

Credit Risk Dynamics and Credit Quality in the Banking Sector and FMCG Industry: Bibliometric Study and Content Analysis

Muhammad Rafi Jainuri*, **Aang Kunaifi**
Institut Teknologi Sepuluh Nopember, Indonesia
Email: rafijainuri@gmail.com*

ABSTRACT

In an increasingly dynamic and uncertain global business landscape, risk management has become essential to maintaining operational continuity and institutional performance. This study examines the dynamics of credit risk and credit quality and their impact on institutional performance in the banking and Fast-Moving Consumer Goods (FMCG) sectors. The objective of this research is to analyze the dynamics of credit risk and credit quality in the banking and FMCG sectors, Explore the Shift in Research Focus Post the 2008 Global Financial crisis, and provide practical recommendations for more adaptive risk management. This study employed bibliometric and content analysis approaches to evaluate existing literature on credit risk in both sectors. The analysis also includes scholarly collaboration and research trends from 2008 to 2016. The findings indicate a sharp increase in academic interest in this topic following the 2008 financial crisis, peaking in 2016. Research focus has shifted from financial stability to the integration of credit risk within non-financial industries such as FMCG. The Battle of the analysis also reveals fragmented scholarly networks. This study emphasizes the importance of applying adaptive, data-driven, and integrated risk mitigation theories to support the resilience of both the financial and real sectors. The Battle of the findings contribute to the development of a cross-sectoral framework and provide practical recommendations for contextual risk management.

Keywords: *Bibliometrics, Content, Bank Risk, FMCG. Credit Analysis*

INTRODUCTION

In the context of an increasingly dynamic global business filled with uncertainty, risk management has become a fundamental component in maintaining operational sustainability and institutional performance (Aman et al., 2023; Eyinade et al., 2025; Igbekoyi et al., 2024; Wedraogo et al., 2023). Large-scale events such as the 2008 global financial crisis, supply chain disruptions triggered by the COVID19 pandemic, and economic pressures due to geopolitical dynamics have reinforced the urgency of risk management as an integral part of corporate strategy. The banking sector and the fast-moving consumer goods (FMCG) industry are two strategic sectors that are significantly affected by various forms of risk, but each show different characteristics. Credit risk emerged as a major challenge in the banking sector, closely related to the potential default of debtors and asset quality, while the FMCG sector was more exposed to operational risks such as supply chain disruptions, volatility of logistics costs, and reputational risks that had a direct impact on consumer perception and market sustainability. In the banking sector, credit risk and credit quality are central issues that have a direct impact on financial stability and operational continuity. This risk reflects the possibility of the debtor's failure to meet its financial obligations, which if not managed optimally can reduce the quality of assets and disrupt the bank's financial performance. In contrast, in the FMCG industry, the main challenges revolve around operational risks such as supply chain disruptions, volatility of logistics costs, as well as reputational risks that have the potential to erode consumer confidence and brand value.

Previous literature suggests that the evolution of approaches in credit risk measurement, as reviewed by (do Prado et al., 2016), has undergone a significant shift from classical

discriminant methods to artificial intelligence-based models such as artificial neural networks. However, the application of this approach is generally still limited to a specific sectoral scope and has not been comprehensively integrated across sectors. In the context of the FMCG industry, (Diehl, 2012) revealed that although supply chain risks have a direct impact on operational performance, the measurement is still subjective and has not been fully consolidated into the institutional corporate risk management framework. Furthermore, (Nobanee et al., 2021) highlight the importance of reputational risk in improving corporate sustainability, but assert that this dimension is still rarely treated as an integral part of an institution's risk measurement system. The main gap in the literature is the lack of systematic studies that compare credit risk dynamics and credit quality across sectors, especially between the banking and FMCG sectors, as well as the limited integration of risk dimensions into the framework of long-term institutional performance measurement. In fact, risk not only represents potential losses, but also becomes an important determinant in strategic decision-making, strengthening corporate governance, and achieving competitive advantage (Ahirrao et al., 2025; Gleißner & Berger, 2024; Moridu, 2023; Tewu et al., 2024).

