

A Bibliometric Review of ESG Disclosure and Stock Price Crash Risk Studies in the Food and Beverage Industry of Emerging Markets: Evidence from Indonesia

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Abstract: This study conducts a bibliometric analysis of the relationship between Environmental, Social, and Governance (ESG) disclosure and stock price crash risk (SPCR) in Indonesia's food and beverage industry, focusing on emerging markets. Using a descriptive-quantitative approach, we analyzed 1,000 publications from Crossref (2019–2025) with *Publish or Perish* and *VOSviewer* to identify trends, influential authors, and thematic clusters. Results indicate a robust academic focus, with a high citation impact (h-index: 42; 7.11 citations per paper). Keyword co-occurrence and co-citation analysis reveal three major clusters: (1) ESG's influence on market dynamics, (2) SPCR mitigation strategies, and (3) challenges unique to emerging markets. Network visualizations demonstrate strong linkages between ESG transparency and reduced stock volatility, while temporal overlays show an evolution from crisis-driven studies to sustainability-oriented frameworks. The study contributes original insights as one of the first bibliometric reviews in this niche, highlighting ESG disclosure as a critical tool for risk management in volatile markets. Practical implications suggest that firms and policymakers should adopt standardized ESG reporting to enhance investor confidence and financial stability. Future research should address fragmentation in co-authorship networks and expand sectoral/geographic coverage to strengthen interdisciplinary collaboration between finance, governance, and sustainability scholars.

Keywords: Bibliometric Analysis; ESG Disclosure; Emerging Markets; Food and Beverage Industry; Indonesia

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1. Introduction

In recent decades, increasing attention has been directed toward Environmental, Social, and Governance (ESG) practices, particularly within the context of developing countries. ESG disclosure is regarded as a crucial mechanism for reducing information asymmetry between management and stakeholders, enhancing transparency, and promoting sustainable business practices (Alazzani dkk., 2021).

Specifically, the food and beverage sector in emerging markets, such as Indonesia, faces mounting pressure to adopt higher ESG standards due to rising expectations from investors, consumers, and regulators (Madiha Kiran, Sumayya Chughtai, Mustafa Raza Rabbani, 2024).

Meanwhile, Stock Price Crash Risk (SPCR) has emerged as a significant concern in corporate finance research. This risk is closely linked to managerial behaviours involving the concealment of negative information (bad news hoarding), which may ultimately trigger

sudden and severe stock price declines once such information is disclosed (Xiao, 2023). In emerging markets, where regulatory frameworks and investor protection mechanisms are often less robust, SPCR tends to be more pronounced (Reber dkk., 2022). Prior studies have indicated that ESG disclosure can mitigate SPCR by strengthening investor trust and discouraging opportunistic managerial behaviour (Y. C. Chen dkk., 2018);(Masoud & Vij, 2021). However, other studies suggest that the relationship may be conditional, depending on moderating factors such as corporate governance quality(Ali dkk., 2017);(Seow, 2024) or institutional pressures (Hoang dkk., 2018);(Mai Tran & Tran, 2022).

Although research on the ESG disclosure–SPCR relationship has expanded, most of the studies focus on developed economies, particularly the United States and Western Europe (Yang, Wang, dkk., 2023);(Lins dkk., 2017). The relationship between ESG (Environmental, Social, and Governance) disclosure and stock price crash risk in the food and beverage industry in emerging markets, particularly Indonesia, is an important area of study. This is due to the increasing global emphasis on sustainable business practices and the potential financial implications of ESG activities. Empirical evidence from the food and beverage sector in emerging markets, especially Indonesia, remains limited. Previous research in China has shown that ESG disclosure can have varying impacts on stock price crash risk. For example, several studies have shown that higher ESG scores are associated with a reduced risk of stock price crashes, highlighting the protective role of ESG against financial downturns(Luo, 2023);(X. Chen, 2020);(Yang, Chen, dkk., 2023). This gap is critical, given the sector's substantial contribution to national economic output and its role as a major GDP driver(Central Bureau of Statistics, 2024).

Furthermore, there are notable methodological gaps in the current literature. Most existing studies rely on traditional quantitative methods, while bibliometric analyses—mapping research trends, author collaboration networks, and the intellectual structure of the field—are still rare (Donthu dkk., 2021). Accordingly, there is a strong need for a comprehensive bibliometric review to better understand the evolving research landscape concerning ESG disclosure and SPCR within the food and beverage sector in emerging markets.

