

Majdi A. Quttainah
Kuwait University, Kuwait

William Paczkowski
*Florida Atlantic University,
USA*

Bibliometric Review of Global Environmental, Social, and Governance (ESG) and Sustainability Challenges

Abstract

Purpose: This bibliometric review investigates the evolution and thematic development of Environmental, Social, and Governance (ESG) research from 2000 to 2024, highlighting critical trends, regulatory milestones, and emerging solutions.

Study design/methodology/approach: The study employs a structured methodology to analyze research outputs through quantitative and qualitative bibliometric tools.

Sample and data: The analysis identifies three distinct phases of ESG research: Initial Growth (2000–2010), focusing on theoretical foundations and stakeholder engagement; Mainstreaming ESG (2011–2015), driven by regulatory frameworks such as the EU Non-Financial Reporting Directive; and Exponential Growth (2016–2024), marked by the adoption of global frameworks like the Paris Agreement and SDGs.

Results: Key findings include the increasing integration of technologies such as AI and blockchain in ESG reporting and the continued dominance of finance and energy sectors in ESG studies. However, significant gaps remain, including the underrepresentation of developing economies and small and medium enterprises (SMEs).

Originality/value: The study underscores the need for standardized ESG metrics, capacity-building initiatives, and cross-sector collaborations to bridge these gaps. Emerging solutions, such as the International Sustainability Standards Board (ISSB) and programs like AGRA, exemplify actionable pathways to enhance ESG adoption globally.

Research limitations/implications: This research provides policymakers, businesses, and academics with actionable insights to advance ESG practices, foster sustainability, and address inequities across regions and industries.

Keywords: Environmental, Social and Governance, Sustainability Challenges, Corporate Responsibility, ESG Reporting, Technological Innovation, Policy Development.

JEL classification: L83, L90, M21

Submitted: 22/12/2024, revised: 31/1/2025, accepted: 18/3/2025.

Published by the Academic Publication Council of Kuwait University. All rights reserved.

To cite: Quttainah, M. A., & Paczkowski, W. (2024). Bibliometric review of global environmental, social, and governance (ESG) and sustainability challenges. *Arab Journal of Administrative Sciences*, 31(3), 621-647. <https://10.34120/ajas.v31i3.1327>

الملخص

المراجعة البليومتريّة للتحديات البيئية والاجتماعية والحوكمة العالمية والاستدامة

مجدي أنور قطينة

جامعة الكويت، الكويت

ويليام باتشكاوسكي

جامعة فلوريدا أتلانتيك

الولايات المتحدة الأمريكية

هدف الدراسة: يتناول هذا الاستعراض البليومتري التطور الموضوعي للبحوث البيئية والاجتماعية والحوكمة (ESG) من عام 2000 إلى عام 2024، مع تسليط الضوء على الاتجاهات الحرجة والإنجازات التنظيمية والحلول الناشئة.

تصميم/ منهجية/ طريقة الدراسة: تعتمد الدراسة على منهجية منظمة لتحليل مخرجات البحث؛ باستخدام أدوات القياس البليومتريّة الكمية والنوعية.

عينة الدراسة وبياناتها: يحدد التحليل ثلاث مراحل مميزة لبحوث البيئة والمجتمع والحوكمة: النمو الأولي (2000-2010)، مع التركيز على الأسس النظرية وإشراك أصحاب المصلحة؛ ودمج البيئة والمجتمع والحوكمة (2011-2015)، مدفوعاً بأطر تنظيمية مثل توجيه الإبلاغ غير المالي للاتحاد الأوروبي؛ والنمو الأسّي (2016-2024)، والذي يتميز باعتماد أطر عالمية مثل اتفاق باريس وأهداف التنمية المستدامة.

نتائج الدراسة: تشمل النتائج الرئيسية التكامل المتزايد لتقنيات مثل الذكاء الاصطناعي والبلوك تشين) في إعداد التقارير البيئية والاجتماعية والحوكمة، واستمرار هيمنة قطاعي التمويل والطاقة في دراسات البيئة والاجتماعية والحوكمة. ومع ذلك، لا تزال هناك فجوات كبيرة، منها ضعف تمثيل الاقتصادات النامية والشركات الصغيرة ومتوسطة الحجم.

أصالة الدراسة: تؤكد الدراسة على الحاجة إلى وضع مقاييس موحدة للبيئة والمجتمع والحوكمة، ومبادرات بناء القدرات، والتعاون بين القطاعات المختلفة لسد هذه الفجوات. وتجسد الحلول الناشئة؛ -مثل مجلس معايير الاستدامة الدولي (ISSB) وبرامج مثل (AGRA) - مسارات قابلة للتنفيذ لتعزيز تبني البيئة والمجتمع والحوكمة على مستوى العالم.

حدود الدراسة وتطبيقاتها: يوفر هذا البحث لصناع السياسات والشركات والأكاديميين رؤى قابلة للتنفيذ لتعزيز ممارسات (ESG)، وتعزيز الاستدامة، ومعالجة عدم المساواة عبر المناطق والصناعات.

الكلمات المفتاحية: البيئة والمجتمع والحوكمة، تحديات الاستدامة، المسؤولية الاجتماعية للشركات، إعداد التقارير البيئية والاجتماعية والحوكمة، الابتكار التكنولوجي، تطوير السياسات.

تصدر عن مجلس النشر العلمي بجامعة الكويت. جميع الحقوق محفوظة للمجلة.

الإشارة المرجعية: قطينة، مجدي أنور، وباتشكاوسكي، ويليام. (2024). المراجعة البليومتريّة للتحديات البيئية والاجتماعية والحوكمة العالمية والاستدامة. المجلة العربية للعلوم الإدارية، 31(3)، 621-647.

<https://10.34120/ajas.v31i3.1327>

Introduction

The urgency to address global challenges such as climate change, social inequities, and governance deficiencies has placed Environmental, Social, and Governance (ESG) principles at the forefront of corporate and policy agendas (Pickering et al., 2022). ESG provides a comprehensive framework for aligning business strategies with sustainability objectives, encompassing environmental stewardship, social responsibility, and governance transparency (Agbakwuru et al., 2024). These dimensions guide organizations in mitigating risks, enhancing stakeholder trust, and fostering innovation and long-term value creation in an increasingly complex global environment (García-Olalla & Vázquez-Ordás, 2024). As the global economy faces mounting environmental and social pressures, ESG principles have become essential for sustainable development and resilience (Jang et al., 2016).

The environmental dimension of ESG focuses on mitigating the adverse effects of climate change, promoting the transition to renewable energy, and ensuring the sustainable use of resources (Oliver Yébenes, 2024). This is critical as industrialization, urbanization, and unsustainable consumption patterns have resulted in significant environmental consequences. Organizations face growing pressure to adopt carbon neutrality, water conservation, and waste reduction practices. Regulatory frameworks, including the Paris Agreement, have further elevated the importance of environmental accountability by mandating alignment with global climate action goals (UNFCCC, 2016). These developments underscore the pivotal role of businesses in addressing environmental challenges.