This condition reveals the main research gap. First, most previous studies examine credit risk within a single sector, especially banking, without systematically comparing how credit risk and credit quality operate across a financial sector and a real-sector industry. Second, the literature tends to focus on either quantitative modeling, financial performance, or supply-chain disruption, but rarely integrates these dimensions into one cross-sector bibliometric map. Third, despite rising interest after major crises, there remains limited synthesis of how research themes, collaboration patterns, and emerging topics have evolved over time. The manuscript explicitly positions itself against this gap by combining bibliometric study and content analysis to map 634 Scopus-indexed documents related to credit risk, credit quality, banking, and FMCG.

The urgency of this research is therefore both academic and practical. Academically, a fragmented literature limits theory development because it prevents scholars from understanding whether credit risk should be conceptualized differently across sectors or whether a shared adaptive framework is possible. Practically, rising trade barriers, financial volatility, and geopolitical uncertainty increase the likelihood that risk in one sector will affect others through financing constraints and supply-chain dependency. Under such conditions, managers and policymakers need an evidence-based synthesis that clarifies where the literature has concentrated, where it remains thin, and which themes are becoming more important for future risk governance.

The novelty of this study lies in its effort to bridge two bodies of literature that are usually treated separately. Rather than examining only banking risk or only operational vulnerability in FMCG, this research proposes a cross-sectoral reading of credit risk and credit quality. Its novelty is also methodological, because it does not stop at bibliometric mapping but extends to content analysis in order to interpret shifts in thematic focus, collaborative networks, and future research opportunities. In the manuscript, this novelty is reflected in the attempt to trace post-2008 changes in research attention and to identify how discussions moved from conventional financial stability concerns toward broader integration with non-financial sectors such as FMCG.

Based on that positioning, the purpose of the research is to analyze the dynamics of credit risk and credit quality in the banking sector and FMCG industry, to identify potential directions for future research, and to examine the relevance of existing studies to the findings generated

in this bibliometric review. More specifically, the study seeks to answer how credit-risk discussions have developed across the two sectors, what topics have become dominant, and how existing scholarship can inform adaptive risk management strategies. These purposes are consistent with the manuscript's formulation of research questions and its emphasis on bibliometric trends, content patterns, and cross-sector interpretation.

The expected contribution of this research is to enrich the literature with a more integrated understanding of credit risk as a multidimensional and cross-sector phenomenon. Theoretically, it contributes by proposing a basis for a cross-sector framework linking credit risk, credit quality, and institutional performance. Methodologically, it shows how bibliometric and content analysis can be combined to reveal not only publication growth and topic evolution but also structural fragmentation in scholarly collaboration. Practically, the study offers benefits for banks, FMCG firms, and policymakers by providing a knowledge base for more contextual, adaptive, and data-driven risk management. In that sense, the objective and benefit of the research converge: to support stronger institutional resilience in both financial and real sectors through a clearer map of past scholarship and a more focused direction for future inquiry.

METHOD

In research, the selection of methods is a fundamental aspect that determines the direction and quality of scientific studies. This study used a bibliometric approach as the main method to analyze the scientific literature quantitatively and systematically. The tool used is Bibliometrics, an open-source tool developed by (Aria & Cuccurullo, 2017) using the R programming language. Through Bibliometrics, researchers can process large amounts of publication data to identify research trends over time, frequently discussed topics, and developments in certain scientific disciplines. This approach also provides an in-depth understanding of the structure and dynamics of a field of study, including the relationship between authors, institutions, and interrelated research themes. Bibliometric analysis involves a systematic examination of published works in a specific field or topic to identify trends, patterns, and relationships among authors, organizations, and research themes (Varsha et al., 2021)

