

Corporate Waste Disclosure: A Systematic Review and Future Research Agenda

Desi Zulvina¹, Doddy Setiawan^{2*}, Y. Anni Aryani³, Taufiq Arifin⁴

^{1,2,3,4}Faculty of Economics and Business, Universitas Sebelas Maret, Surakarta, Indonesia

Email: ¹desizulvina@gmail.com; ²doddy.setiawan@staff.uns.ac.id;

³y_anniaryani@staff.uns.ac.id; ⁴taufiqar@staff.uns.ac.id

^{*}Corresponding Author

JEL Classification:

M41

Q53

Q56

G30

Received: 22 February 2026

Revised: 07 June 2026

Accepted: 15 June 2026

Published online: September 2026

Abstract

Research Originality: No prior systematic review has mapped corporate waste disclosure as a standalone research construct. This study fills that gap by synthesizing the field's theoretical foundations, geographical distribution, measurement approaches, and determinants and consequences.

Research Objectives: This study systematically reviews the existing literature on corporate waste disclosure to map what is known, identify gaps, and propose a structured agenda for future research.

Research Method: Using a systematic literature review (SLR) following the PRISMA protocol, ten scholarly articles were selected from the Scopus database based on predefined inclusion and exclusion criteria and analyzed through content analysis.

Empirical Results: Given the limited body of literature on corporate waste disclosure, this study identified 10 scholarly articles that met the inclusion criteria—underscoring the field's nascent state. Studies remain limited and geographically concentrated in developed countries, with the role of top management characteristics and ownership structure largely unexplored.

Implications: Researchers are encouraged to examine board characteristics and ownership structure as determinants of waste disclosure, particularly in emerging market contexts. For policymakers, the findings underscore the need for mandatory disclosure standards aligned with international norms and incentive mechanisms to promote high-quality waste reporting.

Keywords:

systematic literature review; waste disclosure; corporate governance; corporate social responsibility; emerging markets.

How to Cite:

Zulvina, D., Setiawan, D., Aryani, Y. A., & Arifin, T. (2026). Corporate Waste Disclosure: A Systematic Review and Future Research Agenda. *Etikonomi*, 25(2), 769 – 784. <https://doi.org/10.15408/etk.v25i2.50239>.

INTRODUCTION

Waste as an environmental issue, as part of Corporate Social Responsibility (CSR), is gaining heightened significance as stakeholder concern continues to escalate (Benjamin et al., 2020). CSR integrates economic, environmental, and social goals into corporate strategy and operations (Wirba, 2024), yet its implementation remains an evolving subject, with much of it still academically unexamined (Fatima & Elbanna, 2023). Waste management disclosure represents a critical dimension of this agenda: companies with effective waste management tend to disclose more environmental information, enhancing transparency and stakeholder trust, while also using disclosure as a signal of value generation and commitment to sustainability goals (Benjamin et al., 2023; Wulansari & Adhariani, 2023; Ha & Mansi, 2023).

Corporate waste disclosure enables companies to communicate efforts in shifting from linear to circular models, mitigate greenwashing accusations, and align with sustainability objectives (Opferkuch et al., 2023). The GRI 306 standard provides the regulatory backbone for this reporting, with greater adherence associated with broader SDG disclosure (Massari & Giannoccaro, 2023; Zampone & Guidi, 2024). Higher levels of waste management disclosure are further associated with increased corporate value, and improved waste reporting is increasingly recognized as essential for minimizing waste and enhancing environmental, human, and financial resource management (Bose et al., 2024; Korzec et al., 2026).

Despite this growing importance, the existing environmental disclosure literature remains dominated by broader constructs such as CSR reporting and environmental performance in general. Studies that isolate waste disclosure as the central object of inquiry are remarkably scarce, and most sustainability accounting reviews treat waste as a subcategory within larger indices or focus on specific waste streams such as e-waste or hazardous materials (Benjamin et al., 2020; Abd-Mutalib et al., 2021). To our knowledge, no prior systematic literature review has mapped the corporate waste disclosure field as a whole, and the comparatively low level of research in developing nations makes this gap particularly consequential (Fatima & Elbanna, 2023).

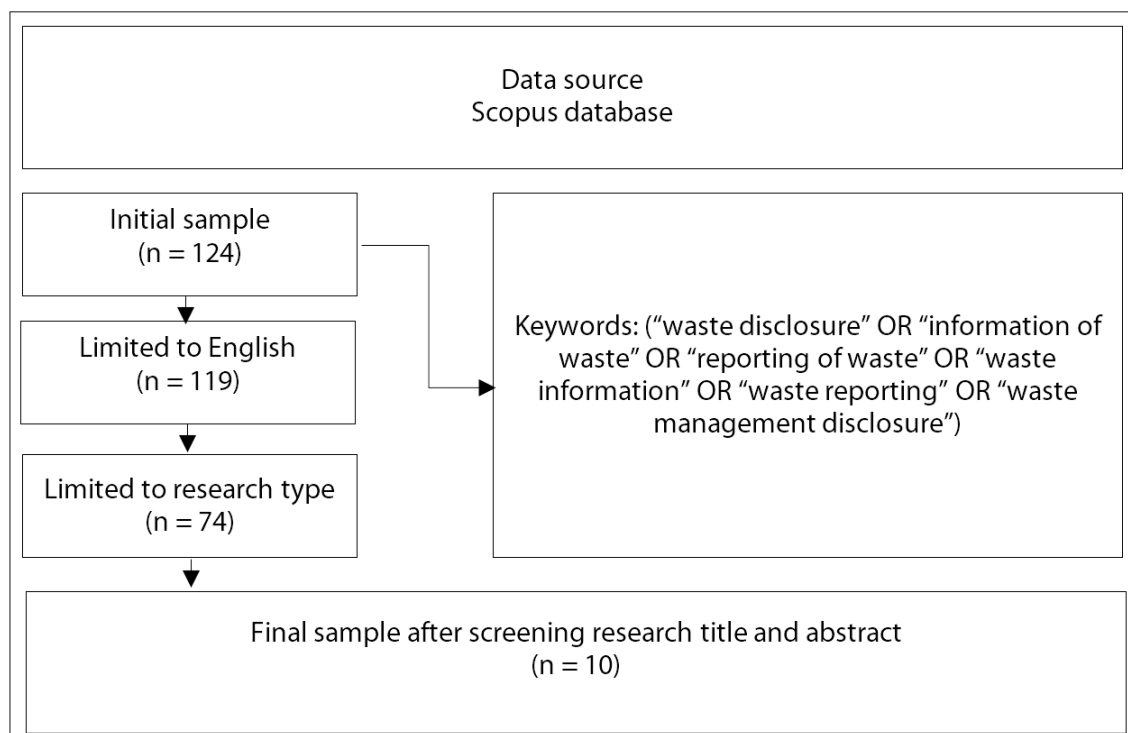
In response to these gaps, this study addresses four research questions: (RQ1) What theoretical frameworks have been applied in prior studies on corporate waste disclosure? (RQ2) What are the research trends in geographical distribution, methodology, and measurement approaches? (RQ3) What determinants and consequences of corporate waste disclosure have been identified in prior studies? (RQ4) What gaps exist and what directions should future research pursue? This study makes two contributions that distinguish it from prior reviews. First, unlike existing reviews that treat waste as a subcategory of broader CSR or environmental disclosure indices, this study is the first to examine corporate waste disclosure exclusively as a standalone research construct, providing a comprehensive map of its theoretical underpinnings, geographical distribution, determinants, consequences, and measurement approaches. Second, it proposes a future research framework grounded in Upper Echelon Theory and Agency Theory, directing