The primary objectives and scope of this study are to: 1). Conduct a bibliometric analysis of the literature related to ESG disclosure and SPCR in the food and beverage industry of emerging markets. 2). Identify publication trends, scientific collaboration patterns, major research themes, and future research gaps and directions. 3). Present managerial and academic implications based on the research findings. Novelty of this study: This study addresses a significant research gap by conducting the first bibliometric analysis examining the relationship between ESG disclosure and stock price crash risk (SPCR) in the food and beverage industry within emerging markets, particularly Indonesia. Through a systematic mapping of research outputs from the past five years, it identifies leading contributors,

influential journals, and key emerging themes related to ESG and SPCR. Beyond the academic contribution, the study provides practical implications for regulators, corporate managers, and investors, emphasizing the critical role of ESG disclosure in reducing financial instability and stock price crash risks.

2. Preliminaries or Related Work or Literature Review

2.1 Environmental, Social, and Governance (ESG) Disclosure

Theory: ESG disclosure refers to the practice of reporting a company's environmental, social, and governance performance (Eccles & Klimenko, 2019). Based on *Stakeholder Theory* (Freeman, 1984), ESG disclosure acts as a strategic communication tool to build positive relationships with various stakeholders. Previous Studies: (Hung, 2016) showed that mandatory ESG disclosure enhances corporate transparency and profitability. Research from (2023);(Wu, 2025) found that ESG disclosure significantly reduces stock price crash risk in emerging markets. The food and beverage sector in emerging markets has become increasingly pressured to strengthen ESG practices, considering its high environmental and social impact (Shen dkk., 2023)).

2.2 Stock Price Crash Risk (SPCR)

Theory: SPCR refers to the likelihood of a sudden, extreme decline in stock prices, often resulting from the accumulation of hidden negative information (*bad news hoarding theory*, (Hutton dkk., 2009)). Previous Studies: Study from (Kim & Zhang, 2016) demonstrated that firms practicing accounting conservatism have lower crash risks. Research from (Y. Chen, 2022) linked greenwashing activities to increased stock price crash risks. The food and beverage sector is particularly vulnerable to crash risks due to its exposure to reputation, regulatory pressure, and consumer sentiment.

2.3 ESG Disclosure and Stock Price Crash Risk

Theory: Based on (Read, 2014) *Agency Theory* (Jensen & Meckling, 1976), ESG disclosure can reduce managerial opportunism, thus lowering stock price crash risks. Previous Studies: (Kim & Zhang, 2016) proved that firms with strong ESG disclosures experience fewer crashes. Finding result from (Li dkk., 2022) emphasized that corporate governance quality moderates the effect of ESG disclosure on crash risk reduction. In emerging markets like Indonesia, the effectiveness of ESG disclosure in mitigating SPCR heavily depends on governance quality and regulatory frameworks.

2.4 Bibliometric Analysis

Bibliometric analysis is a structured quantitative method that systematically investigates the dynamics of scholarly communication, encompassing citation trends, co-authorship connections, and the evolution of research themes(Judijanto & Astutik, 2025)(Kryvykh & Goncharenko, 2020). In the field of bibliometrics, researchers typically apply rigorous quantitative methodologies to scrutinize bibliographic data, thereby elucidating patterns of

knowledge production, institutional affiliations, and international research collaborations manifested in scholarly publications, patents, and related intellectual outputs(Sharma, 2024).

3. Proposed Method

This study applies a bibliometric approach to investigate the development of research on the relationship between ESG disclosure and stock price crash risk, with a specific focus on the food and beverage sector in emerging markets. Data will be sourced from two major academic databases, Crossref. The literature search will use specific keywords, including ("ESG disclosure" OR "sustainability reporting") AND ("stock price crash risk") AND ("food and beverage" OR "F&B industry") AND ("emerging markets"), to ensure the selection of relevant studies. The inclusion criteria are limited to journal articles published between 2019 and 2024. The study will consider empirical research, theoretical discussions, and systematic reviews that examine the food and beverage sector in emerging market contexts. For the analysis, bibliometric mapping techniques employed using Publish or Perish and VOSviewer software.

Several dimensions of the research landscape will be explored, including the mapping of author collaboration networks, the identification of keyword trends, the examination of citation networks, and the clustering of research themes(Zhang dkk., 2024). The analytical process begins with a descriptive analysis, outlining the number of publications per year, the countries of contributing authors, and the journals where the articles are published. Following this, co-authorship analysis will be conducted to visualize patterns of collaboration among researchers and institutions. Keyword co-occurrence analysis will help to identify the main topics and emerging themes within the field, while co-citation analysis will be used to highlight influential works and foundational literature.

