

Mapping of credit risk management research in islamic banks: A bibliometric study

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ABSTRAK

Manajemen risiko kredit merupakan salah satu elemen penting dalam operasional bank syariah, yang memiliki tantangan unik karena harus mematuhi prinsip syariah. Penelitian ini bertujuan untuk memetakan perkembangan literatur terkait manajemen risiko kredit pada bank syariah menggunakan pendekatan bibliometrik. Data diperoleh dari jurnal nasional terakreditasi Sinta melalui platform Garuda dan Google Scholar, dianalisis menggunakan perangkat lunak VOSviewer, Microsoft Excel, dan Mendeley Desktop. Hasilnya menunjukkan bahwa terdapat 31 publikasi terkait topik ini selama periode 2017–2024. Visualisasi bibliometrik mengidentifikasi delapan kluster utama dengan 52 item yang menggambarkan tema penelitian, termasuk hubungan risiko

kredit dengan kesehatan bank, manajemen risiko likuiditas, indikator keuangan seperti rasio kecukupan modal (CAR) dan return on assets (ROA), serta perbedaan antara bank syariah dan konvensional. Penelitian ini mengungkapkan bahwa analisis bibliometrik memberikan wawasan mendalam tentang tren, pola, dan kontribusi penelitian di bidang ini, membantu mengidentifikasi tantangan utama dan peluang pengembangan manajemen risiko kredit di bank syariah. Temuan ini dapat menjadi panduan bagi peneliti dan pembuat kebijakan untuk mengembangkan strategi manajemen risiko yang inovatif dan sesuai syariah, guna mendukung keberlanjutan perbankan syariah secara global.

ABSTRACT

Credit risk management is one of the important elements in the operation of Islamic banks, which has unique challenges because it must comply with Islamic principles. This study aims to map the development of literature related to credit risk management in Islamic banks using a bibliometric approach. Data were obtained from Sinta-accredited national journals through the Garuda and Google Scholar platforms, analyzed using VOSviewer, Microsoft Excel, and Mendeley Desktop software. The results show that there were 31 publications related to this topic during the period 2017–2024. Bibliometric visualization identified eight main clusters with 52 items that describe research themes, including the relationship between credit risk and bank health, liquidity risk management, financial indicators such as the capital adequacy ratio (CAR) and return on assets (ROA), and the differences between Islamic and conventional banks. This study reveals that bibliometric analysis provides in-depth insights into research trends, patterns, and contributions in this field, helping to identify key challenges and opportunities for developing credit risk management in Islamic banks. These findings can serve as a guide for researchers and policymakers to develop innovative and sharia-compliant risk management strategies, in order to support the sustainability of Islamic banking globally.

Introduction

The economy of every country depends on the financial industry. In other words, the economic growth of a country is greatly influenced by the performance and efficiency of the banking and financial system. In this case, the role of the banking sector has



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grown in the modern world and has become an effective and reliable tool in the development economy. Its role is more than just carrying out banking activities, but more on creating conditions that support economic growth. Conversely, a financial system that does not function properly will hinder economic growth and increase the likelihood The economy of every country depends on the financial industry. In other words, the economic growth of a country is greatly influenced by the performance and efficiency of the banking and financial system. In this case, the role of the banking sector has grown in the modern world and has become an effective and reliable tool in the development economy (Butola et al., 2022) . Its role is more than just carrying out banking activities, but more on creating conditions that support economic growth. Conversely, a financial system that does not function properly will hinder economic growth and increase the likelihood of an overall economic downturn, and exacerbate poverty (Saleh & Paz, 2023) .

The Islamic banking sector has developed into an important part of the global financial system, providing financial products that comply with Islamic principles. As an alternative to the conventional banking system, these principles emphasize fairness, transparency, and the prohibition of usury. Along with the rapid growth of the Islamic banking industry, credit risk management has become one of the important components that needs to be prioritized. Credit risk management has become very important and has attracted the attention of researchers and policy makers as they list credit risks and their effects (Dian et al., 2024) . Credit risk management is one of the most important aspects in bank operations, especially in the context of Islamic banks. Credit risk in Islamic banks has unique characteristics that are different from conventional banking, especially related to Islamic principles that prohibit interest and require compliance with Islamic contracts. This requires an innovative risk management approach to mitigate risk without violating Islamic principles.