attention toward top management characteristics and ownership structure as theoretically justified but empirically underexplored determinants of waste disclosure behavior.

METHODS

Among internationally recognized citation databases, Scopus offers the most comprehensive multidisciplinary coverage and citation indexing for peer-reviewed literature, encompassing a broader range of topics than Web of Science (WoS) across various academic fields (Ghani et al., 2022; Kumpulainen & Seppänen, 2022; Al-Khoury et al., 2022). This study therefore uses Scopus as the primary search database. It applies a Systematic Literature Review (SLR) methodology following the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) protocol. The keyword string used was: (“waste disclosure” OR “information of waste” OR “reporting of waste” OR “waste information” OR “waste reporting” OR “waste management disclosure”), with no restriction on publication period. The initial search returned 124 articles, subsequently filtered by language (English) and document type (journal articles) to 74 articles, and further screened by title and abstract to yield a final sample of 10 articles. Figure 1 presents the PRISMA flow diagram.

Figure 1. Stages of article search using PRISMA method



Sources: Figure was created by the authors (2025)

Articles were included if they: (1) were published in article-type journals; (2) were written in English; (3) directly examined corporate waste disclosure as a primary variable (dependent, independent, or moderating); and (4) were empirical or review

studies with a clear research design. Articles were excluded if they: (1) appeared in conference proceedings, book chapters, or non-peer-reviewed outlets; (2) addressed waste management from a purely technical perspective without reference to corporate disclosure; (3) treated waste disclosure only as a peripheral element within a broader environmental disclosure index.

The final sample of ten articles reflects the nascent and highly specialized nature of corporate waste disclosure as a standalone construct. To address concerns that the sample may be insufficient, the authors conducted an additional verification search in Web of Science using the same keyword string. This supplementary search did not yield additional articles meeting all inclusion criteria, confirming that ten articles represent the full body of peer-reviewed empirical literature specifically dedicated to corporate waste disclosure. This finding itself underscores the urgency of systematic synthesis at this stage of the field's development.

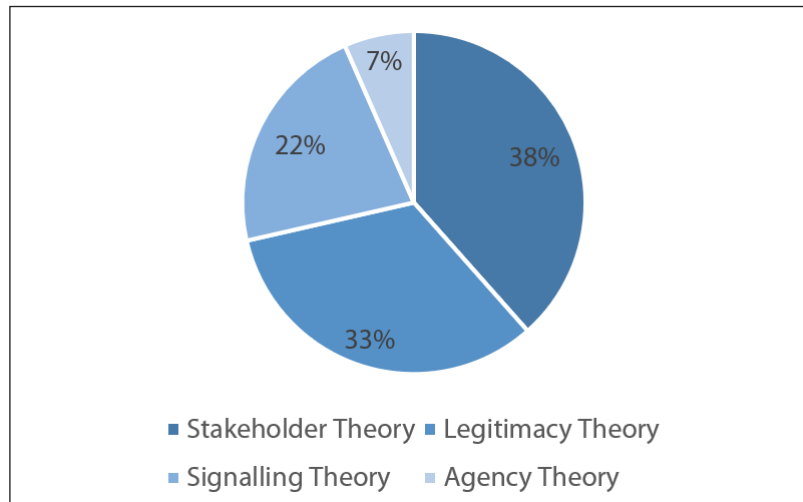
The selection of articles followed an eligibility process adapted from Ram and Bracci (2024), including articles that: (1) directly discuss corporate waste disclosure practices; (2) explore waste disclosure in relation to firm characteristics, governance variables, or firm performance; (3) are available in full-text format; and (4) are written in English. Articles were excluded if they lacked focus on waste disclosure as a primary variable, addressed only technical waste management, or lacked sufficient empirical data. Data were extracted using a structured coding framework covering theoretical perspectives, geographical context, sample size and period, research variables and measurement, analytical techniques, and key findings, and analyzed through content analysis.

RESULTS AND DISCUSSION

The ten reviewed articles span 2020 to 2025, with one publication each in 2020 and 2021, and two publications each in 2022, 2023, 2024, and 2025. This acceleration, coinciding with the introduction of GRI 306 (2020) and increasing regulatory pressure around sustainability reporting, suggests that corporate waste disclosure is gaining traction as a standalone research agenda. Nevertheless, the overall volume remains modest compared to broader environmental disclosure research, confirming that the field has yet to attract sustained mainstream scholarly attention and that the limited literature on this topic calls for deeper exploration (Bogdan et al., 2022).

