Global Islamic Banking Development: A Review and Bibliometric Analysis Using R-Biblioshiny Application

Mohammad Hatta Fahamsyah¹, Imron Mawardi², Nisful Laila^{3*}, Malik Shahzad Shabbir⁴

Department of Management, Faculty of Business and Economics Universitas Pelita Bangsa, Indonesia¹
Department of Islamic Economics, Faculty of Business and Economics Universitas Airlangga, Indonesia^{2,3}
Department of Management Science, Faculty of Business and Economics ILMA University, Pakistan⁴

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Abstract

Islamic banking refers to a banking system that operates based on the principles of Islamic law and Sharia. The bank is guided by Islamic economics and follows specific guidelines and principles that differentiate it from the conventional banking system. The aim of this article is to provide insight into the extensive bibliometric literature on Islamic banking globally. The method used in this study is a bibliometric analysis of the literature collected in 2014 to 2023 from Scopus database, te sample of the study is 69 of the 317 publications. This research classifies and visualizes them using R-Biblioshiny software. Overall, this review provides an appropriate reference point for further research on 'Islamic Banking Globally'. The results of the bibliometric analysis reveal that the research focuses mainly on "Islamic" and "Bank". The findings of this research show that Islamic banking globally has experienced a significant trend in the last 9 years and to be of significant interest for discussion and research. Notably, the density visualization analysis, which involves measuring the co-occurrence network of keyword pairs reveals a compelling trend, thus indicating that this research theme is still interesting to research today. However, further research is needed in more detail considering the increasing development of Islam.

Keywords: bibliometric, Islamic bank, Islamic economics

INTRODUCTION

Islamic banking exhibits favorable growth trends despite the existence of several strategic complexities and challenges. Among these challenges, a notable impediment remains the relatively modest global adoption of Islamic banking. However, Islamic banking has earned renown for its notable resilience amid economic crises. Notably, it proved its unique capacity during the 1988 crisis by being the sole banking model capable of not only surviving but also thriving in adverse conditions. In the broader landscape of contemporary global markets, Islamic finance has transcended its conventional confines and garnered recognition and acceptance that extends beyond nations with Muslim-majority populations. Bello (2022) expounds upon this phenomenon, elucidating how the presence of Islamic finance contributes to the fortification of an academic domain and exerts considerable influence, both on local and international scales. This assertion underscores the transformative potential embedded within the realm of Islamic finance, rendering it a substantial force in shaping economic discourse and outcomes.

The swift expansion within the domain of Islamic economics has culminated in its assimilation within the global financial system, emerging as an efficacious instrument for facilitating developmental initiatives on a global scale. The conventional market has increasingly incorporated Islamic finance, discerning its intrinsic capability in effectively tackling multifaceted challenges, including the alleviation of poverty and the equitable dissemination of welfare. This transformative recognition of Islamic finance's potentiality and utility solidifying its substantial role in addressing critical socioeconomic imperatives (World Bank, 2015).

Islamic banking has undergone a swift and widespread evolution, extending its presence to numerous countries, including Western nations such as Denmark, the United Kingdom, and Australia. This surge is marked by a competitive drive among these nations to establish themselves as global centers of Islamic finance, thereby instituting Islamic banks to provide financial services in alignment with Islamic principles (OJK, 2022). The initial foray into Islamic banking commenced in countries such as Saudi Arabia (1974), the United Arab Emirates (UAE) (1975), Kuwait (1977), Bahrain (1978), and Malaysia (1983). This progression was followed by the proliferation of Islamic banking across the globe, encompassing regions like Iran (1979), Pakistan (1980), and Sudan (1984). It is noteworthy that both Sudan and Pakistan initially embraced and subsequently withdrew from the banking framework, subsequently reentering the arena (Imam & Kpodar, 2010).

The engagement of the English sphere with Islamic banking commenced with the provisioning of deposit accounts utilizing the mark-up murabaha within the Gulf region,

Employing the London Metal Exchange rate as a benchmark. The establishment of British Sharia-compliant banking, however, marks its inception in 1982 (Ainley, Mashayekhi, Hicks, Rahman, & Ravalia, 2009). Then, Iraq also showed improved mechanisms in corporate governance in Islamic banking, where the bank's ability to have a positive impact on reacting timely to potential changes is likely to increase. In this case, it is hoped that there will be a flexible and fast provision of various services to various customers, acceptance of innovation, identification and implementation of environmental opportunities, and having a culture of learning and working together. This policy is expected to increase market efficiency through the design of regulations and bank managers in general which will influence bank agility in emerging markets (Issa & Abbaszadeh, 2023).