Credit risk management in Islamic banks involves a series of systematic procedures, from risk identification to control and evaluation. This process includes determining financing limits that are in accordance with the bank's risk tolerance and calculating losses that may be caused by debtor failure. Islamic banks must also make contingency plans to minimize the negative effects of the risks faced. To ensure compliance with sharia principles, strict internal supervision and periodic audits are also important components of risk management (Ningsih, 2020) . Bibliometric studies on credit risk management in Islamic banks can provide valuable insights into research trends and recent advances in this field. Researchers can find important patterns and contributions from previous studies by analyzing the existing literature. Therefore, mapping research on credit risk management in Islamic banks is essential to understand current difficulties and develop solutions to overcome them. This will help the development of the Islamic banking industry as a whole and ensure the sustainability of their operations in the long term. Therefore, this study aims to map the development of research related to credit risk management in Islamic banks using a bibliometric approach.

Credit risk management is one of the important pillars in the sustainability of Islamic banking operations. Islamic banks face unique challenges in managing credit risk due to their sharia-based operational principles, which are different from conventional banks.

Credit risk management is a bank's policy and strategy to offset the risk of increasing credit arrears, and to determine how much they tolerate the credit risk that may occur at the expected profit level. As the risk of credit arrears increases, credit risk management is very important to be implemented consistently. Banks must actively review customers who are potentially delinquent in order to anticipate arrears early on (Yanti, 2020). Credit risk management is used to ensure that businesses operate well and survive (Sari et al., 2020).

According to Dubyna et al., 2022, This bibliometric study is to analyze and evaluate scientific publications and related information. This involves the use of statistical and informatics techniques to assess the production, citation, and dissemination of scientific literature. Bibliometric studies can be used to measure the contributions and performance of individuals, institutions, and fields of science, as well as to understand the relationships and interactions between publications and fields of science. In addition, it can help in finding and assessing trends and problems in the scientific literature. Visibility analysis, cluster analysis, and citation network analysis are some examples of bibliometric study applications. Researchers, governments, and industries can use bibliometric research findings to understand progress and contributions in a field of science and to determine future research goals (Budianto, 2023).

The research method uses a *mix-method approach*, namely quantitative methods are used for bibliometric studies and qualitative methods for literature review studies. Secondary data is the type of data used in this study on credit risk management. The data used comes from research journal articles that discuss credit risk management in Islamic banking.

The data collection sources come from national journals accredited by Sinta through the Garuda platform (Garba Rujukan Digital) and Google Scholar through *Perish/Harzing software*. The data analysis process was carried out using *Microsoft Excel software, Mendeley Desktop, and VOSviewer*. The data collection technique involves several steps, namely (1) conducting a journal search using the *Perish/Harzing software* with the keyword "Credit Risk Management of Islamic Banks in the title words category without time limits, (2) collecting journal title data in *Microsoft Excel*, identifying journals that have duplicate titles: (3) downloading files in RIS (*Research Information Systems*) and PDF formats from journals that have been recorded, and (4) importing RIS files into the *software. Mendeley Desktop* for reference data management.

The data analysis technique includes three stages: (1) mapping RIS data files on *Mendeley Desktop based on the order of year, author, and publisher*; (2) mapping the results of bibliometric network visualization and scientific publication trends using the *VOSviewer (Visualization of Similarities)* algorithm software based on the number of clusters and items; and (3) mapping research topics based on *literature review studies*. (Budianto & Dewi, 2022).

Discussion

Mapping the Distribution of Scientific Publications on Credit Risk Management Research in Islamic Banks

There are 31 international and national research publications based on data collection results originating from the *Perish/Harzing application* during the period 2017 to 2024.