Figure 2 presents the distribution of theoretical frameworks. Stakeholder Theory is the most frequently applied (38%), reflecting researchers' emphasis on stakeholder expectations and information needs (Freeman, 1984; Mahajan et al., 2023; Adler et al., 2022). Legitimacy Theory follows (33%), framing waste disclosure as a strategy to maintain social acceptance (Abd-Mutalib et al., 2021; Ha & Mansi, 2023). Signaling Theory accounts for 22%, with firms using disclosure to signal environmental responsibility to investors (Ahsan et al., 2023; Wulansari & Adhariani, 2023). Agency Theory is the least applied (7%), despite the centrality of information asymmetry between managers and shareholders to environmental reporting challenges (Bai et al., 2025; Cherian et

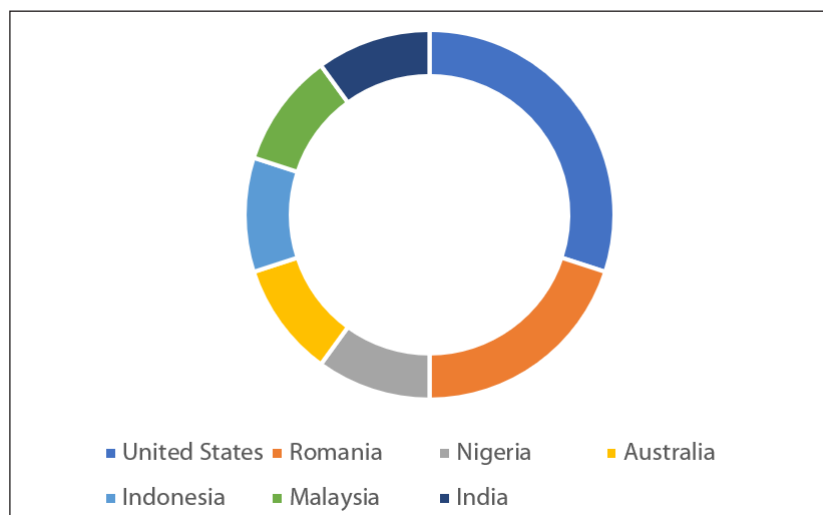
Figure 2. Reserach Theoretical



Sources: Figure is created by authors (2025)

al., 2020). The dominance of stakeholder and legitimacy perspectives suggests the field has framed waste disclosure primarily as a reactive, externally driven behavior, leaving internal organizational dynamics — including managerial characteristics and ownership incentives — largely underexplored. Future research would benefit from more explicitly integrating agency and upper echelon perspectives to complement existing frameworks (Hambrick & Mason, 1984; Hambrick, 2007).

Figure 3. Geographical Distribution



Sources: Figure is created by the authors (2025)

Figure 3 shows that most studies have been conducted in developed countries, with limited evidence from emerging markets such as Indonesia, Malaysia, and India. In developed economies, strong stakeholder interests — including regulators, shareholders, investors, and the media — drive CSR disclosure (Ali et al., 2017). Environmental

restrictions in the U.S. compel waste reporting (Ahsan et al., 2024); Australian metal and mining companies' reporting is often characterized by vagueness (Ha & Mansi, 2023); Romanian companies disclose less and poorer waste information than required (Bogdan et al., 2022; Bogdan et al., 2025); Indonesian companies fail to meet GRI 306 disclosure criteria (Wulansari & Adhariani, 2023); and Indian companies report on only 15% of index items on average (Adler et al., 2022).

This geographical imbalance is not merely descriptive — it carries substantive implications for the generalizability of existing findings, as regulatory environments, ownership structures, and stakeholder dynamics in developed economies differ markedly from those in emerging markets. Greater research is needed on waste disclosure in developing nations, and future studies should examine how ambiguous regulations affect disclosure practices in these contexts (Fatima & Elbanna, 2023; Wirba, 2024; Kamal et al., 2025).

Table 1. Research methodology of prior studies

Category	Subcategory
Methods	Quantitative; Qualitative; Mixed Method; Cases; Review
Sample Period	Over 10 years; 6 to 10 years; 3 to 5 years; below 3 years
Study Context	United States; Romania; Nigeria; Australia; India; Indonesia; Malaysia
Analysis Technique	Content analysis; Panel regression estimation; Descriptive analysis
Sample Size	1-100; 101-500; 501-1000; Over 1000

Source: table created by the authors (2025)

Table 1 presents the research methodology of prior studies. Quantitative approaches dominate, with content analysis the most common technique, followed by panel regression and descriptive analysis. Sample periods range from below three years to over ten years, and study contexts span seven countries. This methodological diversity, combined with wide variation in sample sizes, reflects the field's early-stage and fragmented nature and points to the need for more standardized approaches in future research (Benjamin et al., 2020; Ram & Bracci, 2024).

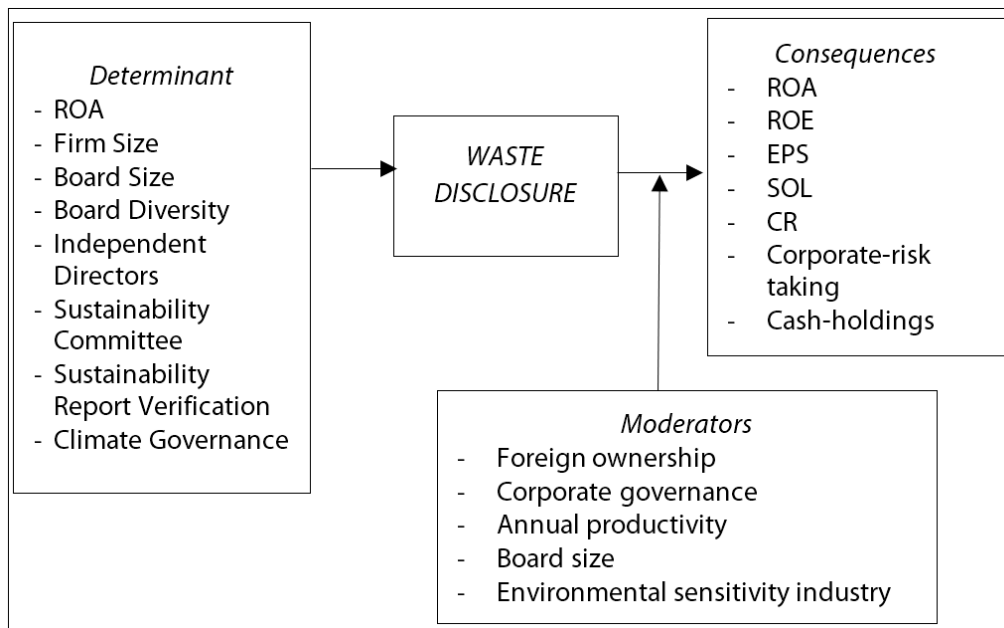
Table 2 presents measurement approaches across prior studies. Most studies employ GRI 306-based scoring indices, ranging from Bogdan et al. (2022; 2025) with a 0-3 scale and Wulansari and Adhariani (2023) with a 0-2 scale, to Ha and Mansi (2023) with a 26-item index across four categories, and Adler et al. (2022) with a 35-item index. Abd-Mutalib et al. (2021) measured e-waste disclosure through word count, sentence count, and a 4-point quality scale, while Bai et al. (2025) and Benjamin et al. (2020) used Bloomberg data, and Ahsan et al. (2024) used ASSET4. This wide variation reflects the field's methodological fragmentation and underscores the need for a standardized waste disclosure index to enable more systematic cross-study comparison.

