

Scientometric Analysis of Sustainability Accounting Publications in Reputable Journals

Loso Judijanto
IPOSS Jakarta

Article Info

Article history:

Received Jun 9, 201xx

Revised Nov 20, 201xx

Accepted Dec 11, 20xx

Keywords:

Sustainability Accounting;
Scientometric Analysis;
Sustainability Reporting; ESG;
Sustainable Development

ABSTRACT

This study does a thorough scientometric analysis of sustainability accounting papers in esteemed international journals to delineate their intellectual framework, thematic evolution, and collaboration networks. The study analyzes publishing trends, co-authorship dynamics, keyword co-occurrences, and international partnerships utilizing bibliographic data from Scopus and analytical tools like VOSviewer and Bibliometric. The results indicate that sustainability and sustainable development constitute the core conceptual foundations of the discipline, underpinned by interrelated themes such as ESG reporting, environmental protection, economic analysis, and energy efficiency. The analysis identifies certain geographic clusters, including Europe, China, the United States, and India as significant contributors to global research production, despite the restricted nature of cross-regional collaboration. Emerging subjects like artificial intelligence and optimization illustrate the increasing impact of digital transformation on sustainable accounting study. The study offers a comprehensive insight into the evolution of the subject and highlights significant prospects for enhancing theoretical integration, fostering multidisciplinary collaboration, and promoting global research inclusivity.

This is an open access article under the [CC BY-SA](#) license.



Corresponding Author:

Name: Loso Judijanto

Institution Address: IPOSS Jakarta

e-mail: losojudijantobumn@gmail.com

1. INTRODUCTION

Sustainability accounting has emerged as a significant area of academic research due to escalating global issues related to environmental degradation, climate change, and social injustice. Organizations are progressively required to integrate non-financial information into their reporting systems to exhibit their dedication to responsible and ethical business operations [1], [2]. The

advent of frameworks like the Global Reporting Initiative (GRI), Sustainability Accounting Standards Board (SASB), and the International Sustainability Standards Board (ISSB) further solidifies the institutionalization of sustainability disclosure practices [3]. As organizations use these frameworks, academics have reacted by broadening empirical, theoretical, and methodological discussions in sustainability accounting. The domain has ev

olved into a dynamic convergence of accounting, environmental management, governance, and strategic decision-making, underscoring its pivotal role in fostering sustainable development.

In the past twenty years, esteemed journals have experienced significant growth in sustainability accounting publications, propelled by regulatory changes, investor demand for ESG transparency, and the scholarly interest of academics aiming to comprehend the value and effects of sustainability reporting [4]. Journals including the Accounting, Auditing & Accountability Journal, Sustainability Accounting, Management and Policy Journal, Business Strategy and the Environment, and Journal of Cleaner Production regularly publish research on carbon accounting, integrated reporting, social impact measurement, and ESG assurance. These advancements have been augmented by the extensive application of bibliometric methods, allowing scholars to examine publishing trends, co-citation networks, prominent authors, keyword clusters, and topic progression [5]. Scientometric methods provide a thorough and methodical framework for comprehending the conceptual framework of sustainable accounting as a study domain.

The interdisciplinary aspect of sustainability accounting has facilitated its growth. Researchers utilize many theories, including stakeholder theory [6], legitimacy theory [7], institutional theory [8], and the resource-based view (Barney, 1991), to elucidate corporate sustainability behavior. These theories offer analytical frameworks for comprehending the reasons organizations publish sustainability information, the impact of such disclosures on stakeholder perceptions, and the manner in which sustainability practices affect both financial and non-financial performance. The variety of theoretical underpinnings highlights the intricacy of sustainability accounting and reinforces the need for utilizing scientometric tools to delineate theoretical connections and intellectual impacts inside the literature.

The evolution of global regulations has expedited the advancement of sustainable accounting research. Policy modifications, including the European Union's Corporate Sustainability Reporting Directive (CSRD), obligatory climate-related disclosure regulations in several nations, and the worldwide shift towards integrated reporting, have revolutionized corporate reporting methodologies (KPMG, 2022). The regulatory pressures foster opportunities for scholarly investigation into the efficacy, comparability, and reliability of sustainability disclosures. As a result, sustainability accounting has evolved into a comprehensive discipline with specific research areas like carbon management, ESG performance, sustainability assurance, and reporting quality. Scientometric mapping is crucial for evaluating the evolution and interaction of these streams within the wider accounting research ecosystem.

Notwithstanding the field's swift advancement, publishing trends indicate disparities in geography, institutions, and themes. Researchers from Europe, North America, and Australia predominantly lead in research production, whereas contributions from emerging nations, albeit encountering considerable sustainability issues, are still minimal [9]. Collaboration networks demonstrate significant variability, with certain regions demonstrating robust research connections, while others stay isolated from mainstream academic discourse. These differences prompt critical inquiries regarding inclusivity, representation, and the worldwide generation of knowledge in sustainable accounting. A thorough scientometric analysis is required to reveal these tendencies and inform future joint initiatives.