The social pillar of ESG emphasizes equitable labor practices, community engagement, and diversity and inclusion. Businesses are expected to tackle social issues such as gender inequality, worker exploitation, and the marginalization of underrepresented groups (Kabeer, 2021). Investors and consumers increasingly demand transparency and proactive measures in addressing these challenges, making social responsibility a fundamental aspect of organizational strategy (Nave & Ferreira, 2019). The COVID-19 pandemic has heightened awareness of social sustainability, drawing attention to the need for resilient healthcare systems, workplace safety, and equitable economic policies (Zabaniotou, 2020). As a result, the social aspect of ESG has gained unprecedented importance in shaping corporate policies and practices (Ahmad et al., 2023).

Governance is essential for ensuring ethical business conduct, effective risk management, and compliance with regulatory standards (Demidenko & McNutt, 2010). Strong governance frameworks are vital for maintaining stakeholder confidence and navigating various risks, from cyber threats to geopolitical instability and corporate misconduct (Katrakazas & Papastergiou, 2024). The emergence of ESG reporting standards, such as those established by the Global Reporting Initiative (GRI) and the Sustainability Accounting Standards Board (SASB), reflects the growing demand for accountability and transparency in corporate decision-making (Bais et al., 2024). As governance principles become increasingly integrated into ESG frameworks, they provide a critical foundation for achieving organizational sustainability (García-Olalla & Vázquez-Ordás, 2024).

Despite the growing importance of ESG principles, several critical gaps persist in research and practice. A significant research gap exists in understanding how ESG frameworks are adopted and implemented in underrepresented regions, such as developing economies in Africa and Asia, and underexplored sectors, including agriculture, healthcare, and retail. Most ESG studies focus on developed regions and high-impact industries like finance and energy, leaving critical areas underserved. Furthermore, there is a lack of standardized metrics for ESG reporting, complicating efforts to evaluate and compare performance across diverse regions and industries (Fometescu et al., 2024). These gaps underscore the need for a comprehensive review to map the evolution of ESG research and identify opportunities for inclusive and actionable strategies. Additionally, disparities in ESG adoption between developed and developing economies highlight essential gaps. While large corporations in developed regions have made notable progress in implementing ESG principles, small and medium enterprises (SMEs) and businesses in emerging markets often lack the resources, expertise, and regulatory support needed for effective ESG integration (Tsang et al., 2023). These challenges underscore the need for localized strategies and capacity-building initiatives to ensure equitable progress (UNFCCC, 2016).

The evolution of ESG research reflects its growing importance in addressing global sustainability challenges. Over the past two decades, studies have shifted from theoretical explorations of corporate social responsibility to practical analyses of ESG frameworks (Khamisu & Paluri, 2024). Recent research highlights areas such as integrating Artificial Intelligence (AI) in ESG data collection, blockchain applications for supply chain transparency, and industry-specific challenges

in finance, agriculture, and healthcare (Kumar et al., 2023). However, significant gaps remain, particularly in understanding ESG adoption in developing economies, underrepresented sectors and the long-term impacts of ESG initiatives on organizational resilience (Li et al., 2024).

This bibliometric review addresses these gaps by analyzing trends, themes, and knowledge gaps in ESG research from 2000 to 2024. Unlike previous studies that primarily focus on specific regions or industries, this review adopts a holistic approach to examine the global landscape of ESG research. By leveraging quantitative bibliometric tools such as VOSviewer and integrating qualitative insights from expert consultations, this study aims to: (1) map the evolution of ESG research over three distinct phases: Initial Growth (2000–2010), Mainstreaming ESG (2011–2015), and Exponential Growth (2016–2024). (2) Identify thematic trends and sectoral disparities, by highlighting underrepresented regions; such as Africa in the agricultural and healthcare industries. (3) Propose actionable insights for policymakers, business leaders, and academics to address ESG adoption and reporting gaps. The findings of this study have significant implications for ESG practices and policies. By identifying critical trends and emerging solutions, the review provides stakeholders with evidence-based strategies to enhance ESG integration, foster sustainability, and address regional and sectoral inequities. This research contributes to the growing discourse on ESG as a transformative framework for addressing global sustainability challenges and advancing equitable progress across regions and industries. Through a systematic and data-driven approach, this research contributes to the growing discourse on ESG as a critical driver of sustainability and resilience in the 21st century.

Research Methodology

This study utilized a structured bibliometric approach to investigate the evolution of Environmental, Social, and Governance (ESG) research, focusing on identifying sustainability challenges, solutions, and research gaps. The study focused on the period between 2000 and 2024. The methodology was designed to comprehensively analyze research trends, emerging themes, and knowledge gaps in ESG literature during this critical period of rapid development.

Literature Selection

This study utilized a structured bibliometric approach to analyze ESG research published between 2000 and 2024. Data were sourced from Scopus, Web of Sci-

ence (WoS), and Google Scholar, selected for their extensive coverage of peer-reviewed journals and conference proceedings. The inclusion criteria encompassed peer-reviewed articles, book chapters, and conference papers on ESG-related topics. In contrast, non-peer-reviewed sources, opinion articles, and papers lacking substantial ESG relevance were excluded. Three thousand five hundred publications were analyzed, with Scopus contributing 1,500, WoS 1,200, and Google Scholar 800. The final dataset was refined based on citation impact and thematic relevance. The study incorporated a broad geographic scope to ensure comprehensive coverage, spanning developed regions (North America, Europe) and developing economies (Africa, Asia, Latin America). Additionally, ESG research was categorized across key sectors, including finance, energy, agriculture, health-care, and retail, to capture sector-specific insights and emerging trends.

Search Strategy

The search strategy employed a carefully constructed combination of keywords and Boolean operators to ensure comprehensive coverage of relevant literature. Keywords such as "Environmental Social and Governance," "ESG," "Sustainability Challenges," "Corporate Responsibility," and "Climate Governance" were chosen to capture the diverse aspects of ESG research. A Boolean query example, "Environmental Social and Governance" OR ESG AND "sustainability challenges" AND ("corporate" OR "climate" OR "governance"), was designed to broaden the scope while maintaining relevance. This query structure allows for including articles that address ESG principles in varying contexts, emphasizing their application to sustainability challenges, corporate practices, and governance frameworks. Combining multiple search terms and operators ensures the retrieval of a diverse and representative dataset from academic databases.

Data Extraction

In the data extraction stage, the selected literature was systematically analyzed using bibliometric tools to extract critical information relevant to the study objectives. The analysis focused on identifying keyword co-occurrence, citation networks, and collaborative linkages among authors and institutions. Key data points collected included citation counts, measuring the impact and influence of publications, and keywords and themes, highlighting dominant and emerging topics within the field. Additionally, author collaborations and institutional contributions provided insights into the networks driving ESG research, while the regional

distribution analysis uncovered geographic patterns and disparities in research outputs. To enhance the depth of the analysis, Figure 1 has been expanded to illustrate thematic trends and geographic contributions, offering a more comprehensive understanding of ESG research evolution. This structured approach ensured a holistic examination of the ESG literature landscape.