Table 2. Waste Disclosure Measurement

Concept	Measurement	Data Source	Author
Company disclosures on firms' prevention of waste and management of waste resulting from processes, upstream and downstream operations were calculated.	The average disclosure degree of waste information, based on the GRI index, was calculated by assigning the following points: 0 for no information presented, 1 for information presented but poorly highlighted, 2 for information presented satisfactorily but not detailed, and 3 for rich and detailed information.	Annual report	Bogdan et al. (2025)
Firm discloses the amount of non-hazardous waste produced	Dummy variable that takes the value of "1" if the firm discloses the amount of non-hazard waste it produces (or equivalent) or "0" otherwise.	Bloomberg	Bai et al. (2025)
Waste produced and disclosed in tons.	Natural logarithm of the total waste produced and disclosed in tons.	ASSET4	Ahsan et al. (2024)
Content analysis method on corporate disclosure of the waste produced.	The scoring system based on GRI 306 is given a score of 0 if no information or disclosure is found, 1 if there is disclosure information expressed in qualitative words or information, and 2 if the information is disclosed in the form of numbers or quantitative information, and then the accumulated value of the company's waste disclosure score	Annual report and sustainability report	Wulansari & Adhariani (2023)
Corporate information about waste management approach, waste management activities, waste management performance, and waste management cost.	Quality scale: 26 index items of waste management disclosure.	Annual report and sustainability report	Ha & Mansi (2023)
Information disclosed on how the company is involved in the prevention of obtaining waste and how it manages the waste that cannot be avoided as a result of the manufacturing processes, but also of the operations that take place upstream and downstream of the production cycle.	Average disclosure score on waste management information based on GRI 306: 0 for no information disclosed; 1 for less and poor information; 2 for satisfactory information disclosed but not presented in detail; and 3 for rich and detailed information disclosed.	Annual report and sustainability report	Bogdan et al. (2022)
Disclosures about the companies' waste practices.	Scoring 35-item waste disclosure index to identify the waste disclosures: '1' was awarded to each index item on which the company made at least one disclosure in its annual report, sustainability report, or business responsibility report. Accordingly, each company's waste disclosure score could range from 0 to 35.	Annual report, sustainability report, and business responsibility report	Adler et al. (2022)
The initiative to recycle, reuse, reduce, substitute, treat, or phase out e-waste.	E-waste disclosure (EWS) is measured by its extent and quality. Two measurements measure the extent of reporting: (1) number of words and (2) number of sentences; while a 4-point quality scale measures the quality of reporting (0 = a nondisclosure; 1 = a general qualitative disclosure; 2 = specific qualitative disclosure; and 3 = quantitative disclosure).	Annual report and sustainability report	Abd-Mutalib et al. (2021)
The amount of waste the firm produces or discards and is reported in metric tons of (both hazardous and non-hazardous) waste.	The ratio of the amount of waste in metric tons to total sales; The ratio of the amount of waste in metric tons to total assets.	Bloomberg	Benjamin et al. (2020)

Sources: Table is created by authors (2025)

Figure 4. Waste Disclosure Prior Studies Framework



Sources: Figure created by the authors (2025)

Figure 4 presents the emerging research framework on corporate waste disclosure based on prior studies. Abd-Mutalib et al. (2021) found that firm size significantly influences e-waste disclosure, while firm profitability (ROA) shows no significant effect. Board size findings are contradictory: Abd-Mutalib et al. (2021) found no significant effect in Malaysian firms, while Bai et al. (2025) found larger boards are more likely to disclose non-hazardous waste in U.S. firms. This divergence is attributable to differences in regulatory context, waste type, and measurement approach, highlighting the need for more contextually sensitive research designs.