4. Results and Discussion

This study employs bibliometric analysis to systematically examine the trajectory of academic literature on Environmental, Social, and Governance (ESG) disclosure and stock price crash risk (SPCR) within Indonesia's food and beverage industry, as part of emerging markets. Data were extracted from the Crossref database, covering up to 1,000 articles published between 2019 and 2025.

Using the Publish or Perish (PoP) tool, relevant keywords—"ESG Disclosure," "Stock Price Crash Risk," "Bibliometric Analysis," "Food and Beverage Industry," "Emerging Markets," and "Indonesia"—were applied to refine the search. The retrieved metadata were converted into RIS files for bibliometric visualization in VOSviewer. Network, overlay, and density visualizations were generated to identify publication trends, thematic clusters, and research

intensity. This approach provides a comprehensive mapping of scholarly discourse, highlighting key developments and future research directions.

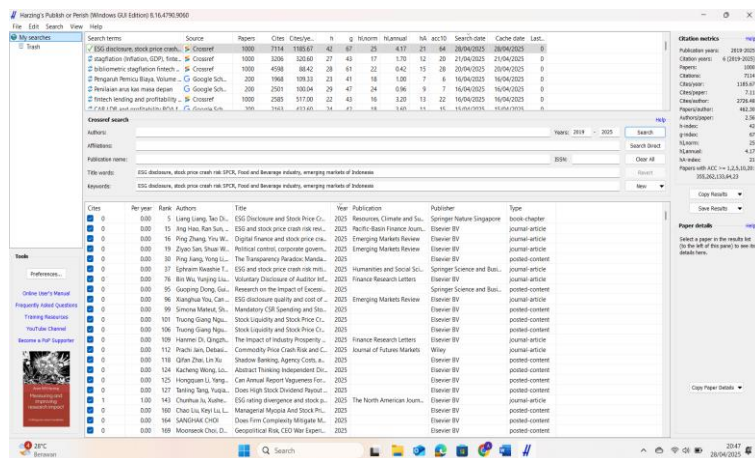


Figure 1. Metadata Search Results Through Publish or Perish Software

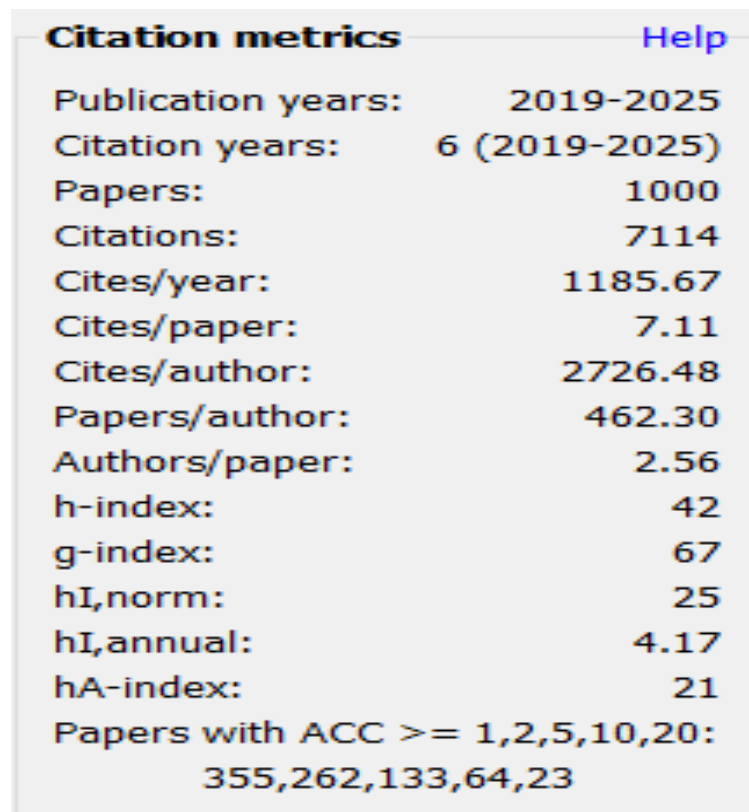


Figure 2. Citation Metric Data and Search Results from Publish or Perish Software

Overview of Publication and Citation Data : The dataset covers publications from 2019 to 2025, spanning six years, and includes 1,000 papers with a total of 7,114 citations. This indicates a high level of research productivity, averaging approximately 167 papers per year. The average citation rate of 7.11 citations per paper suggests that the publications have garnered significant attention within the academic community. Citation Impact and Quality Indicators: The h-index of 42 signifies that 42 papers have each been cited at least 42 times, demonstrating consistent scholarly impact. The g-index of 67, which is higher than the h-

index, highlights the presence of several highly cited papers that contribute disproportionately to the total citation count. Additional normalized metrics, such as the hi_{norm} (25) and hi_{annual} (4.17 per year), indicate sustained research influence over time, even after accounting for factors like the number of authors. The ha -index of 21 further supports the robustness of the research output.