Expert Consultation

To validate and complement the bibliometric findings, semi-structured interviews were conducted with 20 experts, including 10 academics specializing in sustainability reporting, corporate governance, and policy development, alongside 10 industry professionals from multinational corporations, regulatory agencies, and ESG consulting firms. The interviews explored key themes such as ESG adoption challenges, sectoral disparities, and regional implementation barriers. A thematic analysis of the qualitative responses was performed to identify alignment with bibliometric trends, ensuring a well-rounded and contextually relevant understanding of ESG research dynamics.

Data Analysis

The bibliometric data was analyzed using quantitative and qualitative methods to uncover key trends, thematic clusters, and knowledge gaps in ESG research.

Quantitative Analysis

The quantitative analysis focused on identifying measurable patterns and relationships within the dataset. Trends in the volume and growth of ESG research over time were examined to track the field's evolution. Citation analysis was conducted to identify influential publications, leading authors, and high-impact journals that have shaped the discourse. Additionally, network analysis explored collaborations between institutions and geographic regions, highlighting the interconnectedness of global research efforts.

Qualitative Analysis

The qualitative analysis provided a deeper understanding of the content and thematic focus of the literature. Frequently cited papers were subjected to content analysis to extract insights into core sustainability challenges and proposed solutions. Thematic analysis was employed to categorize ESG research into key domains, including environmental impact, social equity, and governance practic-

es. These qualitative insights complemented the quantitative findings, offering a holistic view of the research landscape.

Validation of findings

Triangulation was employed to enhance the reliability of the findings by integrating quantitative bibliometric insights with qualitative expert opinions. Several validation techniques were applied, including cross-validation, which involved comparing key themes from bibliometric analysis with expert consultations. A thematic consistency check was conducted to ensure that the identified ESG research gaps aligned with real-world implementation challenges. Additionally, a comparative analysis with previous bibliometric reviews was performed to benchmark findings, highlighting novel contributions and reinforcing the study's credibility.

Results

Trends in ESG Research

The evolution of ESG research has undergone distinct phases, reflecting shifts in thematic focus and academic engagement. Initially, ESG research was embedded within broader Corporate Social Responsibility (CSR) discussions, with early studies exploring the financial implications of sustainable business practices. During this phase, research predominantly examined stakeholder theory, emphasizing how businesses could align ethical investments with corporate profitability while addressing societal expectations. As illustrated in Figure 1, the number of publications remained relatively low in the early 2000s but showed gradual growth as ESG principles gained traction in academic and policy discourse. A significant turning point occurred in the mid-2010s, with a surge in research focusing on sustainable finance, environmental sustainability, and governance frameworks. This period saw the emergence of studies analyzing the role of ESG in financial markets, regulatory compliance, and corporate transparency. By the 2020s, ESG research had expanded significantly, with thematic areas diversifying to include climate-related financial risks, social impact investing, and corporate governance reforms. Geographic contributions also became more pronounced, with increasing studies examining ESG implementation in developed and emerging economies. The accelerated publication rise during this period indicates a growing recognition of ESG's role in shaping business strategy, policy, and investment decisions (Figure 1). Key milestones include introducing global sustainability reporting

standards, policy-driven ESG mandates, and increased scrutiny of corporate ESG performance (see Table 2).

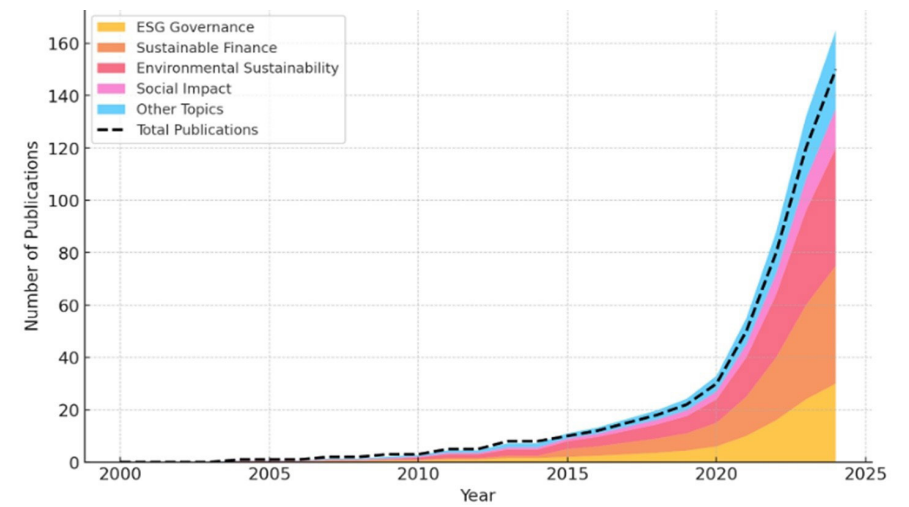


Figure 1: Evolution of ESG Research Trends

Thematic Focus Areas

Thematic analysis revealed three primary areas of focus during this phase: theoretical development, financial implications, and stakeholder engagement (Table 1). These areas underscored the importance of ethical corporate behavior and the role of sustainable practices in driving profitability and meeting societal expectations.

Table 1
Thematic Focus Areas in the Initial Growth Phase

Theme	Focus	Example Studies
Theoretical Development	Differentiating ESG from CSR	Exploration of early sustainable business models.
Financial Implications	Impact of CSR practices on profitability	Linking sustainability to financial performance.
Stakeholder Engagement	Ethical corporate behavior	Role of companies in meeting societal expectations.

Table 2
Drivers and Milestones

Driver	Milestone
Emerging Interest in CSR	Publication of CSR theoretical frameworks, shaping early academic discourse.
Ethical Investments	Studies linking sustainability to profitability gained prominence.
Transition to ESG-Focused Research	Shift from CSR theories to ESG-specific practices and applications.

Drivers and Milestones

Key drivers for research included growing public interest in CSR, the rise of ethical investments, and increasing expectations for corporate accountability. Milestones such as the publication of CSR frameworks and studies linking CSR to profitability marked significant progress in integrating sustainability into business models (see Table 3).

Mainstreaming ESG Phase

A significant increase in regulatory initiatives and corporate accountability measures characterized the Mainstreaming ESG phase. Regulatory frameworks, particularly the European Union's Non-Financial Reporting Directive (2014), served as key drivers, requiring companies to disclose non-financial information related to environmental, social, and governance (ESG) issues. This led to an increased focus on ESG reporting and compliance, with academia and industry exploring best practices for integrating these principles into organizational strategies. The volume of publications showed a marked increase, with annual publications rising from 2016-2024, reflecting heightened academic and industry interest (see Figure 1)

Thematic Focus Areas in Mainstreaming the ESG Phase

Thematic analysis identified four dominant areas of focus: regulatory compliance, ESG reporting standards, integration of ESG into corporate strategies, and stakeholder engagement. These themes highlighted the growing emphasis on transparency and the strategic role of ESG in enhancing organizational value (Table 3).