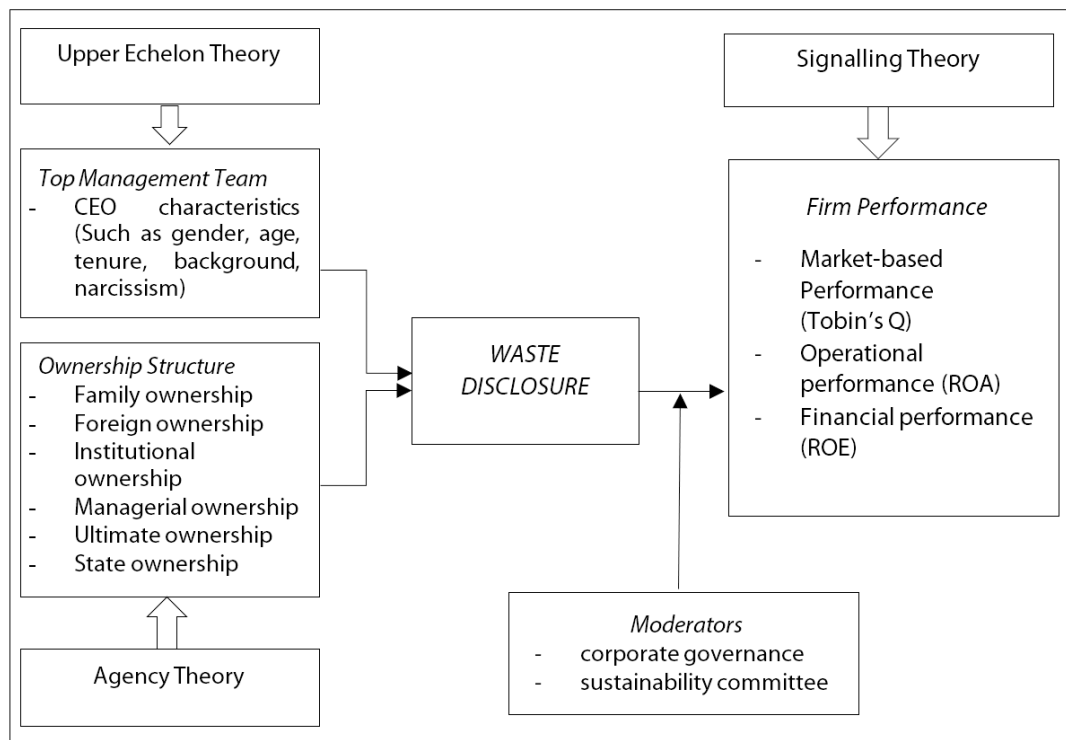
Governance variables consistently show positive associations with waste disclosure. Firms with higher proportions of female directors, more independent directors, established sustainability committees, and externally validated sustainability reports are more inclined to disclose waste (Bai et al., 2025). Effective climate governance — encompassing CSR focus, environmental orientation, and governance quality — further enhances both hazardous and non-hazardous waste disclosure and positively influences market performance through this channel (Ahsan et al., 2024). Agency theory accounts for only 7% of reviewed studies, which is surprising given how central information asymmetry is to environmental reporting, and future research should integrate governance-based perspectives more explicitly.

Waste disclosure is positively associated with profitability (ROA, ROE, EPS) but shows no significant effect on liquidity and a predominantly negative effect on solvency (Bogdan et al., 2022). It also promotes corporate risk-taking, as stakeholder validation aligns expectations and maintains resource access (Wulansari & Adhariani, 2023), and is positively associated with cash holdings in firms with strong governance (Benjamin et

al., 2020). These findings suggest that the financial benefits of waste disclosure are real but conditional — mediated by governance quality and stakeholder expectations — a conditionality that represents one of the most promising directions for future research in emerging markets (Fatima & Elbanna, 2023).

Foreign ownership shows no significant moderating role in the relationship between waste disclosure and risk-taking (Wulansari & Adhariani, 2023). Corporate governance quality positively moderates the relationship between waste disclosure and cash holdings (Benjamin et al., 2020), while industry environmental sensitivity strengthens the link between waste disclosure and financial performance (Bogdan et al., 2022). The mixed findings on moderating variables indicate that the relationship between waste disclosure and firm outcomes is highly context-dependent, pointing to the need for future research to specify more carefully the conditions under which these effects emerge.

Figure 5. Proposed Framework for Future Research on Corporate Waste Disclosure



Sources: Figure created by the authors

Figure 5 presents the proposed framework for future research, integrating Upper Echelon Theory, Agency Theory, and Signaling Theory. Corporate waste disclosure is essential for communicating sustainability efforts, enhancing stakeholder trust, and fostering a favorable firm reputation (Lin, 2024; Anita et al., 2025). From the perspective of Upper Echelon Theory, top management team characteristics — including CEO gender, age, tenure, educational background, and narcissism — are expected to influence waste disclosure practices (Hambrick & Mason, 1984; Hambrick, 2007; Bhaskar et al., 2023; Dong et al., 2025). Women in leadership influence environmental responsibility

decisions and waste recycling practices (Tjahjadi et al., 2024; Gull et al., 2024), while CEO overconfidence and narcissism positively influence CSR engagement and investment (Saini & Singh, 2025; Agnihotri & Bhattacharya, 2024). Based on Agency Theory, ownership structure — including family, foreign, institutional, managerial, ultimate, and state ownership — represents an important but underexplored determinant of waste disclosure (Jensen & Meckling, 1976; Nuhu & Alam, 2024; Dakhli & Houcine, 2025; Lin & Nguyen, 2022; Zhou et al., 2024; Kaimal & Uzma, 2024; Li & Sasaki, 2024).

Waste disclosure as a signal to stakeholders is associated with positive firm performance outcomes, including Tobin's Q and ROA (Zhong et al., 2022; Kaimal & Uzma, 2024; Farooq et al., 2025; Alodat & Hao, 2024; Arian et al., 2025; Saputra et al., 2024). Corporate governance mechanisms moderate the relationship between CSR and firm value, with stronger governance amplifying the advantages of CSR initiatives (Ledi et al., 2025; Farooq et al., 2025; Mondal & Sahu, 2025; Forte et al., 2025). Future research can explore the nexus between CEO characteristics and ownership structure and waste disclosure, investigate the impact of waste disclosure on firm performance, and examine the moderating role of corporate governance and the sustainability committee (Gull et al., 2024; Driss et al., 2024; Alodat & Hao, 2024).

CONCLUSION

This study provides the first systematic review of corporate waste disclosure as a standalone research construct, synthesizing ten scholarly articles from the Scopus database. Three key patterns emerge: First, the literature is geographically concentrated in developed economies, with very limited evidence from emerging markets; Second, existing studies are theoretically dominated by stakeholder and legitimacy perspectives, while agency and upper echelon approaches remain underutilized; and Third, corporate governance variables consistently emerge as stronger determinants of waste disclosure than firm financial characteristics, while the financial consequences of disclosure are real but conditional on governance quality.

These findings contribute to the literature by establishing a consolidated empirical foundation and identifying top management team characteristics and ownership structure — grounded in Upper Echelon Theory and Agency Theory — as underexplored but theoretically justified determinants warranting future investigation (Hambrick & Mason, 1984; Jensen & Meckling, 1976). Future research is encouraged to explore CEO characteristics and ownership structure as determinants of waste disclosure, investigate the impact of waste disclosure on firm performance, and examine the moderating role of corporate governance and the sustainability committee.

For policymakers, particularly in emerging economies where environmental reporting remains voluntary or weakly enforced, the findings underscore the need for mandatory disclosure standards with measurement benchmarks aligned with GRI 306 and incentive mechanisms—such as tax benefits or preferential access to green financing—to reward firms for consistent, high-quality waste reporting. This study is limited to Scopus-indexed

articles that directly examine waste disclosure as a primary variable. An additional verification search across Web of Science confirmed that ten articles represent the full body of qualifying literature, underscoring the field's nascent state and the urgency of broader scholarly engagement with this topic.