Despite the significant academic interest in sustainable accounting, there is a deficiency of thorough scientometric analyses that especially investigate the role of esteemed journals in the development of the discipline. Current evaluations mostly utilize narrative or systematic methodologies and frequently neglect to encompass scientific networks,

intellectual connections, and the developments across time [5], [10]. In the absence of a comprehensive scientometric analysis, stakeholders—such as scholars, policymakers, practitioners, and journal editors—are deprived of clear understanding of predominant research domains, nascent themes, prominent authors, and collaborative interactions. This disparity underscores the necessity for a comprehensive scientometric analysis to elucidate the evolution of sustainability accounting research and its future trajectory.

This study seeks to deliver a thorough scientometric analysis of sustainable accounting papers in leading journal. The objectives are to: (1) analyze publication and citation trends over time; (2) identify the most influential authors, countries, institutions, and journals; (3) delineate intellectual structures through co-authorship, co-citation, and keyword co-occurrence networks; (4) reveal major themes and their evolution utilizing bibliometric visualization techniques; and (5) pinpoint research gaps and suggest future research directions to enhance the advancement of sustainability accounting as a robust scientific discipline.

2. METHOD

This study employed a scientometric approach to comprehensively examine the evolution, structure, and philosophical framework of sustainability accounting research published in esteemed publications. Scientometric analysis offers a quantitative and network-oriented methodology for comprehending research production, academic influence, and partnership dynamics within scholarly communities [5]. The Scopus database was chosen as the principal data source due to its comprehensive coverage of peer-reviewed, high-impact journals pertinent to sustainability and accounting. A detailed search string was developed utilizing combinations of keywords like “sustainability accounting,” “sustainability reporting,” “ESG disclosure,” “environmental

accounting,” “social accounting,” and “integrated reporting.” Boolean operators (AND/OR) were employed to guarantee elevated recall and precision. Only documents published in esteemed journals—characterized as those indexed in Scopus and incorporated in acknowledged rating systems such as ABDC or ABS—were deemed acceptable. Articles, reviews, and conference papers were included, however book chapters, editorials, and non-peer-reviewed materials were omitted to ensure data integrity.

Upon retrieval, bibliographic data including titles, abstracts, keywords, author names, affiliations, publication year, journal source, citation counts, and reference lists were exported in RIS and CSV formats for analysis. Data cleaning protocols were executed to eradicate duplicate data, synchronize author names, normalize institutional affiliations, and rectify discrepancies in keyword labeling. The sanitized dataset was analyzed utilizing VOSviewer (version 1.6.x) and the Bibliometrix tool in R. VOSviewer was used to visualize scientific networks, encompassing co-authorship networks, co-citation interactions, and clusters of keyword co-occurrence [11]. Bibliometrix facilitated comprehensive performance analysis through the generation of annual publication trends, citation metrics, dominance factors, topic evolution diagrams, and productivity indicators at the levels of authors, institutions, and countries [12].

The analytical process entailed assessing quantitative metrics and visual network diagrams to identify key research subjects, prominent authors, theoretical underpinnings, and collaborative dynamics within the literature on sustainable accounting. Co-citation analysis was employed to elucidate the intellectual foundation of the field, emphasizing seminal authors and foundational theories that underpin sustainability accounting research. Keyword co-occurrence mapping elucidated the conceptual framework and emergent patterns, whilst co-authorship networks depicted the geographical and institutional distribution of research collab

oration. This multimethod scientometric approach incorporating performance analysis, scientific mapping, and network visualization guaranteed methodological rigor and facilitated a thorough comprehension of the evolution of

sustainable accounting scholarship in esteemed international publications.