The bibliometric approach has proven to be an effective method in tracing and presenting statistical information about certain terms or concepts in the scientific literature. In the context of this research, the method is used to examine fields related to credit risk, especially in the banking sector and the fast-food goods (FMCG) industry. Through bibliometric analysis, researchers can conduct an in-depth examination of publication metadata, such as author information, keywords, journals, and institutional affiliations. In addition, this approach also allows the application of content analysis, which is a technique that aims to systematically examine the content of texts to identify themes, frequencies, and relationships between concepts in scientific documents (Krippendorff, 2019). Content analysis provides added value by enriching the understanding of the context, meaning, and tendencies of the content of the publication, which is not only based on quantitative data, but also on the qualitative interpretation of the content of the document. Thus, the combination of bibliometric analysis and content analysis provides a more comprehensive picture of the pattern of dissemination and substance of scientific information, thus helping readers understand the structure and dynamics of research development in the topic under study (Kaur et al., 2024).

The use of databases such as Scopus provides a solid foundation for Bibliometric analysis. The study uses a combination of keywords such as ("Credit Risk" OR "Quality Credit" AND

"Banking" OR "FMCG") applied to All Fields to ensure broad coverage of relevant documents. The application of this comprehensive search strategy succeeded in producing 634 documents from Scopus which are the main data sources for bibliometric trend analysis and content analysis in this study.

RESULTS AND DISCUSSION

This research includes all papers related to Credit Risk and Institutional Performance described by Credit Quality to companies such as in Banking sector and FMCG industry. The first step related to database selection is to extract data for bibliometric analysis. For this review, we used a database from Scopus. The second step, we search for relevant literature by using appropriate keywords. There are two keyword search criteria that we use, namely Credit Risk and Credit Quality and Banking and FMCG. From the keywords used, we got 634 articles from Scopus. Furthermore, an analysis of 634 articles was carried out using Rstudio software.

Screening Process

All results obtained from the identification of data totaling 2,225 articles will be filtered and entered based on criteria. There are five criteria used in this study, namely the subject of the document (article), the type of source (journal), language (English), access (Open Access) and the publication stage (Final). After the screening process, 654 articles were obtained from Scopus. The literature search results data will be downloaded and exported in the form of information that includes citations, bibliographies, abstracts, keywords, and other metadata elements. All data obtained from these two sources is then processed using R Studio software. This process includes data cleansing, including the removal of duplicates, resulting in a total of 634 articles that are worthy of further analysis.

Data Eligibility Process

At this stage, a re-verification process is carried out on the downloaded literature. Verification is done manually by reading and understanding the abstract thoroughly to ensure the relevance of the content to the research topic. This process consists of two steps. The first step involves reviewing the title, abstract, and keywords of the entire article. From the results of the initial screening of 654 articles, as many as 634 articles were declared to meet the eligibility criteria and selected as relevant primary studies in accordance with the Systematic Literature Review (SLR) approach.

Analysis



Figure 1. Key Information Data

A bibliometric analysis of the study entitled "Credit Risk Dynamics and Institutional Performance in the Banking Sector and FMCG Industry" provides a comprehensive mapping of the development of the scientific literature in the period 1995 to 2025. The study referred to 308 reference sources consisting of scientific journals, books, and other academic publications, with a total of 634 documents analyzed. The annual publication growth rate of 10.31% reflects a relatively low level of scientific productivity in this topic, although it shows a steady trend. The average age of the analyzed documents was 6 years, which indicates that the research focus was more directed to recent and contemporary relevant contributions. With an average of 22.68 citations per document, it can be concluded that the literature involved in this study has a significant level of influence in the academic community. Analysis of the author's 1,714 keywords shows the breadth of multidisciplinary scope and complexity of the topics covered. The participation of 1,714 authors in the overall document reflects the collaborative nature of research in this field, with one document involving an average of 2.78 authors. The international collaboration rate of 29.5% indicates cross-border engagement, which enriches research perspectives through the integration of global insights. Overall, the results of this bibliometric analysis confirm that credit risk plays an essential role in the banking and FMCG sectors, with significant implications for financial stability, asset quality, and profitability levels. The support of a diversity of literature sources and collaborative synergy are important foundations in expanding scientific understanding of credit risk dynamics in both industry sectors.