Table 3
Thematic Focus Areas in Mainstreaming ESG

Theme	Focus	Example Studies
Regulatory Compliance	Adapting to frameworks like the EU Non-Financial Reporting Directive	Impact of regulatory changes on corporate disclosure.
ESG Reporting Standards	Development and adoption of standardized ESG metrics	Studies on Global Reporting Initiative (GRI) and SASB.
Integration into Corporate Strategy	ESG as a driver of business performance and resilience	Exploration of ESG’s role in competitive advantage.
Stakeholder Engagement	Enhancing transparency and trust	Influence of stakeholder expectations on ESG practices.

Regulatory Milestones and Their Impact

The introduction of ESG metrics by the Global Reporting Initiative (GRI) marked a significant turning point in ESG research by providing standardized reporting frameworks, as shown in Table 4. This milestone facilitated the systematic collection, analysis, and comparison of environmental, social, and governance performance across organizations and industries. Researchers increasingly focused on examining these metrics' adoption, implementation, and challenges, enabling transparency and consistency in ESG reporting. As a result, GRI's metrics laid a foundational basis for further advancements in corporate sustainability disclosures and accountability on a global scale.

Table 4
Key Regulatory Milestones and Their Impact

Regulatory Development	Impact on ESG Research
Introduction of ESG Metrics by GRI	Increased focus on standardized reporting frameworks.
EU Non-Financial Reporting Directive	Surge in studies exploring compliance and implementation.
Adoption of SDGs by the United Nations	Shift toward aligning ESG strategies with global sustainability goals.

The EU Non-Financial Reporting Directive spurred a surge in research focused on compliance and implementing mandatory non-financial disclosures. This regulation required companies to disclose information on environmental, social, and governance matters, driving studies that analyzed how organizations adapt to these requirements and the resulting impact on corporate transparency. Researchers explored the effectiveness of the directive in fostering accountability, improving ESG performance, and influencing stakeholder trust. Consequently, the directive has highlighted the role of regulatory frameworks in promoting corporate sustainability practices.

The adoption of the Sustainable Development Goals (SDGs) by the United Nations in 2015 introduced a global sustainability agenda that significantly influenced ESG research. This milestone encouraged businesses and researchers to align ESG strategies with the SDGs, resulting in studies assessing corporate contributions to specific goals such as climate action, gender equality, and responsible consumption. The SDGs have also facilitated the integration of global sustainability priorities into ESG reporting, expanding the scope of research to include the broader societal and environmental impact of corporate activities. As a result, the SDGs have strengthened the link between ESG performance and sustainable development objectives.

Exponential Growth Phase (2020–2024)

The Exponential Growth phase (2020–2024) witnessed a dramatic surge in ESG research, spurred by global commitments like the Paris Agreement (2016) and the UN Sustainable Development Goals (SDGs). These frameworks emphasized integrating ESG principles into corporate and policy agendas to achieve sustainable development. Key research areas during this period included ESG integration into corporate decision-making, stakeholder engagement, and sustainable finance. The number of publications rose sharply by 2024, indicating unprecedented academic and industry interest (Figure 1). This phase also saw advancements in ESG methodologies, such as adopting AI for ESG data collection and using blockchain for supply chain transparency.

Thematic Focus Areas in Exponential Growth Phase (2020–2024)

Thematic analysis revealed three primary focus areas: ESG integration, stakeholder engagement, and sustainable finance. These topics reflect the evolving complexity and scope of ESG practices in addressing global sustainability challenges (Table 5).

Table 5
Thematic Focus Areas in Exponential Growth Phase

Theme	Focus	Example Studies
ESG Integration	Embedding ESG into corporate strategy	AI applications for ESG data, blockchain in supply chains.
Stakeholder Engagement	Enhancing trust and collaboration with stakeholders	ESG’s role in community resilience and ethical leadership.
Sustainable Finance	Investments aligned with sustainability goals	Green bonds, ESG criteria in portfolio management.

Global Milestones and Their Impact

Global initiatives and regulatory developments significantly influenced the trajectory of ESG research during this period. Table 6 outlines the key milestones that drove the exponential growth in ESG-related publications.

Table 6
Key Global Milestones and Their Impact (2016–2024)

Milestone	Impact on ESG Research
Paris Agreement Adoption	Increased focus on climate governance and carbon neutrality.
Integration of SDGs in Corporate Reporting	Alignment of ESG practices with global sustainability targets.
COVID-19 Pandemic	Highlighted the importance of social and governance pillars.
EU Corporate Sustainability Reporting Directive (CSRD)	Standardized ESG reporting practices across regions.

Themes Identified

The bibliometric analysis identified three critical themes in ESG research: Regulatory Challenges, Technological Innovation, and Sectoral Disparities. Each theme reflects pressing issues and opportunities for advancing ESG practices across regions and industries.

Regulatory Challenges

ESG reporting standards exhibit significant variability across regions, posing challenges for multinational corporations operating in diverse regulatory envi-

ronments, as summarized in Table 7. For instance, while the European Union (EU) enforces strict ESG disclosure mandates through directives like the Corporate Sustainability Reporting Directive (CSRD) (Hummel & Jobst, 2024), many countries in Asia and Africa lack comprehensive regulations. This disparity complicates global ESG adoption and benchmarking (Schumacher et al., 2022). A study of financial firms in North America and Europe highlights these challenges. It revealed that U.S. firms predominantly rely on voluntary frameworks like the Sustainability Accounting Standards Board (SASB), whereas their European counterparts adhere to stricter EU directives (Christensen et al., 2021).

Table 7
Regional Disparities in ESG Reporting Standards

Region	Regulatory Frameworks	Challenges
European Union	EU Non-Financial Reporting Directive, CSRD	High compliance costs for SMEs.
North America	SASB, GRI	Voluntary adoption leads to inconsistent practices.
Asia and Africa	Limited or no comprehensive frameworks	Regulatory gaps hinder ESG adoption.

Technological Innovation

Table 8 shows emerging technologies, such as Artificial Intelligence (AI) and blockchain, are transforming ESG data management (Stein Smith, 2024). AI facilitates predictive analytics for environmental and social risk management, while blockchain enhances transparency and traceability in supply chain reporting (Idrissi et al., 2024). An example is Walmart's blockchain system for tracking food safety, which provides real-time insights into sustainability metrics (Ellahi et al., 2023). Similarly, AI-driven tools are increasingly used for automated ESG scoring and reporting, enabling organizations to meet compliance standards efficiently (Božić, 2023).

Table 8
Applications of Technology in ESG Practices

Technology	Application	Impact
AI	Predictive analytics for risk management	Proactive identification of ESG risks.
Blockchain	Supply chain transparency and immutability	Enhanced trust in sustainability reporting.
IoT (Internet of Things)	Monitoring environmental metrics (e.g., emissions)	Real-time tracking of ESG goals.