Distribution of Citations Across Papers: An analysis of citation distribution reveals: 355 papers (35.5%) have at least 1 citation, 262 papers (26.2%) have at least 2 citations, 133 papers (13.3%) have at least 5 citations, 64 papers (6.4%) have at least 10 citations, 23 papers (2.3%) have at least 20 citations.

This distribution indicates that while a substantial portion of the papers have been cited, a smaller subset (2.3%) has achieved exceptional influence, accumulating 20 or more citations.

Author Collaboration and Productivity: The dataset shows an average of 2.56 authors per paper, reflecting a moderate level of collaboration, which is common in contemporary research. The high citations per author (2,726.48) suggests that some authors have made particularly significant contributions, leading to a strong overall citation impact.

Key Takeaways: The research output is highly productive, with 1,000 papers published in six years. Citation metrics (h-index 42, g-index 67) confirm a strong and consistent academic impact. A small fraction of papers (2.3%) have achieved exceptionally high citation counts, indicating influential work. Collaborative research practices (2.56 authors/paper) contribute to sustained productivity. The citation metrics reflect a highly productive and influential research profile, with a strong emphasis on collaborative work. While most papers have received citations, a select few stand out as particularly impactful, driving the overall citation performance. Future research could explore disciplinary benchmarks to contextualize these findings further.

4.1 Bibliometric Interpretation Based on Network Visualization

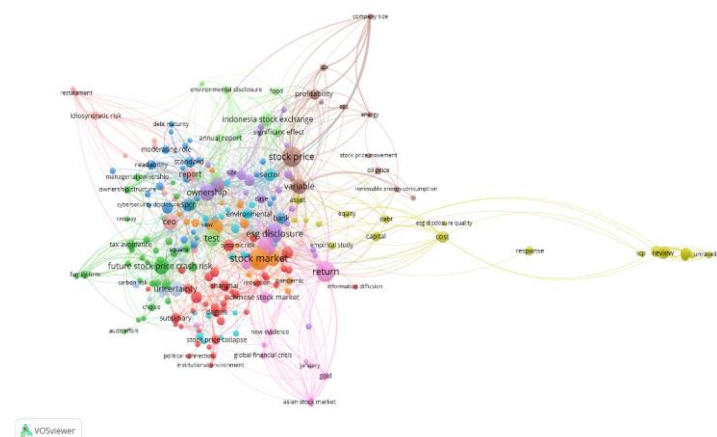


Figure 3. Network Visualization

In this network visualization, each colour represents a different thematic cluster. Specifically for the keywords "ESG disclosure" and "stock price crash risk (SPCR)", both are located at the centre of the network map, grouped within the pink and red clusters. This indicates a strong thematic linkage between ESG disclosures and stock price crash risks.

Regarding the "Food and Beverage industry", while not explicitly visible, it is inferred to be connected to themes such as "environmental disclosure" and "sector" within the green cluster. Meanwhile, the "emerging markets of Indonesia" are evident through keywords like "Indonesia stock exchange" located in the light green cluster, highlighting a geographically specific research focus.

4.1.1 Cluster Identification by Colour

Based on the visual distribution, the three major thematic clusters identified are:

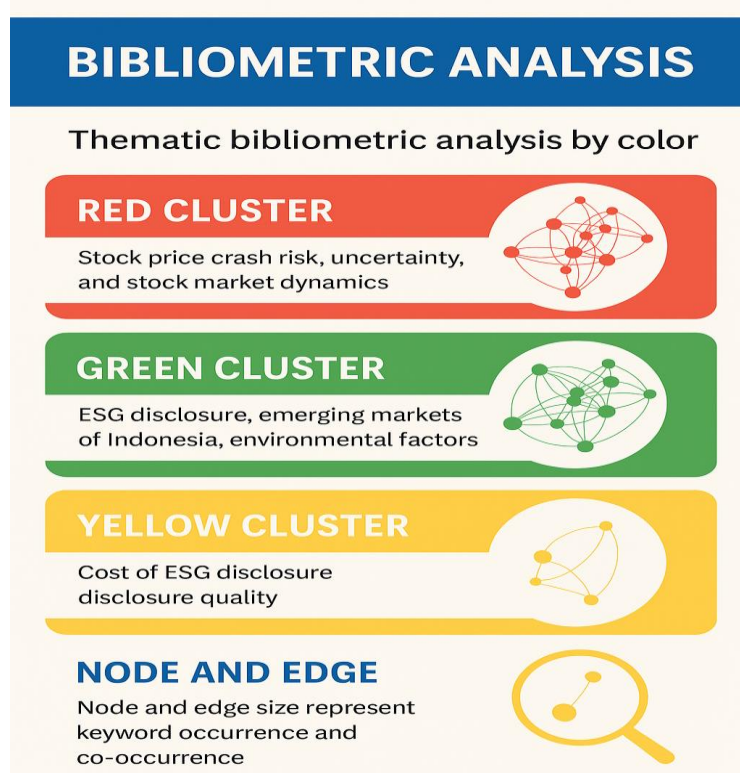


Figure 4. Infographic thematic bibliometric analysis

- Red Cluster: Focused on stock price crash risk, uncertainty, and stock market dynamics (including the impact of the pandemic and the global financial crisis).
- Green Cluster: centred on ESG disclosure, emerging markets (such as Indonesia), and environmental factors affecting the stock market.
- Yellow Cluster: Analysing the *cost* of ESG disclosure and market responses to such disclosures, including disclosure quality.

4.1.2 Node and Edge Visualization Analysis

In this visualization, nodes represent research keywords or concepts, while edges (connecting lines) show the co-occurrence relationships between those keywords. Nodes with larger sizes (such as "stock market", "ESG disclosure", and "stock price") indicate higher occurrence frequency. The density of edges around large nodes signifies that these topics are frequently studied together in scientific works.

4.1.3 Thematic Interpretation by Topic

The thematic interpretation of the network analysis highlights key topics relevant to ESG (Environmental, Social, and Governance) disclosure, stock price crash risk, and emerging markets, particularly in Indonesia. Each identified theme plays a distinct role in shaping the understanding of stock market dynamics, with a particular emphasis on the interconnectedness of ESG practices and their influence on market performance.

ESG Disclosure stands at the core of the thematic network, signifying its central role in contemporary research on stock market behaviors. The analysis reveals that ESG disclosure is not only a primary focus but also a pivotal factor in understanding stock price fluctuations. Its proximity to both stock price crash risk (SPCR) and market return underscores its importance in mitigating potential risks associated with sudden market downturns. This connection illustrates the growing recognition of ESG disclosure as a crucial element in risk management, influencing both investor sentiment and market stability.

Stock Price Crash Risk (SPCR) is closely linked to broader concepts of market uncertainty and systemic risk. This association highlights the role of effective ESG disclosure in minimizing the likelihood of stock price crashes. Studies indicate that companies with robust ESG disclosures may be better positioned to navigate market volatility, as transparent communication fosters investor trust and reduces uncertainty, which can, in turn, lower the risk of drastic stock price drops.

The Food and Beverage Industry, though not explicitly represented in the thematic map, is suggested to be an underlying link within the network. This inference is drawn from its connection to environmental disclosure themes and broader sectoral topics that are particularly relevant for ESG research in emerging economies. The industry's significant environmental footprint and increasing regulatory scrutiny make it a crucial subject of study in understanding how sector-specific factors interact with ESG practices to influence market performance, particularly in emerging markets.

Emerging Markets, specifically Indonesia, emerges as a focal point for much of the literature examined. Keywords such as "Indonesia stock exchange" and "Indonesia" indicate that a substantial portion of the research is concentrated on understanding how ESG disclosure practices and related risks manifest within the context of emerging economies. The Indonesian market, with its unique economic, regulatory, and social characteristics, provides a distinct setting for analysing how ESG disclosure impacts market behaviour and investor decision-making in less-developed financial systems.

Lastly, Other Relevant Topics, including "carbon risk," "institutional environment," and "empirical study," are identified as recurring cross-cutting themes that bridge multiple research clusters. The prevalence of "carbon risk" reflects the growing importance of environmental factors, particularly related to climate change and sustainability, in shaping corporate disclosures and investor behaviour. The "institutional environment" points to the

significant role of regulatory frameworks and local market conditions in influencing how ESG disclosure is implemented and perceived. The emphasis on empirical studies highlights the need for data-driven analysis to substantiate the theoretical underpinnings of ESG practices and their effects on market outcomes.

In conclusion, the thematic analysis underscores the interconnectedness of ESG disclosure, stock price crash risk, and market returns, with particular attention to the dynamics of emerging markets such as Indonesia. As the role of ESG practices continues to evolve, these findings provide valuable insights into the mechanisms through which corporate transparency influences market stability and risk management strategies.