Publication trend analysis is an approach used to review the dynamics and development of the scientific literature in a particular field of study over a certain period of time. This process includes identifying shifts in topic focus as well as increasing the intensity of research over time. Based on Figure 3, the growth pattern of publications related to the topic of credit risk and its relevance to the banking sector and the fast-food goods (FMCG) industry during the period 1995 to 2025 is shown. The visualization was compiled based on the results of a compilation of 634 scientific documents that were successfully collected, which reflects how academic interest in credit risk issues has developed in a multidisciplinary and applicative context over the past three decades.

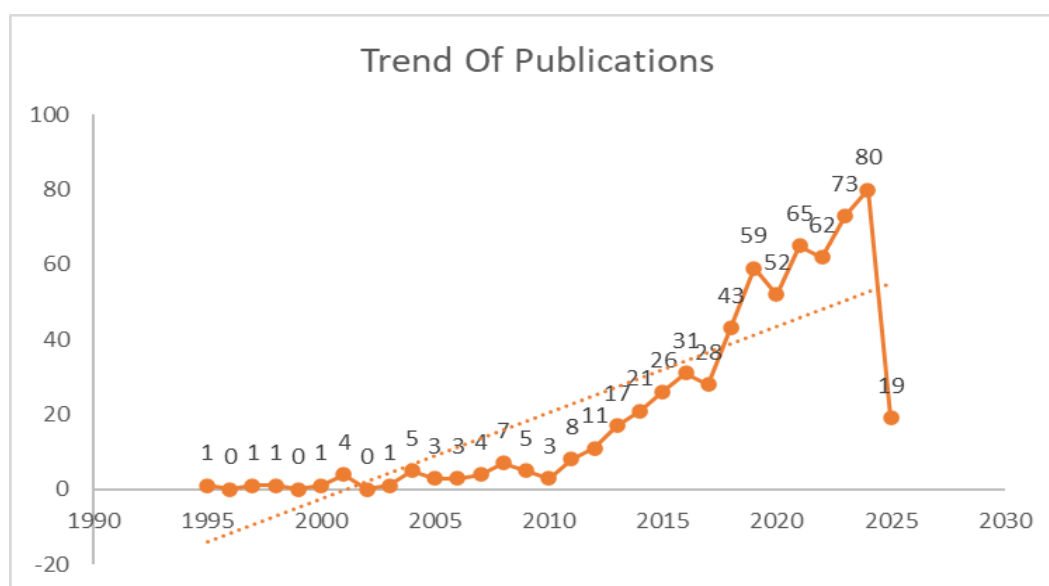


Figure 2. Trends from Article Publication

The analysis of publication trends in the study themed "The Role of Credit Risk in the Banking and FMCG Industry" reflects the evolutionary dynamics of scientific output over a given time period. In 1995, there was only one publication specifically addressing this topic, indicating the early stages of academic interest in the issue of credit risk in the two sectors. Over time, there has been a significant increase in the number of publications, reaching a peak in 2016 with 31 articles published, signaling the high intensity of research and scientific attention to this issue. Nevertheless, 2017 showed a slight decline in productivity with only 28 articles published. These fluctuations confirm that academic engagement with the topic of credit risk is dynamic, and reflects a shift in focus and relevance of the topic in the context of economic developments and financial sector policies. These findings also provide important insights into the direction and intensity of research that is developing in the domain of credit risk studies in the banking and FMCG industry.

In a scientific study, understanding topic trends is an important step to identify the direction of development of a scientific field over time. This approach not only provides a historical overview of how a topic developed, but also helps in formulating a future research map based on trends and patterns formed. Next, it will be explained about the topic trends from the current research. The analysis of topic trends will be explained in Figure 4 below.