Sectoral Disparities

ESG research is heavily concentrated in sectors like finance and energy due to their significant environmental and social impacts, as shown in Table 9. However, healthcare, agriculture, and retail sectors remain underexplored despite their critical roles in global sustainability. For instance, a review of ESG implementation in agriculture revealed challenges such as the lack of carbon tracking tools and insufficient data on sustainable farming practices (Wang et al., 2024). Addressing these gaps is essential for achieving sector-specific ESG goals.

Table 9
Sectoral Representation in ESG Research

Sector	Research Focus	Challenges Identified
Finance	Sustainable investments, green bonds	Fragmented reporting frameworks.
Energy	Transition to renewables, carbon capture	High costs of technology adoption.
Agriculture	Sustainable farming practices	Lack of carbon tracking and sustainability data.
Healthcare	Social equity and access to services	Limited research on ESG applications.
Retail	Supply chain transparency	Adoption of technology for traceability.

Gaps in the Literature

The bibliometric analysis identified critical gaps in ESG research, particularly concerning Regional Imbalances and SME Inclusion. These gaps highlight the

uneven distribution of ESG research and adoption, underscoring the need for tailored strategies to address sustainability challenges in underrepresented regions and sectors.

Regional Imbalances

Developing economies face significant sustainability challenges but remain underrepresented in ESG research. Regions, such as Africa, struggle with critical issues like deforestation, energy poverty, and access to clean water, yet these concerns receive limited attention in scholarly work. In contrast, more developed regions, mainly Europe and North America, dominate ESG-related research, highlighting a clear regional imbalance. This disparity underscores the need for localized studies that address the unique environmental, social, and governance challenges developing economies face and offer context-specific solutions to promote sustainability.

SME Inclusion

Small and medium enterprises (SMEs), vital to global economic growth, face notable challenges in adopting ESG practices. These challenges include limited financial resources, insufficient expertise, and restricted access to tools and frameworks necessary for effective ESG implementation. Unlike large corporations, SMEs often struggle to monitor and integrate sustainability metrics into their operations, highlighting a significant gap in ESG adoption. Bridging this gap requires tailored solutions, capacity-building initiatives, and more significant support to enable SMEs to align with broader sustainability goals.

Emerging Solutions

The analysis highlights innovative strategies that address key challenges in ESG implementation. These emerging solutions focus on global standardization, collaborative initiatives, and capacity-building programs, offering actionable pathways for advancing ESG practices across regions and sectors.

Standardization of Metrics

One significant advancement in ESG implementation is the development of unified global reporting frameworks. The International Sustainability Standards Board (ISSB) aims to harmonize ESG metrics and disclosures, reducing inconsistencies and enabling comparability across regions and industries. This

standardization is expected to enhance transparency and facilitate informed decision-making for investors and stakeholders, as shown in Table 10.

Table 10
Benefits of Standardized ESG Metrics

Benefit	Description
Improved Comparability	Enables benchmarking across regions and industries.
Increased Transparency	Builds stakeholder trust through consistent reporting.
Simplified Compliance	Reduces complexity for multinational corporations adhering to diverse standards.

Cross-Sector Collaboration

Collaborative efforts between governments, NGOs, and private entities amplify the effectiveness of ESG initiatives, as shown in Table 11. For instance, the African Green Revolution Alliance (AGRA) exemplifies successful partnerships addressing food security and promoting sustainable agriculture (AGRA, 2021). These collaborations leverage diverse expertise, financial resources, and networks to drive scalable solutions.

Table 11
Examples of Successful Cross-Sector Collaborations Education and Capacity Building

Initiative	Focus Area	Impact
African Green Revolution Alliance (AGRA)	Sustainable agriculture	Has improved food security in African nations.
Global Alliance for Banking on Values	Ethical finance	Promotes investment in sustainable businesses.
Carbon Neutrality Coalition	Climate action	Facilitates transitions to net-zero emissions.

Discussion

Evolution of ESG Research

The analysis reveals three distinct phases in ESG research: Initial Growth (2000–2010), Mainstreaming ESG (2011–2015), and Exponential Growth (2016–2024). The Initial Growth phase focuses on theoretical Corporate Social Respon-

sibility (CSR) frameworks, forming the foundation for ESG principles. During the 'Mainstreaming' phase, regulatory initiatives, such as the European Union's Non-Financial Reporting Directive (Aluchna et al., 2023), enhanced corporate accountability, significantly increasing research on ESG reporting and compliance (Handoyo & Anas, 2024). The 'Exponential Growth' phase was driven by global commitments like the Paris Agreement (Aggarwal, 2024) and the Sustainable Development Goals (SDGs), which spurred interest in ESG integration, stakeholder engagement, and sustainable finance (Raman et al., 2023). This trajectory highlights the growing recognition of ESG as a strategic framework for addressing sustainability challenges. The surge in publications during the Exponential Growth phase underscores the urgency of ESG topics in response to escalating environmental and social crises (de Silva Lokuwaduge et al., 2022).

Themes and Challenges

Uniform ESG reporting standards present a significant barrier to global implementation (Bezerra et al., 2024). While frameworks like the EU's directives provide stringent guidelines, voluntary frameworks like SASB dominate regions such as North America, leading to disparities in reporting practices (Bais et al., 2024). These inconsistencies hinder the comparability of ESG data across regions, making it difficult for stakeholders to assess performance reliably.

Integrating AI and blockchain technologies is transforming ESG data collection and reporting. For example, Walmart's blockchain-based supply chain tracking system ensures transparency and enables real-time monitoring of sustainability metrics (Sharma & Kumar, 2021). Such innovations enhance data accuracy and improve stakeholder trust by mitigating risks associated with manual reporting (Johri, 2025).

ESG research disproportionately focuses on high-impact sectors such as finance (Jucá et al., 2024) and energy (Baratta et al., 2023), while industries like healthcare, agriculture, and retail remain underexplored (Chaudhry et al., 2023). This gap limits the development of tailored ESG strategies for sectors with unique sustainability challenges, such as carbon tracking in agriculture or resource efficiency in healthcare (Zhen & Rahman, 2024).

Gaps in the Literature

The underrepresentation of developing economies in ESG research is evident. Africa, for instance, contributes little to ESG-related research despite the fact that

the region is facing significant sustainability challenges, such as deforestation and energy poverty (Peprah et al., 2024). While there are strides towards incorporating ESG measures in some areas, such as South Africa's implementation of carbon tax frameworks and responsible investing codes, the region struggles with low publication output. Its minimal share in global ESG literature highlights this, reflecting a pressing need for more localized studies that directly address Africa's unique sustainability issues (Ditlev-Simonsen, 2022). Additionally, despite regulatory efforts and the increasing adoption of ESG frameworks by some African companies, research and implementation lag behind those in more developed regions. This disparity underscores the importance of fostering increased research and publication in Africa to support its sustainable development goals and align with global ESG standards (Igwe et al., 2023). Localized studies are essential to address these region-specific issues and inform policies that promote equitable progress.