3 RESULT AND DISCUSSIONS

3.1 Network Visualization

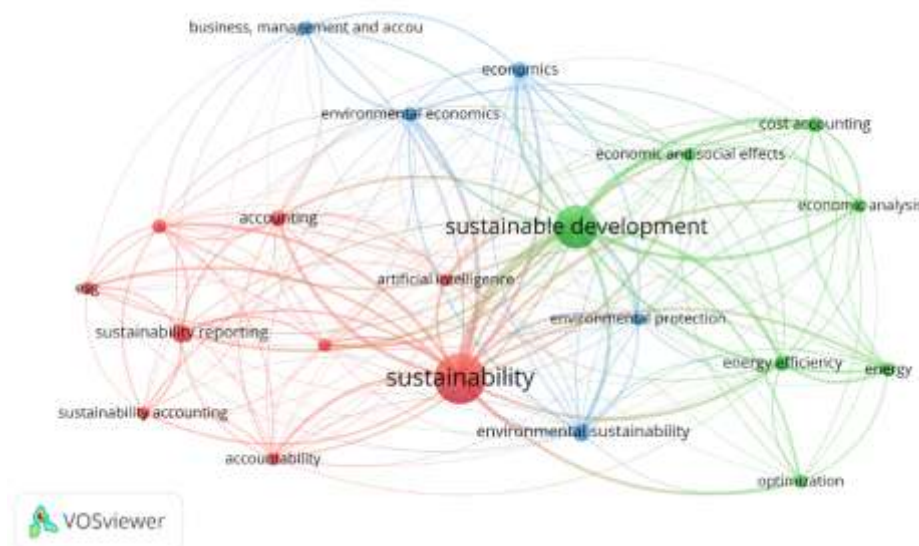


Figure 1. Network Visualization

Source: Data Analysis Result, 2025

The VOSviewer network visualization displays three predominant keyword clusters, highlighting the multifaceted character of sustainability accounting research. The red cluster, focused on concepts like sustainability, sustainability accounting, sustainability reporting, ESG, accounting, and accountability, represents the fundamental disciplinary basis of the area. These keywords denote the accounting-centric literature that analyzes how firms disclose sustainability information, assess performance, and react to regulatory and stakeholder demands. The intricate relationships within this cluster indicate a dynamic and unified academic community investigating reporting practices, ESG frameworks, and the accountability mechanisms that underpin corporate sustainability disclosures.

The green cluster, centered on sustainable development, economic analysis, socio-economic impacts, energy efficiency, and environmental protection, signifies research that connects sustainability accounting to wider

economic and environmental performance factors. This cluster illustrates the intersection of sustainability reporting with long-term development agendas, resource efficiency, and the assessment of economic and social repercussions. The robust connection between sustainable development and economic analysis suggests that academics are progressively examining the impact of sustainability initiatives on organizational value generation and efficiency. Moreover, terms like energy and optimization illustrate the increasing convergence of sustainability accounting with environmental economics and operational decision-making.

The blue cluster, encompassing economics, environmental economics, business, management, accounting, and environmental sustainability, underscores the interdisciplinary growth of sustainability accounting within economic and managerial fields. This cluster demonstrates the theoretical and methodological convergence of accounting, economics, and environmental sciences. The

placement of environmental economics adjacent to both the red and green clusters underlines its intermediary function: it links accounting-based disclosure studies with comprehensive environmental impact evaluations and policy-focused analysis. This indicates that sustainable accounting is progressively influenced by multidisciplinary theories and quantitative economic models.

A notable tendency in the network is the emergence of technologically driven keywords, such as artificial intelligence. While not as important as primary sustainability concepts, these correlations suggest that digital change is starting to impact sustainability accounting studies. The connections between artificial intelligence and sustainability measures indicate an increasing interest in the potential of digital tools to improve sustainability reporting, data analytics, environmental monitoring, and predictive decision making. This nascent theme indicates the forthcoming frontier of sustainable accounting research, wherein automation, machine learn

ing, and digital assurance are expected to have a more significant role in future publications.

The network map illustrates that sustainability accounting is a deeply interconnected and dynamic domain, with robust foundations in accounting, increasing connections to sustainable development and environmental economics, and developing intersections with technology-driven methodologies. The existence of several distinct clusters, along with numerous inter-cluster connections, signifies an evolving study domain characterized by varied yet complementary trajectories. The interaction of ESG reporting, economic performance, and environmental efficiency underscores the sector's function in connecting organizational accountability with global sustainability objectives. This map offers a thorough overview of the evolution of sustainable accounting scholarship and identifies potential future research avenues, especially in digitization and multidisciplinary collaboration.

3.2 Overlay Visualization

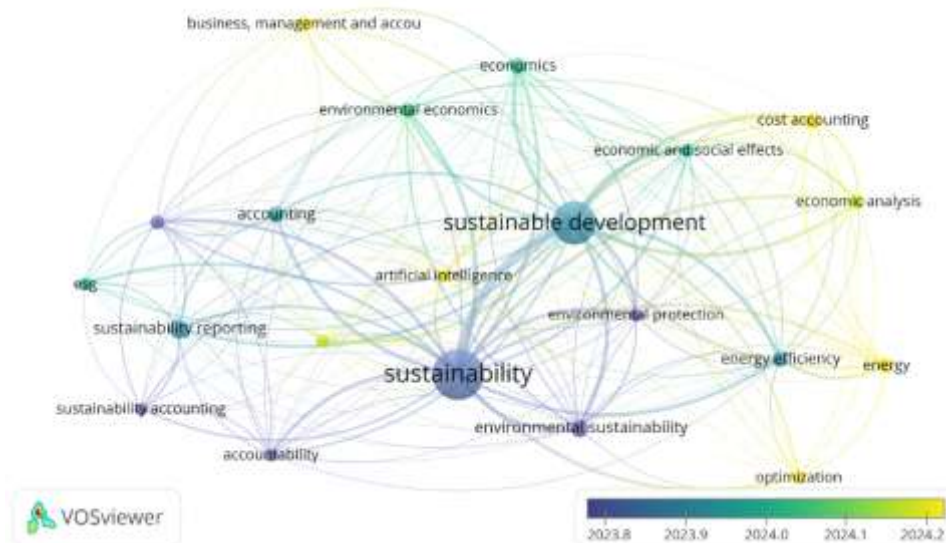


Figure 2. Overlay Visualization

Source: Data Analysis Result, 2025

The overlay visualization reveals a distinct chronological evolution in sustainability accounting research, with older studies (shown in darker blue hues from 2023.8

to 2023.9) focusing on fundamental concepts such as sustainability accounting, accountability, and environmental sustainability. These keywords represent the

foundational aspects of the discipline, illustrating the early academic emphasis on reporting systems, environmental disclosure methods, and corporate obligations in sustainability contexts. The pronounced grouping of these initial terms indicates that the topic initially evolved from conventional accounting viewpoints before progressively diversifying into interdisciplinary realms.