4.2 Bibliometric Interpretation Based on Overlay Visualization

The following is a bibliometric interpretation based on overlay visualization:

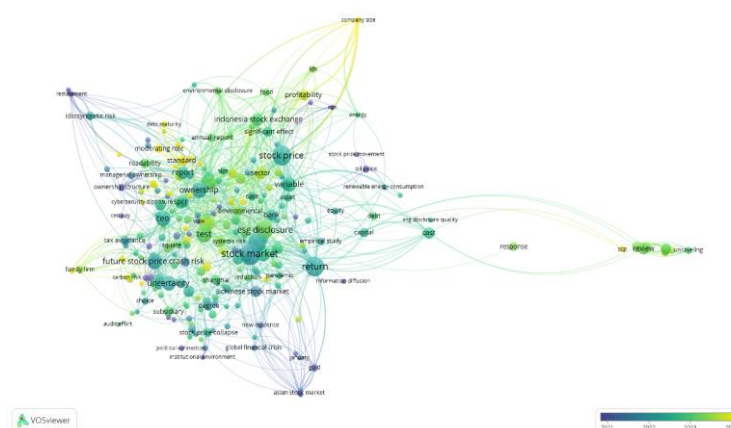


Figure 5. Overlay Visualization

General Overview: The overlay visualization map presented herein was generated through bibliometric analysis using VOSviewer. Each node in the map represents a keyword extracted from the analysed body of literature. The size of each node reflects the frequency with which a keyword appears, with larger nodes corresponding to higher frequencies. The colour gradient applied to the nodes indicates the average publication year associated with each keyword, ranging from blue (earlier publications around 2021–2022) to green (intermediate publications during 2022–2023), and yellow (more recent publications from 2023–2024).

Interpretation of Color and Temporal Trends: Analysis of the colour distribution reveals that keywords such as "stock market," "stock price," "ESG disclosure," "return," and "uncertainty" are predominantly displayed in green, suggesting that these topics were actively discussed and investigated between 2022 and 2023. In contrast, emerging keywords such as "SCP," "review," and "unravelling" are visualized in yellow, indicating that these subjects have only recently garnered scholarly attention in 2023–2024. Earlier discussions, signified by blue nodes, were centered around topics such as "future stock price crash risk," "global financial

crisis," and "Asian stock market," which were more prevalent in research outputs from around 2021.

Main Clusters Identified: The visualization further reveals a densely connected cluster at the centre, indicating a highly interrelated body of literature. Core research themes within this cluster include stock market behaviour, stock price dynamics, Environmental, Social, and Governance (ESG) disclosure practices, ownership structures, market uncertainty, and returns. Notably, a smaller, relatively isolated cluster toward the right side of the map—comprising the keywords "SCP," "review," and "unravelling"—suggests the development of new research areas that are not yet fully integrated into the dominant themes.

Keyword Linkages (Connections and Edges): The extensive linkages among keywords demonstrate a high degree of thematic interconnectivity within the field. Central keywords such as "stock market," "stock price," and "ESG disclosure" serve as pivotal points within the research network, reflecting their centrality and importance in the scholarly discourse.

Bibliometric Interpretation and Research Evolution: The bibliometric analysis indicates a clear evolution of research themes over time. Earlier research primarily addressed market uncertainty, stock price crashes, and the impacts of financial crises. More recently, the focus has shifted toward the quality of ESG disclosures and the unravelling of ESG-related frameworks within financial markets. This evolution highlights an increasing scholarly interest in sustainability-related topics and the integration of non-financial disclosures into market performance analyses.

In conclusion, the bibliometric findings suggest that the literature is predominantly centered on stock market dynamics, stock price movements, ESG disclosures, and market returns. Over time, research has transitioned from traditional financial crisis concerns to the examination of disclosure quality and sustainability issues. Furthermore, emerging topics such as systematic review methodologies, ESG disclosure unravelling, and broader sustainability themes present promising avenues for future research endeavours.

4.3 Bibliometric Interpretation Based on Density Visualization

The following is a bibliometric interpretation based on density visualization:

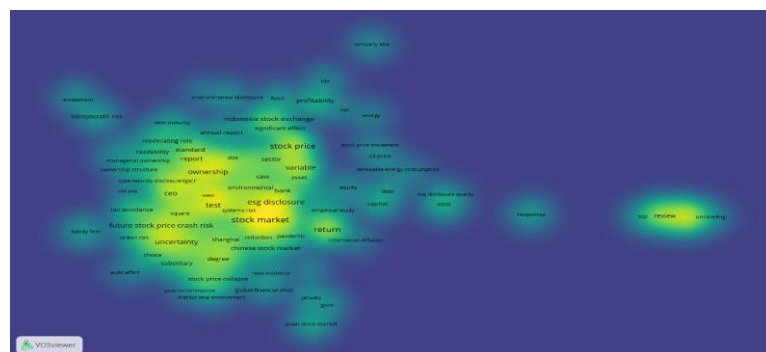


Figure 6. Density Visualization

The density visualization map presented in this analysis was generated through bibliometric methods using VOSviewer. Each term in the map corresponds to a keyword extracted from a corpus of scholarly publications. The visualization employs a colour gradient to reflect keyword density, where brighter colours (yellow) signify areas of higher keyword frequency and co-occurrence, and darker colours (blue) indicate lower density.