REFERENCES

- Abd-Mutalib, H., Muhammad Jamil, C. Z., Mohamed, R., Shafai, N. A., & Nor-Ahmad, S. N. H. J. N. (2021). Firm and Board Characteristics, and E-Waste Disclosure: A Study in the Era of Digitalisation. *Sustainability*, 13(18), 10417. <https://doi.org/10.3390/su131810417>.
- Adler, R., Mansi, M., & Pandey, R. (2022). Accounting for Waste Management: A Study of The Reporting Practices of The Top Listed Indian Companies. *Accounting & Finance*, 62(2), 2401–2437. <https://doi.org/10.1111/acf.12869>.
- Agnihotri, A., & Bhattacharya, S. (2024). CEO Narcissism and CSR: Role of Organizational Virtue Orientation. *Society and Business Review*, 19(2), 316–335. <https://doi.org/10.1108/SBR-03-2023-0080>.
- Ahsan, T., Albitar, K., Gull, A. A., & Hussainey, K. (2024). Does Climate Governance Affect Waste Disclosure? Evidence from the US. *Applied Economics*, 56(43), 5146–5162. <https://doi.org/10.1080/00036846.2023.2244242>.
- Ali, W., Frynas, J. G., & Mahmood, Z. (2017). Determinants of Corporate Social Responsibility (CSR) Disclosure in Developed and Developing Countries: A Literature Review. *Corporate Social Responsibility And Environmental Management*, 24(4), 273–294. <https://doi.org/10.1002/csr.1410>.
- Alodat, A. Y., & Hao, Y. (2024). Environmental, Social, and Governance (ESG) Disclosure and Firm Performance: Moderating Role of Board Gender Diversity and Sustainability Committee. *Sustainable Development*, 33(1), 636–651. <https://doi.org/10.1002/sd.3126>.
- Anita, R., Abdillah, M. R., Sari S, P. S., Rizki, S., & Arlendhea, W. (2025). Corporate Social Responsibility and Firm Performance: The Role of Firm Reputation. *Journal of Global Responsibility*, 16(4), 669–685. <https://doi.org/10.1108/JGR-11-2023-0181>.
- Arian, A., Sands, J., Rahman, H. U., & Khatatbeh, I. N. (2025). Corporate Social Performance through Instrumental Stakeholder Theory: A Sector-Specific Perspective. *Management Decision*, 63(5), 1369–1390. <https://doi.org/10.1108/MD-11-2023-2108>.
- Bai, M., Qin, Y., & Dasgupta, A. (2025). Does Waste Disclosure Waste?. *Business Strategy and the Environment*, 34(1), 932–944. <https://doi.org/10.1002/bse.4030>.
- Bedoya, M., Román, E., Gutiérrez, S., Pérez, E., Zapata, C., Castro-Gómez, J., & Jaramillo, J. (2025). The Impacts of Corporate Social Responsibility on Internal Organizational Processes to Create Shared Value. *Cogent Business & Management*, 12(1), 2418420. <https://doi.org/10.1080/23311975.2024.2418420>.
- Benjamin, S. J., Biswas, P. K., Wellalage, N. H., & Man, Y. (2023). Environmental Disclosure

- and Its Relation to Waste Performance. *Meditari Accountancy Research*, 31(6), 1545–1577. <https://doi.org/10.1108/MEDAR-04-2021-1261>.
- Benjamin, S. J., Regasa, D. G., Wellalage, N. H., & M Marathamuthu, M. S. (2020). Waste Disclosure and Corporate Cash Holdings. *Applied Economics*, 52(49), 5399–5412. <https://doi.org/10.1080/00036846.2020.1764480>.
- Bhaskar, R., Li, P., Bansal, S., & Kumar, S. (2023). A New Insight on CEO Characteristics and Corporate Social Responsibility (CSR): A Meta-Analytical Review. *International Review of Financial Analysis*, 89, 102815. <https://doi.org/10.1016/j.irfa.2023.102815>.
- Bogdan, V., Popa, D. N., & Rus, L. (2025). Analysis of Moderation and Co-Moderation Effects on Waste Information Disclosure and Financial Performance Connection: A Way to Ensure Sustainable Business for SMEs. *Eastern European Economics*, 63(5), 803-827. <https://doi.org/10.1080/00128775.2024.2423929>.
- Bogdan, V., Sabău-Popa, C. D., Boloş, M. I., Popa, D. N., & Beleneşi, M. (2022). Tracking Waste Management Information Disclosure Behavior Connected to Financial Performance Through Moderating Variables. *International Journal of Environmental Research And Public Health*, 19(20), 13068. <https://doi.org/10.3390/ijerph192013068>.
- Bose, S., Khan, H. Z., & Bakshi, S. (2024). Determinants and Consequences of Sustainable Development Goals Disclosure: International Evidence. *Journal of Cleaner Production*, 434, 140021. <https://doi.org/10.1016/j.jclepro.2023.140021>.
- Cherian, J., Safdar Sial, M., Tran, D. K., Hwang, J., Khanh, T. H. T., & Ahmed, M. (2020). The Strength of CEOs' Influence on CSR In Chinese Listed Companies. New Insights from An Agency Theory Perspective. *Sustainability*, 12(6), 2190. <https://doi.org/10.3390/su12062190>.
- Dakhli, A., & Houcine, A. (2025). Does CEO Compensation Affect Earnings Management in France? The Mediating Effect of Corporate Social Responsibility. *Society and Business Review*, 20(2), 319–346. <https://doi.org/10.1108/SBR-09-2024-0306>.
- Dong, H., Zhang, C., & Teng, W. (2025). Top Management Team Heterogeneity and Corporate ESG Performance. *Finance Research Letters*, 73, 106610. <https://doi.org/10.1016/j.frl.2024.106610>.
- Driss, H., Drobetz, W., El Ghoul, S., & Guedhami, O. (2024). The Sustainability Committee and Environmental Disclosure: International Evidence. *Journal of Economic Behavior & Organization*, 221, 602–625. <https://doi.org/10.1016/j.jebo.2024.02.019>.
- Emmanuel, Y. L., Owolabi, O. J., Owolabi, B. A., Kwarbai, J. D., Akinbode, J. O., Olasupo, S. F., & Otekunrin, A. O. (2024). Nexus Between Returns on Equity and Disclosures of Greenhouse Gas Emissions, Waste Management, And Renewable Energy. *International Journal of Energy Economics and Policy*, 14(5), 98–108.
- Farooq, M., Khan, I., Kainat, M., & Mumtaz, A. (2025). Corporate Social Responsibility and Firm Value: The Role of Enterprise Risk Management and Corporate Governance. *Corporate Governance: The International Journal of Business in Society*, 25(3), 631–663. <https://doi.org/10.1108/CG-08-2023-0341>.