During 2008, Islamic financial institutions demonstrated an annual growth rate ranging from 10% to 15%. These institutions span across more than 51 countries, with an additional 250 mutual funds adhering to Islamic principles. The footprint of Islamic finance extends to operations in 105 countries. By 2016, the Financial Stability Board classified Islamic banking as a significant system, with operations spanning over 60 countries and 14 jurisdictions, predominantly concentrated in the Middle East and Southeast Asia (Foglie, Boukrami, Vento, & Panetta, 2023).

In recent years, Islamic banking's global assets have expanded at an average annual growth rate surpassing 17% between 2009 and 2013, culminating in a value of \$1.7 trillion in 2013 (Ernst & Young, 2014). Notably, the Middle East and North Africa region have emerged as a central hub, housing a substantial portion of Islamic banking assets, representing over onethird of the global Islamic banking asset total, as underscored by the Islamic Financial Services Board (2016). In the year 2020, the World Bank's statistical findings, as cited by Mirza (2022), spotlight Saudi Arabia as the holder of the largest share of Islamic banking assets globally, accounting for approximately 50.6% of the country's total banking assets. The cumulative value of global Islamic finance market assets is estimated at around \$2.88 trillion. A key emphasis within this realm pertains to equity-based and asset-backed Islamic finance, which serves to bridge the financial sector with tangible economic activity, promoting risk-sharing and real economic value. This strategic orientation underscores Islamic banks' focus on tangible and asset-based financing, fostering productive economic pursuits while mitigating speculative or transaction-based undertakings. The encompassing Islamic finance assets span banking and non-bank financial institutions, the capital market, money market, and insurance sectors. This expansive panorama underscores the magnitude and influence of Islamic banking within the global financial terrain, as affirmed by the World Bank (2015).

Banking, as a sector, is intrinsically subject to stringent regulation. A paramount prerequisite for the prosperity of this industry is the establishment of a robust regulatory framework of superior quality. Furthermore, governments assume a pivotal role in instilling requisite confidence by safeguarding banks and depositors against liquidity shortfalls and potential insolvency. Following a challenging year in 2020, economic recovery gained momentum in 2021. However, as numerous economies embarked on reopening, the resurgence of Covid-19 brought about a fresh wave, impeding progress and necessitating renewed lockdowns or safety measures. This recurrence has once again disrupted global supply chains and elevated transportation costs, as indicated by the Indicators of Development of Islamic Finance. (Abdo, Noman, & Hanifa, 2023) explained that the short-term liquidity of Islamic banking is relatively higher and experiences a lower net stable funds ratio in the long term compared to central banks. This means that the higher the liquidity, the greater the company's ability to fulfill its short-term financial obligations.

Modern Islamic banking is intrinsically intertwined with the aforementioned dynamics. Malaysia stands as an exemplary model illustrating how a government can provide steadfast support and astute planning. In 1981, the Malaysian government initiated a council tasked with studying the establishment of Islamic banking, subsequently culminating in the launch of Malaysia's inaugural Islamic bank in 1983, as underscored by Halit and Yasar (2017). The incorporation of ethical and religious foundations within Islamic banking exerts a discernible influence over the institutional architecture and legal frameworks of Islamic nations, setting Islamic banks apart from their conventional counterparts by adhering to Sharia law. Consequently, the presence of a regulatory framework conforming to International Featured Standards (IFS) assumes pivotal significance, ensuring alignment with Sharia principles and engendering a level playing field within the international market (Hassan & Dickle, 2005).

In prior research conducted by Foglie, Boukrami, Vento, and Panetta (2023), it was elucidated that the Islamic banking system still necessitates standardized and harmonized regulation due to the variances in interpretation across different countries. In 2002, the Islamic Financial Services Board (IFSB) emerged, uniting multiple Islamic banks and banking authorities to establish principles and products characterized by prudence. Subsequently, in 2015, the IFSB encouraged its members to employ these principles as a foundational benchmark for evaluating the caliber of regulatory and supervisory frameworks. This aimed to establish a fundamental level of robust regulation and sound practices within the domain of Islamic finance, as outlined by the Islamic Financial Services Board (2016).