Small and medium enterprises (SMEs), which form the backbone of many economies, face significant barriers to ESG adoption. Limited financial resources and expertise restrict their ability to track ESG metrics and implement sustainability practices. Recent research on ESG (Environmental, Social, and Governance) practices among European SMEs indicates that a significant gap exists compared to larger corporations. Specifically, only about 30% of SMEs in the EU actively engage with ESG initiatives, contrasting with 70% of large companies with more robust ESG strategies. This discrepancy highlights challenges SMEs face, such as limited resources and expertise, which hinder their ability to adopt comprehensive sustainability practices. Supporting SMEs through targeted policies and access to financial resources is crucial to bridge this gap and enhance their participation in sustainable business practices (Denicolai et al., 2021). Tailored support mechanisms are needed to enable SMEs to align with global sustainability goals.

Emerging Solutions

The International Sustainability Standards Board (ISSB) was established to address the fragmentation in global sustainability reporting, which has led to inconsistencies and inefficiencies in ESG data (Afolabi et al., 2022). The ISSB aims to create a standardized approach to ESG disclosures, allowing companies to report their performance comparably and transparently, thereby aligning sustainability practices with financial performance and ensuring long-term value creation. This initiative has been supported by its adoption in regions accounting for over half of the world's GDP, demonstrating its significant momentum and importance

in fostering reliable and comparable ESG reporting (Yadav et al., 2024). This standardization is expected to simplify compliance and facilitate benchmarking across regions.

The African Green Revolution Alliance (AGRA) exemplifies a successful cross-sector collaboration for addressing ESG challenges. Through partnerships with governments, NGOs, and the private sector, AGRA has mobilized resources and expertise to tackle food security and promote sustainable agricultural practices across Africa (AGRA, 2021). Their initiatives include launching funds to support climate-resilient farming and training thousands of village advisors to foster sustainable practices. AGRA has demonstrated how multi-sectoral partnerships can leverage collective strengths to advance sustainable development goals and enhance regional food security by involving various stakeholders.

Capacity-building initiatives tailored for SMEs and emerging markets are essential for bridging knowledge gaps in ESG practices. Training programs, such as the SME Sustainability Toolkit, equip organizations with the tools to integrate ESG principles effectively (Hanif et al., 2023). These initiatives are pivotal in expanding ESG adoption in underrepresented regions and sectors.

Implications for Future Research and Practice

The findings of this bibliometric review highlight the urgent need for targeted efforts to address gaps in ESG research and practice. Future research should prioritize localized studies focusing on developing economies, as these regions face significant sustainability challenges yet remain underrepresented in the literature. Expanding ESG research into underexplored sectors, such as healthcare, agriculture, and retail, is crucial for creating comprehensive strategies tailored to specific industry needs. Additionally, there should be a concerted push to support small and medium enterprises (SMEs) through education, training, and financial mechanisms that facilitate ESG adoption. Policymakers, researchers, and industry leaders must collaborate to develop standardized reporting frameworks that bridge regulatory gaps and enhance data comparability across regions. Cross-sector partnerships and innovative solutions, such as leveraging AI and blockchain for ESG data management, will be essential in achieving equitable progress. By addressing these areas, ESG principles can become a more robust and inclusive tool for driving sustainable development in the 21st century.

Policy Implications

This study highlights critical gaps and opportunities in ESG research that significantly impact policymakers. First, the underrepresentation of developing economies in ESG studies calls for targeted policies to promote localized research and address region-specific challenges such as deforestation, energy poverty, and access to clean water. Policymakers in these regions should prioritize funding for ESG-focused research initiatives, incentivize private sector engagement in sustainability practices, and facilitate partnerships between academia, industry, and governments. Second, the limited adoption of ESG frameworks by small and medium enterprises (SMEs) underscores the need for tailored policy interventions. Governments can play a pivotal role by introducing simplified reporting frameworks, offering financial incentives such as tax breaks or grants, and providing capacity-building programs to equip SMEs with the tools and expertise needed for ESG integration. Lastly, the global disparity in ESG metrics highlights the necessity of standardization to improve comparability and accountability across regions and industries. Policymakers should collaborate with international organizations, such as the International Sustainability Standards Board (ISSB), to harmonize ESG reporting requirements, ensuring these frameworks are accessible and relevant to diverse economic contexts.

Conclusion

The bibliometric review highlights the substantial growth and shifting focus of ESG research over the last two decades, largely influenced by global environmental, social, and regulatory developments. The analysis identified several key themes, including regulatory challenges, technological innovation, and sectoral disparities, underscoring the urgent need for standardized reporting frameworks, the integration of advanced technologies, and further exploration of underrepresented sectors. It also pointed to critical gaps in the literature, particularly regarding regional imbalances and the limited inclusion of SMEs, which hinder the broader adoption of ESG practices. Emerging solutions, such as fostering cross-sector collaboration and implementing targeted capacity-building programs, provide promising strategies to overcome these challenges. For future research and practical applications, it is crucial to focus on localized, sector-specific studies, support for SMEs, and the development of unified ESG metrics. By addressing these gaps and challenges, ESG principles can make a meaningful contribution to global sustainability, enhancing resilience and promoting long-term development across diverse regions and sectors.

References

- Afolabi, H., Ram, R., & Rimmel, G. (2022). Harmonization of sustainability reporting regulation: Analysis of a contested arena. *Sustainability*, 14(9), 5517. <https://doi.org/10.3390/su14095517>
- Agbakwuru, V., Onyenahazi, O. B., Antwi, B. O., & Oyewale, K. (2024). The impact of environmental, social, and governance (ESG) reporting on corporate financial performance. *International Journal of Research Publication and Reviews*, 5(9), 3629–3644. <https://doi.org/10.55248/gengpi.5.0924.2710>
- Aggarwal, R. (2024). Carbon offsets compatible with the Paris Agreement to limit global warming: Call for direct action. *Environmental Challenges*, 17, 101034. <https://doi.org/10.1016/j.envc.2024.101034>
- AGRA. (2021). *Agriculture stakeholders plan sustainable and resilient food systems for Africa*. AGRA. <https://agra.org/news/agriculture-stakeholders-plan-sustainable-and-resilient-food-systems-for-africa/>
- Ahmad, H., Yaqub, M., & Lee, S. H. (2023). Environmental-, social-, and governance-related factors for business investment and sustainability: A scientometric review of global trends. *Environment, Development and Sustainability*, 26, 2965–2987. <https://doi.org/10.1007/s10668-023-02921-x>
- Aluchna, M., Roszkowska-Menkes, M., & Kamiński, B. (2023). From talk to action: The effects of the non-financial reporting directive on ESG performance. *Meditari Accountancy Research*, 31(7), 1–25. <https://doi.org/10.1108/MEDAR-12-2021-1530>
- Bais, B., Nassimbeni, G., & Orzes, G. (2024). Global reporting initiative: Literature review and research directions. *Journal of Cleaner Production*, 471, 143428. <https://doi.org/10.1016/j.jclepro.2024.143428>
- Baratta, A., Cimino, A., Longo, F., Solina, V., & Verteramo, S. (2023). The impact of ESG practices in industry with a focus on carbon emissions: Insights and future perspectives. *Sustainability*, 15(8), 6685. <https://doi.org/10.3390/su15086685>
- Bezerra, R. R. R., Martins, V. W. B., & Macedo, A. N. (2024). Validation of challenges for implementing ESG in the construction industry considering the context of an emerging economy country. *Applied Sciences*, 14(14), 6024. <https://doi.org/10.3390/app14146024>