- a. **Central Themes and Core Research Areas:** The central region of the map is characterized by high-density areas, depicted in bright yellow, which highlights the most frequently occurring and interconnected keywords. Notably, the keywords "stock market," "stock price," "ESG disclosure," "return," "uncertainty," and "ownership" dominate this central cluster. Their prominence suggests that these topics constitute the principal focus of research within the analysed dataset. The concentration of these keywords indicates a robust scholarly interest in exploring the dynamics of financial markets, the role and impact of Environmental, Social, and Governance (ESG) disclosure practices, ownership structures, and market performance measures such as returns and risk management under conditions of uncertainty.
- b. **Emerging and Peripheral Topics:** On the right side of the map, a separate cluster comprising keywords such as "SCP," "review," and "unravelling" is identified. Although the density of this cluster is comparatively lower (green to yellow coloration), it suggests the development of emerging research themes that are gaining traction within the academic community. These topics likely pertain to systematic conceptual frameworks (SCP: Structure–Conduct–Performance paradigm) and critical re-examinations or decompositions ("unravelling") of established ESG disclosure practices. Additionally, other keywords such as "response" and "cost" appear in peripheral regions with moderate to low density, implying areas of growing but still limited scholarly attention.
- c. **Topics with Decreasing Attention:** Several keywords are located in low-density (blue) areas, indicating reduced research activity relative to other topics. These include "future stock price crash risk," "global financial crisis," "Asian stock market," and "gold." The positioning and coloration suggest that, while these topics were previously significant, their relative prominence in contemporary literature has diminished in favour of newer themes related to sustainability and disclosure quality.
- d. **Academic Implications:** The density visualization clearly demonstrates that the nexus between stock market performance and ESG disclosure practices represents the dominant research interest over the past few years. Furthermore, the emergence of themes related to systematic reviews and the unravelling of ESG disclosure frameworks suggests a shift toward more critical and integrative analyses in the field. This evolution in research focus reflects broader trends in financial and corporate

governance studies, emphasizing sustainability, transparency, and stakeholder accountability. Scholars are increasingly interrogating not only the existence of ESG disclosures but also their quality, effectiveness, and impact on market behaviour.

In conclusion, the bibliometric density visualization reveals that the field of study is currently cantered around stock market dynamics, ESG disclosure, ownership structures, and market uncertainty. Simultaneously, it points to the emergence of new research directions focusing on systematic reviews and the critical assessment of ESG practices. These findings suggest that future academic work will likely continue to evolve towards evaluating the depth, credibility, and outcomes of ESG disclosures in influencing financial markets.

4.4 Bibliometric Interpretation Based on Co-authorship Density Visualization

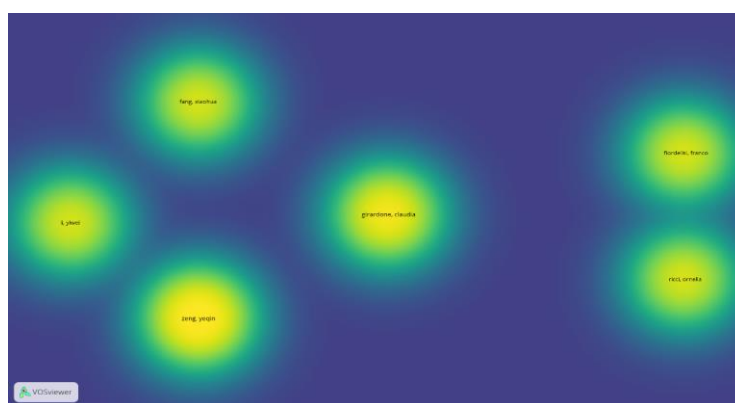


Figure 7. Density Visualization of **Co-authorship**

The visualization highlights several key authors who dominate research activities within the observed domain: Fang, Xiaohua; Girardone, Claudia; Fiordelisi, Franco; Ricci, Ornella; Zeng, Yeqin; and Li, Yiwei. Predominant Research Topics: Based on a review of the bibliometric mapping and the associated literature by these authors, the primary research topics include:

Table 1. The primary of research topics

Author	Major Research Topics
Fang, Xiaohua	Stock market volatility, ESG (Environmental, Social, Governance) disclosures, financial risk management.
Girardone, Claudia	Banking performance, financial regulation, corporate governance in banking institutions.
Fiordelisi, Franco	Financial technology (FinTech), banking risk, corporate finance, bank performance.
Ricci, Ornella	Corporate governance, risk management, financial institutions' behavior.
Zeng, Yeqin	Stock market reactions, financial economics, information disclosure in financial markets.
Li, Yiwei	Corporate financial behavior, market uncertainty, ESG performance impact on firm value.