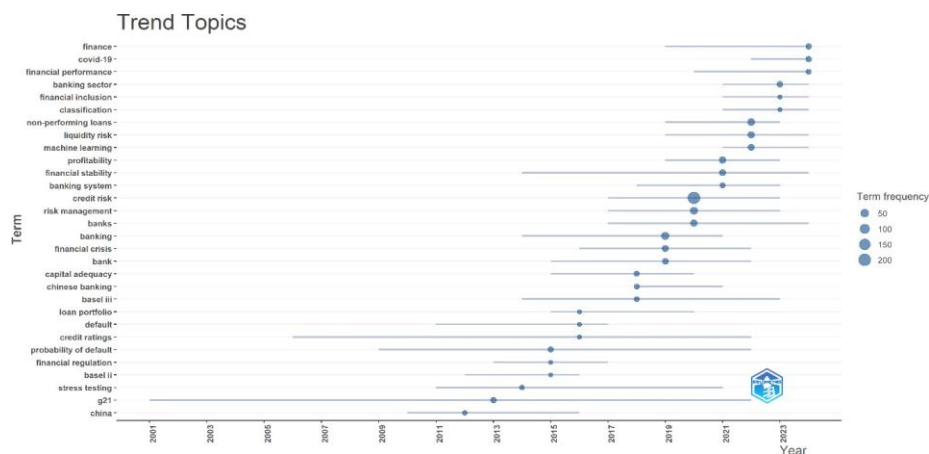


Figure 3. Research Topic Trends

Figure 4 shows a visual representation of Trend Topics that illustrates the dynamics of the emergence and evolution of key terms in scientific publications related to credit risk in the banking sector and the FastMoving Consumer Goods (FMCG) industry during the period 1995 to 2025. Based on this visualization, a number of key terms such as "risk", "credit risk", "banking sector", "financial performance", and "profitability" have experienced an increase in frequency, especially after the global financial crisis in 2008. This reflects the increasing academic attention to risk management issues in the financial system. In addition, terminologies such as "loan default" and "capital adequacy" show consistency in their emergence over the past decade, indicating a shift in focus on the stability and resilience aspects of financial institutions. Furthermore, terms related to the FMCG sector, such as "consumer goods" and "supply chain", have begun to gain greater intensity in recent years, indicating the integration between credit risk assessment and supply chain and the dynamics of the fast-food goods industry. The analysis of trend trends in this topic makes a significant contribution in mapping the direction of scientific development as well as identifying relevant research gaps for further study in the future.

In the context of bibliometric analysis, the visual representation of the collaborative network between authors and institutions plays a crucial role in uncovering patterns of interaction and the level of connectivity in the scientific community. Through this approach, it is possible to identify productive clusters of active researchers, institutions that have a central role, as well as opportunities for cross-institutional collaboration at both the national and international levels. The visualization of the collaborative network presents a strategic understanding of the dynamics of scientific cooperation, especially in the study of credit risk in the banking sector and the FastMoving Consumer Goods (FMCG) industry, which is the main focus of this study.