- Božić, V. (2023). *Environmental, social, and governance (ESG) & artificial intelligence (AI)*.
- Chaudhry, S. M., Chen, X. H., Ahmed, R., & Nasir, M. A. (2023). Risk modelling of ESG (environmental, social, and governance), healthcare, and financial sectors. *Risk Analysis*, 1–19. <https://doi.org/10.1111/risa.14195>
- Christensen, H. B., Hail, L., & Leuz, C. (2021). Mandatory CSR and sustainability reporting: Economic analysis and literature review. *Review of Accounting Studies*, 26(3), 1176–1248. <https://doi.org/10.1007/s11142-021-09609-5>
- Demidenko, E., & McNutt, P. (2010). The ethics of enterprise risk management as a key component of corporate governance. *International Journal of Social Economics*, 37(10), 802–815. <https://doi.org/10.1108/03068291011070462>
- Denicolai, S., Zucchella, A., & Magnani, G. (2021). Internationalization, digitalization, and sustainability: Are SMEs ready? A survey on synergies and substituting effects among growth paths. *Technological Forecasting and Social Change*, 166, 120650. <https://doi.org/10.1016/j.techfore.2021.120650>
- de Silva Lokuwaduge, C. S., Smark, C., & Mir, M. (2022). The surge of environmental social and governance reporting and sustainable development goals: Some normative thoughts. *Australasian Business, Accounting and Finance Journal*, 16(2), 3–11. <https://doi.org/10.14453/aabfj.v16i2.2>
- Ditlev-Simonsen, C. D. (2022). Sustainability in developing countries: Case Sub-Saharan Africa. In *A Guide to Sustainable Corporate Responsibility* (pp. 215–234). Springer International Publishing. https://doi.org/10.1007/978-3-030-88203-7_11
- Ellahi, R. M., Wood, L. C., & Bekhit, A. E.-D. A. (2023). Blockchain-based frameworks for food traceability: A systematic review. *Foods*, 12(16), 3026. <https://doi.org/10.3390/foods12163026>
- Fometescu, A., Hațegan, C.-D., & Cuc, L. D. (2024). Challenges of measuring and reporting ESG performance. In *Exploring ESG challenges and opportunities: Navigating towards a better future* (Vol. 116, pp. 61–82). Emerald Group Publishing Limited. <https://doi.org/10.1108/S1569-375920240000116005>
- García-Olalla, M., & Vázquez-Ordás, C. J. (2024). Introduction to the special issue: "Current challenges of corporate governance: Reputation, risk and sustainability." *Global Policy*, 15(S1), 5–7. <https://doi.org/10.1111/1758-5899.13319>

- Handoyo, S., & Anas, S. (2024). The effect of environmental, social, and governance (ESG) on firm performance: The moderating role of country regulatory quality and government effectiveness in ASEAN. *Cogent Business & Management*, 11(1), 2371071. <https://doi.org/10.1080/23311975.2024.2371071>
- Hanif, M., Hassan, A., Shari, W., Wahab, N. A., & Asmaa, A. (2023). Towards sustainable small and medium enterprises (SMEs): Awareness and overcoming challenges. *Asia-Pacific Management Accounting Journal*, 18(3), 165–197. <https://doi.org/10.24191/apmaj.v18i3-06>
- Hummel, K., & Jobst, D. (2024). An overview of corporate sustainability reporting legislation in the European Union. *Accounting in Europe*, 21(3), 320–355. <https://doi.org/10.1080/17449480.2024.2312145>
- Idrissi, Z. K., Lachgar, M., & Hrimech, H. (2024). Blockchain, IoT and AI in logistics and transportation: A systematic review. *Transport Economics and Management*, 2, 275–285. <https://doi.org/10.1016/j.team.2024.09.002>
- Igwe, M. N., Khatib, S. F. A., & Bazhair, A. H. (2023). Sustainability reporting in Africa: A systematic review and agenda for future research. *Corporate Social Responsibility and Environmental Management*, 30(5), 2081–2100. <https://doi.org/10.1002/csr.2494>
- Jang, J., McSparren, J., & Rashchupkina, Y. (2016). Global governance: Present and future. *Palgrave Communications*, 2(1), 15045. <https://doi.org/10.1057/palcomms.2015.45>
- Johri, A. (2025). Impact of artificial intelligence on the performance and quality of accounting information systems and accuracy of financial data reporting. *Accounting Forum*, 1–25. <https://doi.org/10.1080/01559982.2025.2451004>
- Jucá, M. N., Muren, P. D., Valentinčič, A., & Ichev, R. (2024). The impact of ESG controversies on the financial performance of firms: An analysis of industry and country clusters. *Borsa Istanbul Review*, 24(6), 1305–1315. <https://doi.org/10.1016/j.bir.2024.08.001>
- Kabeer, N. (2021). Gender equality, inclusive growth, and labour markets. In *Women's Economic Empowerment* (pp. 13–48). Routledge. <https://doi.org/10.4324/9781003141938-3>
- Katrakazas, P., & Papastergiou, S. (2024). A stakeholder needs analysis in cybersecurity: A systemic approach to enhancing digital infrastructure resilience. *Businesses*, 4(2), 225–240. <https://doi.org/10.3390/businesses4020015>