As the hues shift to lighter green tones (2024.0), we note a thematic transition towards overarching sustainability issues, including sustainable development, environmental economics, socio-economic impacts, and energy efficiency. These terms signify the amalgamation of sustainability accounting with environmental and economic policy analysis, indicating that academics are progressively investigating the role of sustainability reporting in advancing long-term development objectives, cost assessment, and organizational efficacy. The pivotal role of sustainable development during this period illustrates its function as a conduit connecting prior accounting-centric research with contemporary interdisciplinary studies, highlighting the increasing necessity for sustainability accounting to facilitate strategic decision making and align with public policy.

The latest research frontiers (yellow nodes clustered around 2024.1–2024.2) emphasize emerging subjects such as cost accounting, optimization, energy, and artificial intelligence, indicating a shift towards data driven, technologically advanced, and

efficiency-focused research trajectories. The emergence of artificial intelligence as a contemporary term indicates a growing interest in digital transformation, automated sustainability reporting, and the application of machine learning for environmental monitoring and ESG analytics. The emphasis on optimization and energy signifies a shift towards operational efficiency, climate risk evaluation, and enhancements in sustainability-oriented performance. These trends combined indicate that sustainability accounting is entering a new phase marked by digital innovation, quantitative modeling, and integration with energy transition research.

3.3 Citation Analysis

This study analyzes the most cited publications within the dataset to discover the intellectual foundations and significant contributions that influence the development of sustainability accounting and broader sustainability research. These works are pivotal contributions that have profoundly impacted theoretical development, methodological progress, and empirical comprehension of sustainability-related matters. The table below presents a summary of the most cited articles, showcasing the variety of disciplines—including sustainability reporting, planetary health, natural capital accounting, precision agriculture, blue carbon ecosystems, and energy security—that collectively enhance sustainability accounting research.

Table 1. Top Cited Research

Citations	Authors and year	Title
2035	Eccles, R.G., Ioannou, I., Serafeim, G. (2014)	The impact of corporate sustainability on organizational processes and performance
2016	Whitmee, S., Haines, A., Beyrer, C., ... Vega, J., Yach, D. (2015)	Safeguarding human health in the Anthropocene epoch: Report of the Rockefeller Foundation-Lancet Commission on planetary health
2015	Bettencourt, L.M.A., Lobo, J., Helbing, D., Kühnert, C., West, G.B. (2007)	Growth, innovation, scaling, and the pace of life in cities
1234	Pendleton, L., Donato, D.C., Murray, B.C., ... Gordon, D., Baldera, A. (2012)	Estimating Global Blue Carbon Emissions from Conversion and Degradation of Vegetated Coastal Ecosystems

Citations	Authors and year	Title
1157	Gebbers, R., Adamchuk, V.I. (2010)	Precision agriculture and food security
1137	Asif, M., Muneer, T. (2007)	Energy supply, its demand and security issues for developed and emerging economies
1124	Wackernagel, M., Onisto, L., Bello, P., ... Guerrero, A.I.S., Guerrero, Ma.G.S. (1999)	National natural capital accounting with the ecological footprint concept
1121	Hahn, R., Kühnen, M. (2013)	Determinants of sustainability reporting: A review of results, trends, theory, and opportunities in an expanding field of research
950	Richards, D.R., Friess, D.A. (2016)	Rates and drivers of mangrove deforestation in Southeast Asia, 2000-2012
920	Gray, R. (2010)	Is accounting for sustainability actually accounting for sustainability...and how would we know? An exploration of narratives of organisations and the planet

Source: Scopus, 2025

The extensively referenced works enumerated above illustrate the interdisciplinary character of sustainability research and its significance to sustainability accounting. Publications like [13] and [14] exert a direct impact on the accounting field by examining corporate sustainability strategies and the factors influencing sustainability reporting. Simultaneously, research on planetary health [15], ecological footprinting [16] precision agriculture [17], and blue carbon ecosystems [18] enhances the environmental underpinnings of sustainability accounting frameworks. Studies on urban scaling [19] and energy

security [20] offer significant insights for evaluating the wider sustainability effects within economic and societal frameworks. These works collectively provide a comprehensive intellectual framework that shapes contemporary discussions, methodological strategies, and theoretical trajectories in sustainability accounting, underscoring the necessity for multidisciplinary insight in comprehending the measurement, reporting, and integration of sustainability within organizational practices.