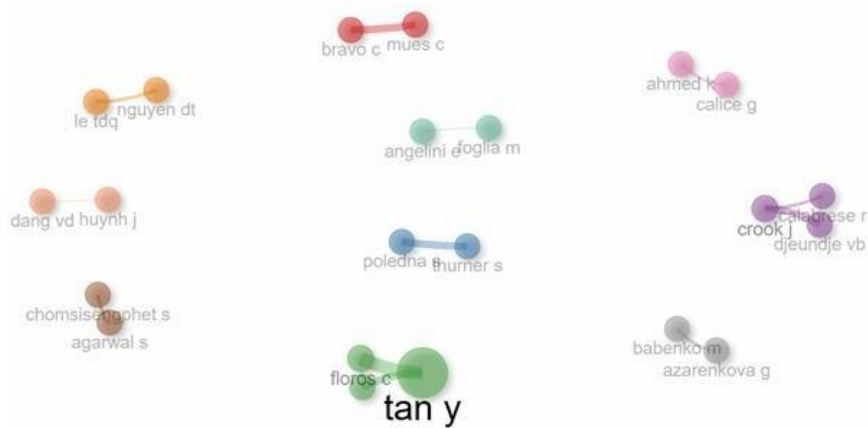


Figure 4. Author Collaboration Network

Figure 5 illustrates a visual representation of a network of collaboration between authors, where each node depicts an author and an edge indicates involvement in a joint publication. From the results of the visualization, it can be seen that the author with the initials Tan Y has a central and dominant role, which is reflected in the larger size of the node than other nodes. This phenomenon signifies the high level of productivity and academic contribution, as well as Tan Y's strategic position as a key figure in a collaborative network of research on credit risk in the banking sector and the FMCG industry. In addition, several authorial pairs such as Floros C–Tan Y, Bravo C–Mues C, Le TDQ–Nguyen DT, and Crook J–Callegrese R, who form a small collaborative cluster. This cluster shows a pattern of intensive collaboration among certain individuals, which indicates a close cooperative relationship in the development of specific scientific studies. However, the overall network structure appears to be fragmented, characterized by limited intercluster relationships and the dominance of bilateral collaboration patterns. This suggests that despite productive collaboration at the level of individuals or research pairs, scientific networks in this field have not yet formed a broadly integrated collaborative structure. This situation opens up opportunities to strengthen cross-group synergies and improve the integration of scientific collaboration networks in the future.

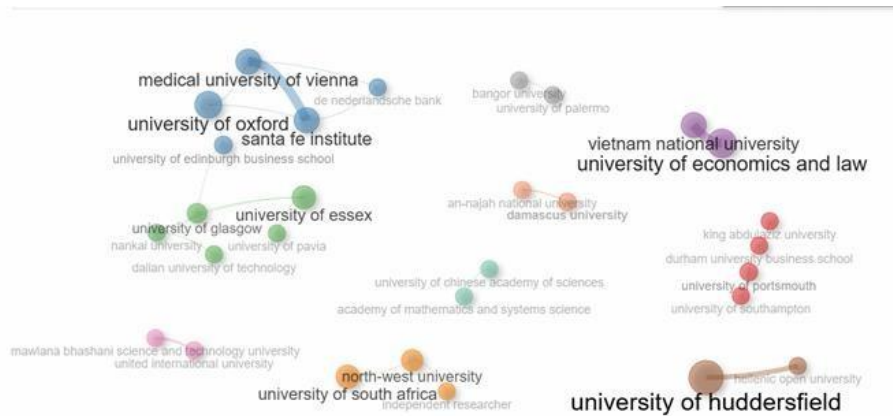


Figure 5. Institutional Collaboration Networks

Figure 5 above shows that, the University of Huddersfield occupies the most dominant position, indicated by the largest node size. This indicates the high level of productivity and involvement of the institution in research related to the study topic. It is followed by institutions such as the University of Oxford, Medical University of Vienna, University of Essex, and University of South Africa, which also display significant node size as well as fairly active connections with other institutions. Furthermore, some institutions form specific regional or thematic collaborative clusters, such as those consisting of the University of Oxford, the Medical University of Vienna, and the Santa Fe Institute, which demonstrate cross-border collaborative networks with a high intensity of interaction. Other clusters such as the University of Economics and Law, Vietnam National University and Damascus University, AnNajah National University reflect the existence of a network of cooperation in the Asian and Middle East regions.

Relationship Between Previous Researchers

In an ever-evolving economic landscape, the stability of the financial sector and real industry is a major concern for researchers and practitioners. Credit risk, as one of the fundamental elements in financial management, plays a crucial role in determining the health of banking institutions and the sustainability of the industrial sector, including the fast-food goods (FMCG) industry. Therefore, this study is here to outline the role of credit risk on the banking sector and the FMCG industry, as well as map the potential direction of future research based on the latest scientific literature and based on the opinions of experts that will be presented below.