Research undertaken by Islam and Rahman (2017) acknowledged a pervasive lack of comprehension among the majority of respondents concerning the functioning of the Islamic

Banking system. Furthermore, the outcomes revealed that most respondents would be inclined to utilize Islamic banking services if adequately informed and if they were presented with a favorable customer experience. These findings underscore the imperative for Islamic banking institutions to construct an effective communication strategy to heighten public awareness regarding the operational dynamics of Islamic banking. This necessitates not only raising awareness but also ensuring that the populace comprehends the modus operandi of the bank. In this endeavor, governmental involvement is pivotal, as it is crucial to engage customers in order to foster a nuanced understanding of the advantages associated with the implementation of Islamic banking transactions. To achieve this goal, the development of communication strategies that extend beyond mere advertising is paramount, as posited by Islam and Rahman (2017). In line with research (Ammar & Rebai, 2023), explained that there is a lack of Islamic normative aspects and low compliance with sustainable practices in implementing Islamic banking. So in particular, people tend to be less interested and less able to understand Islamic products. This causes people to be more interested in economic sustainability and not involved in environmental and social issues (Hassan & Dickle, 2005).

Furthermore, an examination of the existing literature reveals that research utilizing R-Biblioshiny analysis in the realm of Islamic banking has been undertaken, as demonstrated by the work of Marlina, Rusydiana, Hidayat, and Firdaus (2021). Within this corpus of research, it is emphasized that imperative enhancements are requisite within the Islamic banking sector, particularly in the context of Indonesia. Such improvements are deemed a priority, assuming a central role as a regulatory agenda. A pivotal area of concentration pertains to the broader domain of Sharia development on a global scale, entailing thorough research and the adept application of cutting-edge technology to augment the quality of products and services. This directive gains enhanced significance in light of the advent of Industry 4.0, where technology has ascended as a paramount prerequisite within the public domain. The finding from (Majeed & Zainab, 2017) by empirically evaluating how Islamic is Islamic banking and finds that overall Islamic banks are operating per Sharia. Besides, the study finds that Islamic banks are contributing to social welfare by decreasing unemployment and income inequality. It is due to fast growth of emerging financial industry. It represents that it is creating employment opportunities which in turn increasing the level of income, thereby, reducing income disparities.

Islamic banks exhibited consistent efficiency scores both during the global financial crisis of 2007-2008 and the subsequent early post-crisis period (Apergis, 2017). This trend underscores their potential for global Islamic banking development due to their perceived

Stability and superior performance compared to conventional banks (Derbali, 2015). Furthermore, the study by Mirzaei, Ali, Saad, and Emrouznejad (2022) highlighted Islamic banks' resilience in mitigating the detrimental impacts of economic crises. While conventional banks asserted greater preparedness to uphold profitability during crisis periods, empirical evidence suggests that Islamic banks managed to generate shareholder value through higher stock returns, particularly during the COVID-19 pandemic. Drawing from data encompassing 426 banks across 48 nations, it was observed that Islamic banks' stock returns exceeded those of conventional banks by around 10-13 percent. This margin is adjusted to account for diverse pre-crisis attributes at both bank and country levels, including the health of individual banks and risk-taking cultural traits. Meanwhile, the level of awareness and attitude of the people in Bahrain shows that the majority have knowledge about sharia banking products but have not fully implemented sharia principles, but have a positive attitude towards sharia banking practices. This information will be useful for further evaluation and benchmarking of employee competitiveness in Sharia Banking and Financial Institutions (Buchari, Rafiki, & Al Qassab, 2014).

Considering the aforementioned factors, the objective of this article is to conduct a comprehensive bibliometric analysis concerning the global development of Islamic banking. Bibliometrics is utilized as a technique to structure a network of information, addressing questions about topics within a specific field of knowledge. It aims to uncover the main themes in that field, their interrelationships, and how they evolve over time, as outlined by Eck and Waltman (2014). Additionally, bibliometrics allows for the examination of article distribution in terms of authors, countries, and other relevant factors. The study focuses on articles published and indexed by Scopus, categorizing them based on distribution and author affiliations. Through this analysis, the research aims to identify prevalent topics and anticipate future areas of interest within the realm of "Islamic banking globally." This endeavor not only presents avenues for further research but also contributes to understanding research trends. The employed methodology involves bibliometric analysis, utilizing Scopus-derived data and associated analytical techniques. The outcomes of the analysis are subsequently presented using R-Biblioshiny. This presentation is followed by a deliberative segment and conclusions drawn from the bibliometric analysis conducted in the study.

METHOD

This bibliometric literature review employs a systematic and explicit methodology, as proposed by Garza-Reyes (2015), and draws upon mind mapping techniques that emphasize

The boundaries of knowledge, following Tranfield, Denyer, and Smart (2003). The research methodology utilized in this study follows a five-stage process, as proposed by Tranfield, Denyer, and Smart (2003). This approach is also illustrated in Figure 1 and has been adopted by other researchers such as Setyaningsih, Indarti, and Jie (2018). The stages of this methodology likely involve steps such as defining the research scope, conducting searches, analyzing and categorizing articles, synthesizing findings, and drawing conclusions. This systematic approach ensures a comprehensive and structured examination of the literature related to the development of Islamic banking on a global scale.