3.4 Density Visualization

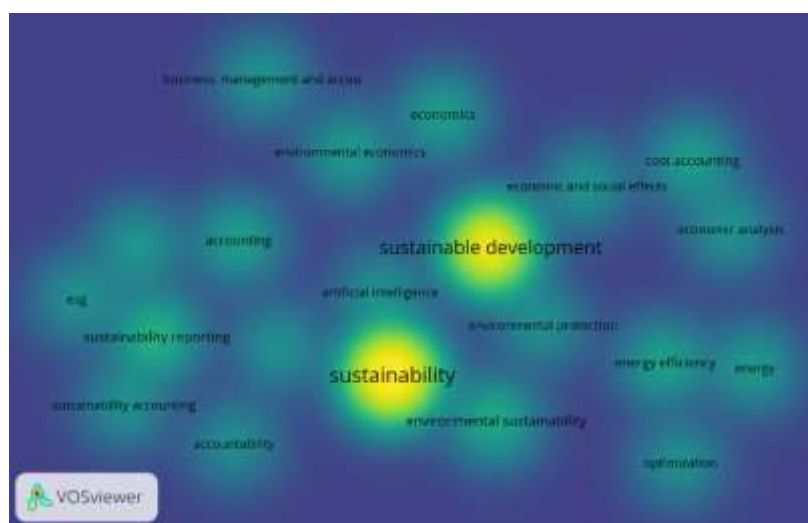


Figure 3. Density Visualization

Source: Data Analysis Result, 2025

The density graphic depicts the concentration of research activity pertaining to sustainability-related keywords, with brighter yellow regions indicating high-frequency concepts that are deeply integrated into the literature. The two most prominent nodes sustainability and sustainable development signify that these notions provide the core foundation of the discipline. Their popularity indicates that academic research in sustainable accounting continually draws from wider sustainability discussions, connecting reporting and measuring approaches to global development objectives, environmental stewardship, and organizational accountability. Encircling these core concepts, moderately luminous nodes such as environmental sustainability, economic and social effects, and environmental protection illustrate the field's pronounced interdisciplinary focus, with research linking accounting systems to ecological results and socio-economic consequences.

The green and blue nodes represent new or supportive themes that, while less prominent, remain significant within the research ecosystem. Terms like sustainability reporting, ESG, accounting, cost accounting, energy efficiency, and optimization encapsulate the technical, administrative, and analytical aspects of sustainability accounting. Their positioning surrounding the center core indicates that, although these themes are significant, they serve more as extensions of practical or operational research rather than as conceptual foundations. The existence of artificial intelligence, however less prevalent, indicates an increasing interest in digital transformation, automation, and data-centric methodologies in sustainability assessment and reporting. The density map illustrates a domain grounded in comprehensive sustainability principles while progressively expanding into technical, transdisciplinary, and innovation-oriented avenues.

3.5 Co-Authorship Network

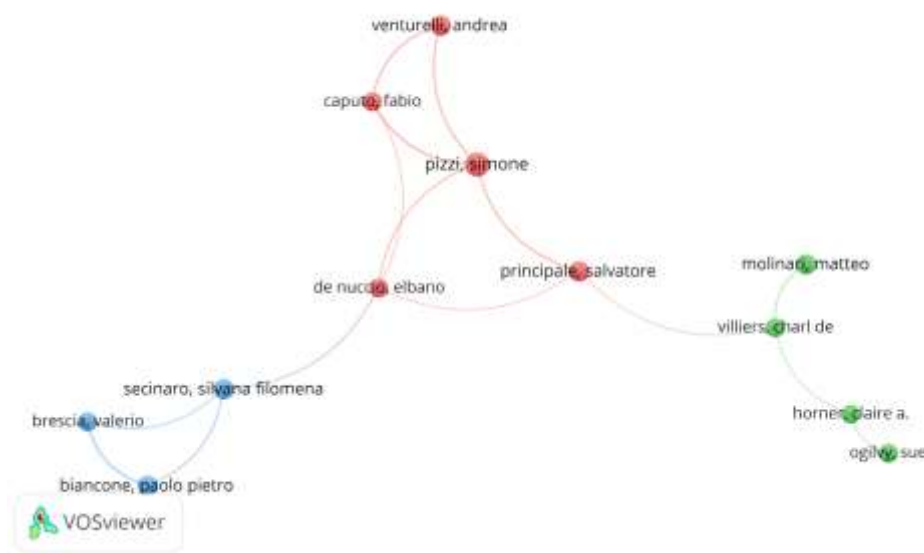


Figure 4. Author Visualization

Source: Data Analysis Result, 2025

The co-authorship network graphic illustrates three separate clusters of researchers engaged in collaboration within the fields of sustainability and sustainability accounting.