- Fatima, T., & Elbanna, S. (2023). Corporate Social Responsibility (CSR) Implementation: A Review and a Research Agenda Towards an Integrative Framework. *Journal of Business Ethics*, 183(1), 105–121. <https://doi.org/10.1007/s10551-022-05047-8>.
- Forte, H. C., Crisóstomo, V. L., & López-Iturriaga, F. J. (2025). Corporate Social Responsibility, Ownership Structure, and Corporate Governance—An Analysis of The Brazilian Firm. *Corporate Social Responsibility and Environmental Management*, 32(1), 866–880. <https://doi.org/10.1002/csr.2991>.
- Freeman, R. E. (1984). *Strategic Management: A Stakeholder Approach*. Boston, MA: Pitman.
- Ghani, N. A., Teo, P. C., Ho, T. C., Choo, L. S., Kelana, B. W. Y., Adam, S., & Ramli, M. K. (2022). Bibliometric Analysis of Global Research Trends on Higher Education Internationalization using Scopus Database: Towards Sustainability of Higher Education Institutions. *Sustainability*, 14(14), 8810. <https://doi.org/10.3390/su14148810>.
- Global Reporting Initiative. (2020). GRI 306: Waste 2020. Retrieved from <https://www.globalreporting.org/publications/documents/english/gri-306-waste-2020/> (Accessed July 2025)
- Global Reporting Initiative. (2023). Waste 2020 Frequently Asked Questions (FAQs). Retrieved from <https://www.globalreporting.org/media/nvih30tl/waste-topic-standard-faqs.pdf> (Accessed July 2025)
- Gull, A. A., Carvajal, M., Atif, M., & Nadeem, M. (2024). The Presence and Composition Of Sustainability Committee and Waste Management Practices. *International Review of Financial Analysis*, 93, 103111. <https://doi.org/10.1016/j.irfa.2024.103111>.
- Guping, C., Safdar Sial, M., Wan, P., Badulescu, A., Badulescu, D., & Vianna Brugni, T. (2020). Do Board Gender Diversity and Non-Executive Directors Affect CSR Reporting? Insight from an Agency Theory Perspective. *Sustainability*, 12(20), 8597. <https://doi.org/10.3390/su12208597>.
- Ha, L. T. D., & Mansi, M. (2023). Accounting for Waste: Waste Reporting in Australian Metals and Mining Companies. *Accounting & Finance*, 63(4), 4683–4711. <https://doi.org/10.1111/acfi.13125>.
- Hallinger, P. (2020). Science Mapping the Knowledge Base on Educational Leadership and Management from the Emerging Regions of Asia, Africa and Latin America, 1965–2018. *Educational Management Administration & Leadership*, 48(2), 209–230. <https://doi.org/10.1177/1741143218822772>.
- Hambrick, D. C. (2007). Upper Echelons Theory: An Update. *Academy of Management Review*, 32(2), 334–343.
- Hambrick, D. C., & Mason, P. A. (1984). Upper Echelons: The Organization as a Reflection of Its Top Managers. *Academy of Management Review*, 9(2), 193–206.
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure. *Journal of Financial Economics*, 3(4), 305–360.

- Kaimal, A., & Uzma, S. H. (2024). Corporate Social Responsibility Expenditure And Financial Performance: The Moderating Role of Family Ownership. *Corporate Governance: The International Journal of Business in Society*, 24(1), 101–118. <https://doi.org/10.1108/CG-03-2022-0128>.
- Kamal, M., Ali, S. S., Gupta, S., Jalil, S. A., & Ahmed, A. (2025). Enhancing Social Sustainability in Textile Supply Chains Using Neutrosophic Sets-Based Fuzzy Goal Programming. *Journal of Industrial and Management Optimization*, 21(2), 1201–1227. <https://doi.org/10.3934/jimo.2024121>.
- Korzec, K., Blackburn, L. M., Deyhim, N., Beck, A., Tang, J., Fahey, M., ... & Haines, L. (2026). REcycle Soon-to-Expire Program (RESTEP): Sustainability Efforts in Hospital Pharmacy. *American Journal of Health-System Pharmacy*, 83(4), 204–210. <https://doi.org/10.1093/ajhp/zxaf216>.
- Kumpulainen, M., & Seppänen, M. (2022). Combining Web of Science and Scopus datasets in Citation-Based Literature Study. *Scientometrics*, 127(10), 5613–5631. <https://doi.org/10.1007/s11192-022-04475-7>.
- Ledi, K. K., Ameza-Xemalordzo, E. B., & Mensah, H. K. (2025). Unpacking Synergistic Dynamics Between Corporate Governance and CSR—The Role of Stakeholder Salience. *Business Process Management Journal*, 31(3), 1149–1171. <https://doi.org/10.1108/BPMJ-01-2024-0003>.
- Li, J., & Sasaki, M. (2024). The Impact of State Ownership on Corporate Social Responsibility Reporting: A Comparison Between State-Owned and Non-State-Owned Enterprises in China. *Management Communication Quarterly*, 38(3), 504–533. <https://doi.org/10.1177/08933189231209727>.
- Lin, C. C., & Nguyen, T. P. (2022). The Impact of Ownership Structure on Corporate Social Responsibility Performance in Vietnam. *Sustainability*, 14(19), 12445. <https://doi.org/10.3390/su141912445>.
- Lin, W. L. (2024). The Role of Corporate Social Responsibility and Corporate Social Irresponsibility in Shaping Corporate Reputation: An Analysis of Competitive Action and Innovation Strategies. *Corporate Social Responsibility and Environmental Management*, 31(2), 1451–1468. <https://doi.org/10.1002/csr.2640>.
- Mahajan, R., Lim, W. M., Sareen, M., Kumar, S., & Panwar, R. (2023). Stakeholder Theory. *Journal of Business Research*, 166, 114104. <https://doi.org/10.1016/j.jbusres.2023.114104>.
- Massari, G. F., & Giannoccaro, I. (2023). Adopting GRI Standards for the Circular Economy Strategies Disclosure: The Case of Italy. *Sustainability Accounting, Management and Policy Journal*, 14(4), 660–694. <https://doi.org/10.1108/SAMPJ-07-2021-0284>.
- Mondal, S., & Sahu, T. N. (2025). Unveiling the Moderating Role of Governance Mechanism on the Nexus Between CSR and Firm Performance In India: A GMM-Based Dynamic Panel Approach. *Corporate Social Responsibility and Environmental Management*, 32(1), 506–521. <https://doi.org/10.1002/csr.2975>.