- Khamisu, M. S., & Paluri, R. A. (2024). Emerging trends of environmental social and governance (ESG) disclosure research. *Cleaner Production Letters*, 7, 100079. <https://doi.org/10.1016/j.clpl.2024.100079>
- Kumar, S., Lim, W. M., Sivarajah, U., & Kaur, J. (2023). Artificial intelligence and blockchain integration in business: Trends from a bibliometric-content analysis. *Information Systems Frontiers*, 25, 871–896. <https://doi.org/10.1007/s10796-022-10279-0>
- Li, Q., Tang, W., & Li, Z. (2024). ESG systems and financial performance in industries with significant environmental impact: A comprehensive analysis. *Frontiers in Sustainability*, 5, 1454822. <https://doi.org/10.3389/frsus.2024.1454822>
- Nave, A., & Ferreira, J. (2019). Corporate social responsibility strategies: Past research and future challenges. *Corporate Social Responsibility and Environmental Management*, 26(4), 885–901. <https://doi.org/10.1002/csr.1729>
- Oliver Yébenes, M. (2024). Climate change, ESG criteria and recent regulation: Challenges and opportunities. *Eurasian Economic Review*, 14(1), 87–120. <https://doi.org/10.1007/s40822-023-00251-x>
- Peprah, J. A., Oteng, C., Karakara, A. A., & Sebu, J. (2024). *Financing green growth in African emerging economies: Opportunities and challenges*. <https://doi.org/10.13140/RG.2.2.22346.38080>
- Pickering, J., Hickmann, T., Bäckstrand, K., Kalfagianni, A., Bloomfield, M., Mert, A., Ransan-Cooper, H., & Lo, A. Y. (2022). Democratising sustainability transformations: Assessing the transformative potential of democratic practices in environmental governance. *Earth System Governance*, 11, 100131. <https://doi.org/10.1016/j.esg.2021.100131>
- Raman, R., Nair, V. K., Shivdas, A., Bhukya, R., Viswanathan, P. K., Subramaniam, N., & Nedungadi, P. (2023). Mapping sustainability reporting research with the UN's sustainable development goal. *Heliyon*, 9(8), e18510. <https://doi.org/10.1016/j.heliyon.2023.e18510>
- Schumacher, K., Baek, Y. J., In, S. Y., & Nishikizawa, S. (2022). *Sustainability reporting in Asia: Are the EU's initiatives the benchmark for ESG disclosure in the region?* Tech Report, Mazars Japan: Tokyo. <https://dx.doi.org/10.2139/ssrn.4244335>

- Sharma, M., & Kumar, P. (2021). Adoption of blockchain technology: A case study of Walmart. In *Blockchain technology and applications for digital marketing* (pp. 1–16). IGI Global. <https://doi.org/10.4018/978-1-7998-8081-3.ch013>
- Stein Smith, S. (2024). ESG and other emerging technology applications. In *Blockchain, artificial intelligence, and financial services* (pp. 267–283). Future of Business and Finance. Springer. https://doi.org/10.1007/978-3-031-74403-7_14
- Tsang, Y. P., Fan, Y., & Feng, Z. P. (2023). Bridging the gap: Building environmental, social and governance capabilities in small and medium logistics companies. *Journal of Environmental Management*, 338, 117758. <https://doi.org/10.1016/j.jenvman.2023.117758>
- UNFCCC. (2016). *Climate action now: Summary for policymakers*. In *Managing the risks of extreme events and disasters to advance climate change adaptation: Special report of the Intergovernmental Panel on Climate Change* (Vol. 9781107025). Cambridge University Press. <https://doi.org/10.1017/CBO9781139177245> https://unfccc.int/resource/climateaction2020/media/1281/unfccc_spm_2016.pdf
- Wang, G., Wang, Y., Li, S., Yi, Y., Li, C., & Shin, C. (2024). Sustainability in global agri-food supply chains: Insights from a comprehensive literature review and the ABCDE framework. *Foods*, 13(18), 2914. <https://doi.org/10.3390/foods13182914>
- Yadav, S., Samadhiya, A., Kumar, A., Luthra, S., & Pandey, K. K. (2024). Environmental, social, and governance (ESG) reporting and missing (M) scores in the Industry 5.0 era: Broadening firms' and investors' decisions to achieve sustainable development goals. *Sustainable Development*, 1–23. <https://doi.org/10.1002/sd.3306>
- Zabaniotou, A. (2020). A systemic approach to resilience and ecological sustainability during the COVID-19 pandemic: Human, societal, and ecological health as a system-wide emergent property in the Anthropocene. *Global Transitions*, 2, 116–126. <https://doi.org/10.1016/j.glt.2020.06.002>
- Zhen, T., & Rahman, M. (2024). Greening emerging economies: Enhancing environmental, social, and governance performance through environmental management accounting and green financing. *Sustainability*, 16(11), 4753. <https://doi.org/10.3390/su16114753>

Majdi A. Quttainah is an Associate Professor at College of Business Administration at Kuwait University. He earned his Ph.D. degree in Management from Rensselaer Polytechnic Institute, Lally School of Management & Technology (USA). He is an active scholar, presently working as senior editor of FIIB Business Review (Scopus, WoS, Published by the Sage Publishing). His research won several recognition and awards in many different international conferences. (Majdi.quttainah@ku.edu.kw)

William Paczkowski is an Instructor at the Department of Management Programs, Florida Atlantic University, College of Business. He earned his Ph.D., J. D., M.B.A., and served as a Captain in the U.S. Army Judge Advocate General's (JAG) Corps for thirteen years, and worked as an attorney/consultant for a subsidiary of Goldman Sachs. He has authored multiple journal articles and conference presentations, coordinates mentorship opportunities for entrepreneurs, and is actively involved in aiding the successful transition of student veterans to the civilian sector of employment. (wpaczkowski@fau.edu)

Acknowledgments and Disclosures

The authors whose names are listed immediately below certify that they have no affiliations with or involvement in any organization or entity with any financial interest (such as honoraria; educational grants; participation in speakers' bureaus; membership, employment, consultancies, stock ownership, or other equity interest; and expert testimony or patent-licensing arrangements), or non-financial interest (such as personal or professional relationships, affiliations, knowledge or beliefs) in the subject matter or materials discussed in this manuscript.

حوليات الآداب والعلوم الاجتماعية

ANNALS OF THE ARTS AND SOCIAL SCIENCES

- مجلة فصلية محكمة.
- تصدر عن مجلس النشر العلمي بجامعة الكويت.
- صدر العدد الأول سنة ١٩٨٠م.
- تنشر الموضوعات التي تدخل في مجالات اهتمام الأقسام العلمية لكليتي الآداب والعلوم الاجتماعية.
- تنشر الأبحاث والدراسات باللغتين العربية والإنجليزية شريطة أن لا يقل حجم البحث عن ٥٠ صفحة وأن لا يزيد عن ٢٠٠ صفحة مطبوعة من ثلاث نسخ.
- لا يقتصر النشر في الحوليات على أعضاء هيئة التدريس لكليتي الآداب والعلوم الاجتماعية فحسب، بل يشمل ما يعادل هذه التخصصات في الجامعات والمعاهد الأخرى داخل الكويت وخارجها.
- تمنح المجلة الباحث خمسين نسخة من بحثه المنشور كإهداء.



ثمن الرسالة للأفراد
(٥٠٠ فلس)

رئيس هيئة التحرير
أ. د. تغريد القدسي

نوع الاشتراك	الكويت	الدول العربية	الدول الأجنبية
الأفراد	٤ دنانير	٦ دنانير	٢٢ دولاراً
المؤسسات	٢٢ ديناراً	٢٢ ديناراً	٩٠ دولاراً

جميع المراسلات توجه إلى رئيس تحرير حوليات الآداب والعلوم الاجتماعية
ص ب 17370 الخالدية 72454 الكويت - هاتف 24830256 فاكس (965) 24830256 (965)
ISSN 1560 - 5248 Key title: Hawliyyat Kulliyyat Al-Adab
www.apc. kuniv. edu.kw/aass E-mail: aass@ku.edu.kw