The banking sector is directly exposed to credit risk through lending activities. According to (Durango-Gutiérrez et al., 2024), a proper credit risk assessment allows microfinance institutions to determine credit interest rates adjusted for the probability of default. The use of techniques such as logistic regression and neural networks has been proven to significantly improve the accuracy of credit risk predictions. Meanwhile, (Tabachov et al., 2023) developed a multilayer network model to assess credit risk contamination in the financial system. They show that credit risk can spread systemically among banks through connectivity between loan portfolios, demonstrating the importance of a macroprudential approach in managing this risk. Although the FMCG industry is not a financial entity, the dynamics of credit risk still have a significant impact, particularly in the context of relationships with distributors, suppliers, and financing institutions. (Arintoko et al., 2024) stated that an increase in non-performing loans

(NPLs) due to macroeconomic pressures such as slowing economic growth and increased carbon emissions can reduce the capacity of financial institutions to distribute credit to the real sector, including FMCG. Furthermore, (Veizi & Çelo, 2024) highlights the importance of strengthening credit risk management in commercial banks to ensure the resilience of productive sectors that depend on short- and medium-term financing.

As the urgency of climate change and the transition to a low-carbon economy increases, recent studies suggest the importance of integrating credit risk and climate risk into the financial valuation system. (Schult et al., 2024) highlight that financial institutions and companies in the FMCG sector need to be evaluated for their resilience to risks climate through the application of climate-based stress tests. This approach not only helps identify potential financial vulnerabilities due to shifts in environmental policies, but also provides strategic guidance in the sustainable management of credit portfolios. The integration of climate risk into the credit risk framework is crucial, especially for companies whose operations are heavily dependent on natural resources or exposed to stringent environmental regulations. On the other hand, the credit risk network model has also undergone significant developments. A study by (Tabachov et al., 2023) shows that a systemic approach in modeling credit risk relationships between financial institutions opens up space for expansion into the industrial sector. This means that credit payment failure in one institution can spread in a chain to other sectors that have economic linkages.

CONCLUSION

A bibliometric and content analysis of 634 Scopus-indexed documents reveals that academic interest in credit risk grew significantly following the 2008 global financial crisis, peaking in 2016, reflecting the sensitivity of this topic to macroeconomic shifts and financial policy changes. Topic trend findings indicate a shift in research focus from broad concepts such as financial stability and banking performance toward more specific and cross-sectoral issues, including the integration of credit risk with FMCG industry dynamics such as supply chain management and financing relationships, signaling the emergence of a more holistic and multidisciplinary research perspective. Analysis of scientific collaboration networks reveals that the overall structure remains fragmented and dominated by bilateral patterns at both the individual and institutional levels, with the University of Huddersfield emerging as the most prominent institutional actor, underscoring the need to strengthen cross-group synergies and build a more inclusive and globally connected research ecosystem. In terms of implications, this study affirms that adaptive, data-driven, and environmentally integrated credit risk management including the incorporation of climate risk is essential to supporting the resilience of both the financial sector and real industries, particularly banking and FMCG, in navigating increasingly complex economic pressures and regulatory demands.

REFERENCES

- Ahirrao, Y. S., Ansari, I., Azim, K. S., Bhujel, K., & Panchal, S. S. (2025). AI-powered financial strategy: Transforming business decision-making through predictive analytics. *Emerging Frontiers Library for The American Journal of Engineering and Technology*, 7(9), 126–151.
- Aman, S., Seuring, S., & Khalid, R. U. (2023). Sustainability performance measurement in risk and uncertainty management: An analysis of base of the pyramid supply chain literature. *Business Strategy and the Environment*, 32(4), 2373–2398.
- Aria, M., & Cuccurullo, C. (2017). Bibliometrix: An R-tool for comprehensive science mapping