The predominant cluster, focused on Pizzi, Simone, comprises contributors including Caputo Fabio, Venturelli Andrea, De Nuccio Elbano, and Principale Salvatore. This group constitutes

a closely linked research community, indicating regular co-authorships and common thematic interests—presumably centered on corporate sustainability, ESG reporting, and the nexus between accounting and sustainable development. A secondary cluster is established around Secinaro, Silvana Filomena, in close collaboration with Brescia Valerio and Biancone Paolo Pietro. Their connection to De Nuccio Elbano suggests sporadic cross-cluster interaction, indicating theme convergence in domains such as sustainability performance assessment, accounting innovation, or public-

sector sustainability reporting. The third cluster includes Villiers, Charl de, who partners with Molinari Matteo, Horner Claire A., and Ogilvy Sue. This organization seems to focus on governance-related sustainability issues, integrated reporting, and accountability frameworks. The map illustrates areas of robust collaboration while also exposing restricted interconnectedness within clusters, suggesting that sustainability accounting research, albeit vibrant, functions within rather fragmented academic groups.

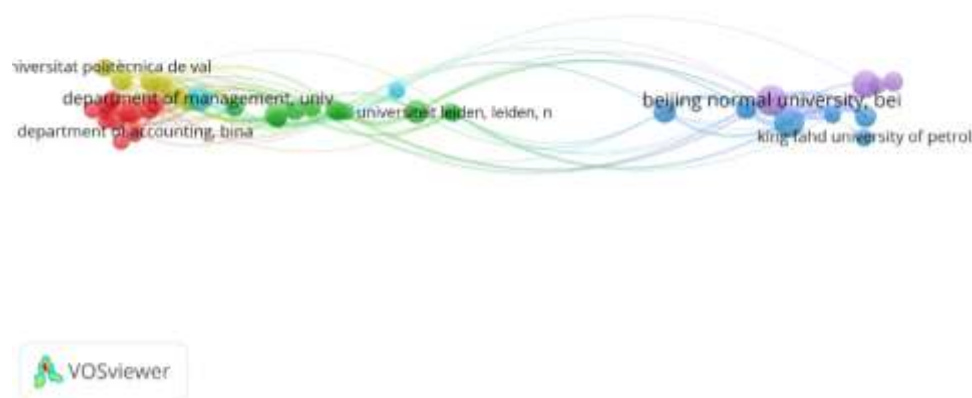


Figure 5. Affiliation Visualization

Source: Data Analysis Result, 2025

The institutional co-authorship network delineates multiple unique clusters of universities engaged in collaborative research on sustainability and sustainability accounting. On the left side of the map, institutions including Universitat Politècnica de València, Department of Accounting, Binus University, and several management and accounting departments constitute a dense red cluster, signifying robust regional or thematic collaboration—presumably focused on corporate sustainability, ESG reporting, and organizational performance research. At the center of the picture, Universiteit Leiden serves as a pivotal green cluster alongside several European partners, illustrating a robust network involved in interdisciplinary sustainability subjects, inc

luding environmental economics, policy analysis, and sustainable development research. A significant cluster forms around Beijing Normal University and King Fahd University of Petroleum & Minerals, underscoring an expanding research network in Asia and the Middle East dedicated to environmental preservation, energy efficiency, and resource sustainability. The interconnecting lines among clusters indicate that while collaboration occurs between regions, these alliances are comparatively restricted, implying that sustainability accounting research remains somewhat geographically fragmented, characterized by robust intra-regional cooperation but diminished cross-continental connections.