- Norris, M., & Oppenheim, C. (2007). Comparing Alternatives to the Web of Science for Coverage of The Social Sciences' Literature. *Journal of Informetrics*, 1(2), 161–169. <https://doi.org/10.1016/j.joi.2006.12.001>.
- Nuhu, Y., & Alam, A. (2024). Ownership Structure and Sustainability Reporting: Emerging Economies Evidence. *International Journal of Accounting & Information Management*, 32(5), 883–908. <https://doi.org/10.1108/IJAIM-09-2023-0228>.
- Opferkuch, K., Walker, A. M., Roos Lindgreen, E., Caeiro, S., Salomone, R., & Ramos, T. B. (2023). Towards a Framework for Corporate Disclosure of Circular Economy: Company Perspectives and Recommendations. *Corporate Social Responsibility and Environmental Management*, 30(5), 2457–2474. <https://doi.org/10.1002/csr.2497>.
- Prysmian. (2024). The Importance of Waste Management. Retrieved from <https://www.prysmian.com/en/insight/sustainability/the-importance-of-waste-management> (Accessed July 2025)
- Ram, M., & Bracci, E. (2024). Waste Management, Waste Indicators And The Relationship With Sustainable Development Goals (SDGs): A Systematic Literature Review. *Sustainability*, 16(19), 8486. <https://doi.org/10.3390/su16198486>.
- Rejeb, A., Rejeb, K., & Keogh, J. G. (2022). The Circular Economy and Marketing: A Literature Review. *Etikonomi*, 21(1), 153-176. <https://doi.org/10.15408/etk.v21i1.22216>.
- Roy, S., Rautela, R., & Kumar, S. (2023). Towards a Sustainable Future: Nexus Between the Sustainable Development Goals and Waste Management In The Built Environment. *Journal of Cleaner Production*, 415, 137865. <https://doi.org/10.1016/j.jclepro.2023.137865>.
- Saeed, M. M., Mohammed, S. S., Kumari, M., & Pandey, G. (2025). The Impact of Corporate Environmental Reporting on the Financial Performance of Listed Manufacturing Firms in Ghana (Csr-24-2036). *Corporate Social Responsibility and Environmental Management*, 32(1), 1230–1244. <https://doi.org/10.1002/csr.3015>.
- Saini, D., & Singh, B. (2025). CEO Overconfidence and Corporate Social Responsibility: Exploring The Moderating Role of Governance. *International Journal of Ethics and Systems*, In-press. <https://doi.org/10.1108/IJOES-11-2024-0358>.
- Saputra, C. C., Anthonie, R. M., & Hwihanus, H. (2024). Corporate Social Responsibility and International Business: A Study of the Impact on Firm Performance. *International Journal of Educational Research*. 1(2), 27. <https://doi.org/10.62951/ijer.v1i2.27>
- Singh, A., & Sushil. (2021). Integrated Approach for Finding the Causal Effect of Waste Management Over Sustainability in The Organization. *Benchmarking: An International Journal*, 28(10), 3040–3073. <https://doi.org/10.1108/BIJ-08-2020-0419>.
- Tjahjadi, B., Hapsari, A. P., Soewarno, N., Sutarsa, A. A. P., & Fairuzi, A. (2024). Women on Boards, Corporate Environment Responsibility Engagement and Corporate Financial Performance: Evidence from Indonesian Manufacturing Companies. *Gender in Management: An International Journal*, 39(8), 1017–1036. <https://doi.org/10.1108/GM-08-2021-0237>.

- Wirba, A. V. (2024). Corporate Social Responsibility (CSR): The Role of Government in Promoting CSR. *Journal of the Knowledge Economy*, 15(2), 7428–7454. <https://doi.org/10.1007/s13132-023-01185-0>.
- Wulansari, W., & Adhariani, D. (2023). Corporate Waste Disclosure, Risk-Taking and Foreign Ownership: Evidence from Indonesia. *Business Strategy & Development*, 6(2), 205–225. <https://doi.org/10.1002/bsd2.234>.
- Yan, L., & Zhiping, W. (2023). Mapping the literature on academic publishing: A bibliometric analysis on WOS. *Sage Open*, 13(1), <https://doi.org/10.1177/21582440231158562>
- Zampone, G., & Guidi, M. (2024). Sustainability Reporting and Assurance Practices Contribution to SDG Disclosure: Evidence From Communication On Progress (CoP). *Meditari Accountancy Research*, 32(7), 236–265. <https://doi.org/10.1108/MEDAR-09-2023-2165>.
- Zhong, X., Chen, W., & Ren, G. (2022). The Impact of Corporate Social Irresponsibility on Emerging-Economy Firms' Long-Term Performance: An Explanation Based on Signal Theory. *Journal of Business Research*, 144, 345–357. <https://doi.org/10.1016/j.jbusres.2022.02.005>.
- Zhou, T., Liu, M., Zhang, X., Qi, Z., & Qin, N. (2024). Does Institutional Ownership Affect Corporate Social Responsibility? Evidence from China. *Economic Analysis and Policy*, 81, 84-98. <https://doi.org/10.1016/j.eap.2023.11.017>.