- analysis. *Journal of Informetrics*, 11(4), 959–975. <https://doi.org/10.1016/j.joi.2017.08.007>
- Arintoko, Badriah, L. S., Rahajuni, D., Kadarwati, N., & Priyono, R. (2024). The impact of macroeconomic variables on credit risk: Evidence regarding sustainable lending in ASEAN countries. *International Journal of Sustainable Development and Planning*, 19(4), 1589–1597. <https://doi.org/10.18280/ijstdp.190435>
- Diehl, D. (2012). *Supply chain risk management: A case study in the fast moving consumer goods industry*.
- do Prado, J. W., Castro Alcântara, V., Melo Carvalho, F., Vieira, K. C., Machado, L. K. C., & Tonelli, D. F. (2016). Multivariate analysis of credit risk and bankruptcy research data: A bibliometric study involving different knowledge fields (1968–2014). *Scientometrics*, 106(3), 1007–1029. <https://doi.org/10.1007/s11192-015-1829-6>
- Durango-Gutiérrez, P., Lara-Rubio, J., Navarro-Galera, A., & Buendía-Carrillo, D. (2024). Microcredit pricing model for microfinance institutions under Basel III banking regulations. *International Journal of Financial Studies*, 12(3), 88. <https://doi.org/10.3390/ijfs12030088>
- Eyinade, W., Ezeilo, O. J., & Ogundeji, I. A. (2025). Financial risk management strategies and their influence on organizational stability. *Finance & Accounting Research Journal*, 7(6), 229–251.
- Gleißner, W., & Berger, T. B. (2024). Enterprise risk management: Improving embedded risk management and risk governance. *Risks*, 12(12), 196.
- Igbekoyi, O., Oluwagbade, O. I., & Dagunduro, M. (2024). Risk management and uncertainty interplay. *International Journal of Economics and Financial Management*, 9, 188–198.
- Kaur, J., Mogaji, E., Paliwal, M., Jha, S., Agarwal, S., & Mogaji, S. A. (2024). Consumer behavior in the metaverse. *Journal of Consumer Behaviour*, 23(4), 1720–1738. <https://doi.org/10.1002/cb.2298>
- Krippendorff, K. (2019). *Content analysis: An introduction to its methodology*. SAGE Publications.
- Moridu, I. (2023). The role of corporate governance in managing financial risk: A qualitative study on listed companies. *The ES Accounting and Finance*, 1(3), 176–183.
- Nobanee, H., Alhajjar, M., Abushairah, G., & Al Harbi, S. (2021). Reputational risk and sustainability: A bibliometric analysis of relevant literature. *Risks*, 9(7). <https://doi.org/10.3390/risks9070134>
- Schult, A., Müller, S., Friedl, G., & Spagnoli, A. (2024). The impact of transitory climate risk on firm valuation and financial institutions: A stress test approach. *Schmalenbach Journal of Business Research*, 76(1), 63–111. <https://doi.org/10.1007/s41471-023-00166-y>
- Tabachov, Z., Diem, C., Borsos, A., Burger, C., & Thurner, S. (2023). Estimating the impact of supply chain network contagion on financial stability. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.4437832>
- Tewu, M. L., Suwarno, S., Lisdiono, P., Friska, R., & Pramono, A. J. (2024). Enterprise risk management and supply chain management: The mediating role of competitive advantage and decision making in improving firm performance. *Uncertain Supply Chain Management*, 12(2), 1131–1140.
- Varsha, P. S., Akter, S., Kumar, A., Gochhait, S., & Patagundi, B. (2021). The impact of artificial intelligence on branding: A bibliometric analysis (1982–2019). *Journal of Global Information Management*, 29(4), 221–246. <https://doi.org/10.4018/JGIM.20210701.0a10>
- Veizi, Z., & Çelo, R. (2024). The impact of non-performing loans ratio on banking profitability in the Albanian banking system. *WSEAS Transactions on Business and Economics*, 21, 448–457. <https://doi.org/10.37394/23207.2024.21.38>
- Wedraogo, L., Essandoh, S., Sakyi, J. K., Ibrahim, A. K., Okafor, C. M., Ogunwale, O., Babalola, A. S., & Adenuga, M. A. (2023). Analyzing risk management practices in international business expansion.