The major overarching topics that unify the research efforts of these scholars are:

- Stock Market Reactions and Volatility
- Corporate Governance and Disclosure Practices
- Financial Performance and Risk Management

- d. Environmental, Social, and Governance (ESG) Factors
- e. Banking Sector Performance and Innovation (e.g., FinTech)

Collaboration Network Structure: The visualization reveals that while these authors are highly productive, their co-authorship networks are relatively isolated from each other. Each author tends to collaborate within distinct subgroups, and cross-group collaboration appears minimal. This separation suggests a specialization within specific niches of the broader financial and economic research areas. **Academic and Practical Implications:** The isolated clusters indicate a valuable opportunity for fostering interdisciplinary collaborations across currently separated research silos. Encouraging connections between experts in stock markets, corporate governance, ESG disclosure, and banking innovation could:

- a. Generate more comprehensive and interdisciplinary insights.
- b. Increase the robustness and societal relevance of financial research.
- c. Enhance policy recommendations for regulators and corporate leaders.

Future research initiatives should aim to bridge these independent clusters to create synergistic knowledge and foster holistic development within financial studies and ESG research. The co-authorship density visualization offers clear evidence of prominent contributors and prevailing research themes within the domain of financial markets, corporate governance, and ESG disclosures. Despite their individual strengths, the current network fragmentation indicates a critical need for broader, cross-disciplinary collaborations to fully capitalize on collective expertise and to drive future academic and practical advancements in the field.

5. Conclusions

This study elucidates the growing academic and practical significance of ESG disclosure as a determinant of stock price crash risk in Indonesia's food and beverage industry. Bibliometric analysis reveals a concentration of high-impact research, with thematic clusters emphasizing the interplay between ESG transparency, market uncertainty, and corporate governance.

The dominance of keywords such as "stock market," "ESG disclosure," and "ownership" in density visualizations reflects the field's core preoccupations, while the emergence of terms like "unravelling" and "SCP" signals a shift toward critical evaluations of ESG frameworks. Despite robust productivity, co-authorship networks remain siloed, suggesting opportunities for greater interdisciplinary collaboration.

Limitations: Several constraints warrant acknowledgment: **Temporal Scope:** The analysis is confined to publications from 2019–2025, potentially omitting earlier foundational works or nascent long-term trends. **Database Bias:** Reliance on Crossref may exclude regionally significant studies published in non-indexed journals. **Sectoral Specificity:** Generalizability of findings may be limited to the food and beverage sector, necessitating caution in extrapolating

to other industries. Methodological Boundaries: Bibliometric analysis, while valuable for mapping trends, does not assess the qualitative rigor of individual studies.

Practical Implications: For Regulatory Bodies: The study advocates for the development of standardized ESG disclosure mandates to reduce information asymmetry and enhance market efficiency. Regulatory frameworks should incentivize granular reporting, particularly on environmental and social metrics, to align with global sustainability benchmarks. **For Corporations:** Firms operating in emerging markets should institutionalize ESG practices within their governance structures, as evidence suggests this mitigates SPCR and fosters investor trust. Proactive disclosure of ESG risks and mitigation strategies is recommended to pre-empt market volatility. **For Investors:** ESG disclosures serve as a critical tool for risk assessment, enabling investors to identify firms with resilient long-term value propositions. Portfolio strategies should incorporate ESG performance metrics to navigate market uncertainties.

Future Research Recommendations: To advance the field, the following directions are proposed: **Interdisciplinary Synthesis:** Future studies should bridge finance, environmental science, and governance theory to develop holistic models of ESG-SPCR dynamics. **Geographic and Sectoral Expansion:** Comparative analyses across ASEAN markets and high-risk sectors (e.g., mining, energy) would test the universality of observed trends. **Advanced Methodologies:** Employ natural language processing (NLP) to evaluate the semantic quality of ESG disclosures or panel data analysis to isolate causal relationships. **Stakeholder-Centric Studies:** Investigate how ESG perceptions vary among investors, regulators, and consumers, and their aggregate impact on market behaviour.

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