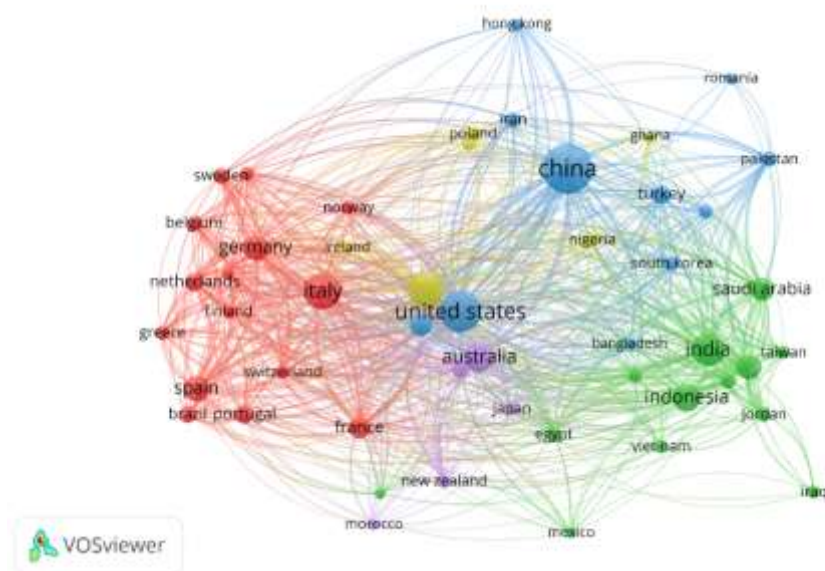


Figure 6. Country Visualization

Source: Data Analysis Result, 2025

The nation co-authorship network demonstrates a highly integrated global framework in sustainability and sustainability accounting research, featuring numerous prominent regional clusters. The United States, China, and India appear as the preeminent and most influential entities, signifying their substantial research output and pivotal positions in global collaborations. China's extensive connections with nations like Pakistan, Turkey, Romania, and South Korea underscore its growing research collaborations in Asia and Europe, whereas the United States sustains comprehensive and equitable global relationships, fostering robust ties with both Western and Asian research groups. India and Indonesia exhibit significant links, especially within the Global South, indicating a growing input from rising economies to sustainability-related research. European nations constitute a continuous cluster, exemplified by Italy, Germany, Spain, France, the Netherlands, Belgium, Sweden, and Switzerland, with Italy and Germany serving as principal hubs. The robust intra-European collaboration indicates a well-established research tradition concerning sustainability, environmental policy, and corporate reporting. Countries such as

Australia, Japan, New Zealand, Egypt, and Mexico serve as intermediaries connecting Western and Eastern clusters, illustrating their function in promoting cross-regional knowledge exchange. The visualization depicts a dynamic and globally dispersed research network, while also revealing regional clustering—Europe and Asia exhibit strong internal interconnections, whereas cross-cluster links, albeit existent, indicate potential for enhanced integrated and diverse international collaboration in sustainability accounting research.

Discussions

Practical Implications

This scientometric analysis provides significant practical insights for governments, corporations, journal editors, and sustainability practitioners. The study delineates predominant issues, including sustainable development, sustainability reporting, ESG, environmental protection, and energy efficiency, so offering a definitive framework for firms aiming to synchronize their sustainability initiatives with global research trends. Organizations can leverage these insights to prioritize reporting on areas that garner significant scholarly focus, such as ESG disclosures, environmental performance, and

socio-economic consequences, thus enhancing the legitimacy and relevance of corporate sustainability reporting. Policymakers can utilize the findings to formulate legislation that align with global knowledge trends, incorporating environmental economics, cost accounting, and energy optimization into national sustainability frameworks. For journal editors and reviewers, comprehending institutional and national collaboration patterns aids in formulating publication plans, pinpointing underrepresented locations or subjects, and fostering cross-regional research partnerships to enhance the global sustainability accounting framework.

Theoretical Contributions

This research offers significant theoretical advancements in the domain of sustainability accounting. Initially, by delineating the intellectual framework of the literature, it elucidates how key theories such as legitimacy theory, stakeholder theory, institutional theory, and resource-based perspectives persist in shaping the advancement of sustainable accounting research. The scientometric approach elucidates increasing theoretical intersections with environmental economics, artificial intelligence, and optimization models, indicating a transition towards multi-theoretical and interdisciplinary frameworks. The examination of co-citation networks and keyword clusters reveals that sustainability accounting is evolving from a reporting-centric framework to a more comprehensive sustainability science viewpoint that encompasses environmental conservation, socio-economic effects, and developmental strategies. The identification of collaborative networks among authors, institutions, and countries enhances theorybuilding by demonstrating that knowledge production in sustainability accounting is influenced not only by conceptual progress but also by global scientific collaboration patterns, thereby strengthening the sociological and network-based aspects of theory development.

Limitations

This study, despite its thorough analytical methodology, has some limitations that must be recognized. The dataset is only based on the Scopus database, which, despite its comprehensiveness, can be omitted if not relevant papers indexed in Web of Science, Google Scholar, or prominent regional journals, potentially constraining the analysis's breadth. The employment of author-provided keywords may create heterogeneity, as many authors may articulate analogous concepts using disparate wording, potentially affecting cluster formation and density patterns. Moreover, scientometric maps emphasize quantitative relationships—such as co-authorship strength, citation frequencies, and keyword co-occurrence while failing to adequately represent the qualitative subtleties, methodological rigor, or theoretical profundity of particular studies. Ultimately, as sustainability accounting is a swiftly advancing discipline, the interpretation of contemporary trends (e.g., artificial intelligence, optimization, digital sustainability reporting) may change with the advent of new research, indicating that the study reflects the present state of knowledge but not future directions.

4 CONCLUSIONS

This scientometric study offers a thorough examination of the intellectual environment, topic progression, and collaborative interactions in sustainable accounting research published in esteemed international publications. The findings indicate that the subject is grounded in overarching sustainability concepts particularly sustainability and sustainable development—which serve as conceptual centers connecting diverse research streams. These fundamental concepts are augmented by notable subfields include sustainability reporting, ESG disclosure, environmental protection, energy efficiency, and economic social impact analysis. Collectively, they illustrate that sustainability accounting has evolved well beyond conventional reporting, now intersecting with economics, environmental science, technology,

and policy research. The data also underscores significant collaborative patterns among authors, institutions, and nations. European nations, including Italy, Germany, Spain, and the Netherlands, constitute concentrated research clusters, whereas China, the United States, India, and Indonesia emerge as significant contributors to worldwide publishing volume. Notwithstanding this vigorous engagement, cross-regional collaboration is inconsistent, exhibiting very restricted integration between Western and Asian research networks. This indicates that although the area is globally engaged, knowledge generation remains spatially focused and somewhat fragmented. Significantly, new themes—such as artificial intelligence, optimization, and digital transformation—signal the future trajectory of sustainable

