will be essential in understanding ESG's evolving role in financial markets.

Globally, ESG implementation varies significantly across regions. Europe leads ESG adoption due to its stringent regulatory frameworks, including the EU Taxonomy and the SFDR, which promote transparency and corporate accountability. Political polarization and evolving SEC regulations are shaping North America's ESG landscape, resulting in both expansion and pushback from various stakeholders. Asia, particularly China, integrates ESG into green finance policies, emphasizing environmental sustainability, but faces governance challenges. Latin America and developing economies are showing a growing interest in ESG, although economic constraints, regulatory gaps, and political instability often hinder its implementation. These regional disparities highlight the need for globally harmonized ESG standards to enhance comparability, credibility, and impact.

From a practical standpoint, businesses, investors, and policymakers must address transparency issues, improve reporting reliability, and align ESG strategies with measurable financial and social outcomes. The long-term sustainability of ESG depends on the development of enhanced regulatory frameworks, market adaptability, and empirical validation of its benefits. Whether ESG remains a dominant paradigm or transitions into a more refined sustainability model largely depends on how these challenges are addressed in the years to come.

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