Table 1. Journal publication data on Credit Risk by year

Year	Number of Publications	Year	Number of Publications
2017	1	2021	4
2018	2	2022	7
2019	2	2023	5
2020	7	2024	3

Source: Processed data, Microsoft Excel

Bibliometric Mapping of Credit Risk Management Research in Islamic Banks

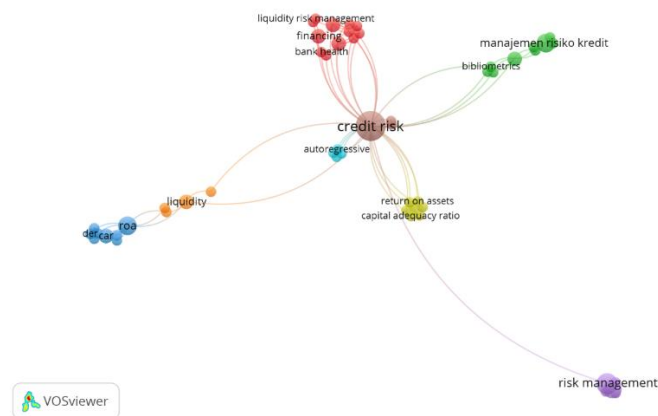


Figure 1. Network Visualization

Source: Data processed , software VOSviewer 1.6.18 (2024)

The results of the VOSViewer software visualization of credit risk management research in Islamic banks show 8 clusters and 52 topic items in the mapping, namely as follows:

- 1) Cluster 1 (12 Items): *bank credit, bank health, banking sector, capital, credit risk management, financial, financial crises, financing, liquidity risk management, loan, Palestine, profitability.*
- 2) Cluster 2 (9 Items): *bibliometric analysis, bibliometrics, Islamic and conventional banking, literature review, credit risk management, problem financing, application of risk management, future research, vosviewer.*
- 3) Cluster 3 (8 Items) : *bopo, car, der, fdr, ldr, npf, npl, roa.*

- 4) Cluster 4 (7 Items) : *capital adequacy ratio, credit to deposit ratio, net interest margin, non-performing assets, operating profit, provision coverage ratio, return on assets.*
- 5) Cluster 5 (5 Items) : *bad credit, credit, non-performing loan, risk management, syariah banking.*
- 6) Cluster 6 (4 Items) : *autoregressive, banking performance, distributed lag, macroeconomic.*
- 7) Cluster 7 (4 Items) : *capital adequacy, liquidity, size, tax avoidance.*
- 8) Cluster 8 (3 Items) : *conventional bank, credit risk, syariah bank*

VOSviewer software . This figure illustrates the relationship between topics that often appear in scientific literature related to credit risk . In the middle, the term " *credit risk* " is the main center because it is the main focus of the research. From this center, there are several groups of connected terms, which are marked with different colors. These colors indicate the grouping of research themes based on their interrelationships.

The red group shows the relationship between credit risk and liquidity risk management, financing , and bank health . This reflects that credit risk is often associated with aspects of liquidity management and bank financing stability. The green group focuses on the terms "credit risk management" and " *bibliometrics* ," indicating that there are studies that use a bibliometric analysis approach to understand credit risk. The yellow group includes financial indicators such as *return on assets* (ROA) and *capital adequacy ratio* , which are often used to measure the impact of credit risk on financial performance. The purple group illustrates the relationship between credit risk and the broader theme of overall risk management. Meanwhile, the blue group more specifically discusses the relationship between liquidity, ROA, and other technical terms such as *dercar* .

The lines connecting the terms indicate the strength of the relationship between the topics. The thicker or closer the lines are, the more frequently the terms appear together in the literature. This visualization provides a clear picture of how credit risk is studied from various perspectives, including risk management, financial analysis, and bibliometrics. By understanding these relationships, researchers can see the main focus and direction of research development in the field of credit risk.

Conclusion

This study maps the literature related to credit risk management in Islamic banks using a bibliometric approach. The results show that the literature on this topic is growing, with a total of 31 publications from 2017 to 2024. Visualization using VOSviewer software identified eight main clusters that represent the research theme. These clusters include the relationship between credit risk and bank health, liquidity risk management, financial ratios such as ROA and CAR, and the differences between Islamic and conventional banking.

Credit risk management in Islamic banks requires a unique approach due to its different characteristics from conventional banks, namely referring to sharia principles. The main challenges involve mitigating credit risk without violating the prohibition of

usury and ensuring compliance with Islamic contracts. This study also found that many studies use bibliometric analysis to understand research trends, scientific contributions, and identify future research directions. This research is important to provide broader insights into credit risk management in Islamic banks. By understanding the relationships between topics, these findings can help researchers and policymakers develop more effective strategies to support the sustainability of Islamic banking operations in the future.

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