accounting as it evolves into more data-driven and technology-enhanced techniques. These emerging tendencies underscore potential for scholars to investigate novel frameworks, incorporate digital technologies, and address deficiencies in underrepresented regions or thematic domains. The paper emphasizes that sustainability accounting is a swiftly advancing and interdisciplinary domain, propelled by global sustainability issues, legislative changes, and technological advancements. This study delineates its structure and dynamics, offering essential advice for future research, allowing scholars to situate their work within current knowledge boundaries and enhance a more cohesive, globally interconnected research environment.

Reference

- [1] R. Gray, "Is accounting for sustainability actually accounting for sustainability... and how would we know? An exploration of narratives of organisations and the planet," *Accounting, Organ. Soc.*, vol. 35, no. 1, pp. 47–62, 2010.
- [2] R. L. Burritt, S. Schaltegger, and K. L. Christ, "Environmental Accounting and the Management Challenge," in *Oxford Research Encyclopedia of Environmental Science*, 2021.
- [3] M. Khan, G. Serafeim, and A. Yoon, "Corporate sustainability: First evidence on materiality," *Account. Rev.*, vol. 91, no. 6, pp. 1697–1724, 2016.
- [4] R. G. Eccles and M. P. Krzus, "The Nordic model: An analysis of leading practices in ESG disclosure," *Nord. J. Bus.*, vol. 67, no. 2, pp. 4–24, 2018.
- [5] N. Donthu, S. Kumar, D. Mukherjee, N. Pandey, and W. M. Lim, "How to conduct a bibliometric analysis: An overview and guidelines," *J. Bus. Res.*, vol. 133, pp. 285–296, 2021.
- [6] R. E. Freeman, *Strategic management: A stakeholder approach*. Cambridge university press, 2010.
- [7] M. C. Suchman, "Managing legitimacy: Strategic and institutional approaches," *Acad. Manag. Rev.*, vol. 20, no. 3, pp. 571–610, 1995.
- [8] P. J. DiMaggio and W. W. Powell, "The iron cage revisited," *new institutionalism Organ. Anal.*, pp. 63–82, 1991.
- [9] S. Kuruppu and U. Business, "Please cite as: Kuruppu, S., Dissanayake, D. & De Villiers, C., 2022. How can NGO accountability practices be improved with technologies such as blockchain and triple-entry accounting?, *Accounting, Auditing & Accountability Journal*, forthcoming. DOI: 10.1108/AAAJ-10-2020".
- [10] B. Fahimnia, J. Sarkis, and H. Davarzani, "Green supply chain management: A review and bibliometric analysis," *Int. J. Prod. Econ.*, vol. 162, pp. 101–114, 2015.
- [11] N. J. Van Eck and L. Waltman, "Visualizing bibliometric networks," in *Measuring scholarly impact: Methods and practice*, Springer, 2014, pp. 285–320.
- [12] M. Aria and C. Cuccurullo, "bibliometrix: An R-tool for comprehensive science mapping analysis," *J. Informetr.*, vol. 11, no. 4, pp. 959–975, 2017.
- [13] R. G. Eccles, I. Ioannou, and G. Serafeim, "The impact of corporate sustainability on organizational processes and performance," *Manage. Sci.*, vol. 60, no. 11, pp. 2835–2857, 2014.
- [14] R. Hahn and M. Kühnen, "Determinants of sustainability reporting: A review of results, trends, theory, and opportunities in an expanding field of research," *J. Clean. Prod.*, vol. 59, pp. 5–21, 2013.

- [15] S. Whitmee *et al.*, "Safeguarding human health in the Anthropocene epoch: report of The Rockefeller Foundation–Lancet Commission on planetary health," *Lancet*, vol. 386, no. 10007, pp. 1973–2028, 2015.
- [16] M. Wackernagel *et al.*, "National natural capital accounting with the ecological footprint concept," *Ecol. Econ.*, vol. 29, no. 3, pp. 375–390, 1999.
- [17] R. Gebbers and V. I. Adamchuk, "Precision agriculture and food security," *Science (80-.)*, vol. 327, no. 5967, pp. 828–831, 2010.
- [18] L. Pendleton *et al.*, "Estimating global 'blue carbon' emissions from conversion and degradation of vegetated coastal ecosystems," 2012.
- [19] L. M. A. Bettencourt, J. Lobo, D. Helbing, C. Kühnert, and G. B. West, "Growth, innovation, scaling, and the pace of life in cities," *Proc. Natl. Acad. Sci.*, vol. 104, no. 17, pp. 7301–7306, 2007.
- [20] M. Asif and T. Muneer, "Energy supply, its demand and security issues for developed and emerging economies," *Renew. Sustain. energy Rev.*, vol. 11, no. 7, pp. 1388–1413, 2007.