Figure 1. Bibliometric analysis of the five-stage method

Define search keywords

The literature search was conducted within the timeframe of 2014 to 2023, utilizing the keyword 'Islamic banking globally.' The Scopus database was selected as the platform for the search due to its affiliation with one of the foremost publishers in the world, Elsevier, as noted by Goodman and Deis (2005). The initial search was performed by inputting the keyword 'Islamic banking globally' as a language query into the Scopus web interface. This search strategy aimed to identify and retrieve relevant articles from the specified time range that pertain to the global landscape of Islamic banking.

Initial search results

The search was limited to the 'journal' category and focused solely on the 'word titles' within the articles. The time range selected for the search spanned from the year 2014 to 2023. As a result of this search criteria, a total of 317 articles were identified in the initial search. To organize and capture essential information from these articles, the results were compiled in 'BibTex' format. This format encompasses crucial details such as the paper title, author names, abstract, keywords, and references, ensuring a comprehensive overview of the gathered articles for further analysis.

Improved search results

The process involves filtering out articles that meet the suitability and indexing criteria of the Scopus database. This excludes content like proceedings, newspapers, books, book reviews, and book chapters. Only selected journal articles are retained for analysis. Subsequently, any necessary corrections or adjustments are made to the data, and the refined

dataset is saved in 'BibTex' format. This resulting 'BibTex' file is then utilized for subsequent phases of data analysis, enabling a more detailed examination of the articles' content and characteristics in relation to the global development of Islamic banking.

Compile initial data statistics

The gathered data is organized and stored in 'BibTex' format. In the initial phase, a check is conducted to ensure the completeness of various components within each journal article, such as the year of publication, volume, number, page numbers, and more. If any incomplete data is identified, the necessary information is added to enhance accuracy.

The subsequent step involves data analysis, which is carried out in a sequential manner. The primary aim of this analysis is to classify the articles based on their publication year, as well as the source and publisher through which they were published. This classification allows for a structured examination of trends over time and insights into the distribution of articles across various publishing sources. The analysis aids in deriving meaningful patterns and information from the collected dataset, contributing to a deeper understanding of the global development of Islamic banking within the specified time frame.

Data analysis

In this study, the bibliometric analysis was conducted using the Scopus database (Andrea & Mariya, 2022). To enhance the analysis and gain a deeper understanding of the interconnections among authors, publications, and keywords within the field of study, researchers employed the R-Biblioshiny software. This software facilitates the visualization of bibliometric networks, enabling the exploration of relationships and patterns.

Through R-Biblioshiny, researchers can uncover research trends, identify gaps in the existing literature, and gain insights into the dynamics of scholarly work. The visualizations produced by the software can be saved in multiple formats, such as png, pdf, and svg, which are suitable for further analysis and presentation purposes. The capabilities of Biblioshiny extend to creating network graphs, co-citation graphs, and co-author graphics, all of which aid users in discerning intricate patterns and relationships present within scientific literature.

In essence, R-Biblioshiny serves as a powerful tool that not only facilitates the analysis of bibliometric data but also transforms this data into visual representations, enabling researchers to gain insights into the complex web of scholarly interactions, collaborations, and trends.

RESULT AND DISCUSSION

Main Data Information

The findings of this study are based on the utilization of the R-Biblioshiny software, which facilitated the identification of frequently appearing keywords. The selection of keywords was tailored to the specific requirements of data collection and analysis. R-Biblioshiny was employed to create visualizations that map the bibliometric landscape. The study focused on publications spanning the years 2014 to 2023. Initially, a total of 317 articles were identified through the Scopus database. However, after applying the refinement process, 69 articles were selected for analysis. These articles originated from 50 different journal sources and featured 226 relevant keywords provided by the authors.

The study involved 166 authors, with 15 authors collaborating on 16 articles. A comprehensive overview of these results is provided in Table 1, allowing readers to gain a more detailed understanding of the data and its various components.

Table 1. Main Data Information

Description	Results
Main Information About Data	
Timespan	2014:2023
Sources (Journals, Books, etc)	50
Documents	69
Annual Growth Rate %	4.61
Document Average Age	3.99
Average citations per doc	12.45
References	1
Document Contents	
Keywords Plus (ID)	37
Author's Keywords (DE)	226
Authors	
Authors	166
Authors of single-authored docs	15
Authors Collaboration	
Single-authored docs	16
Co-Authors per Doc	2.65
International co-authorships %	43.48
Document Types	
Article	69

Source: R-Biblioshiny data processing

Publication and Citation Trends

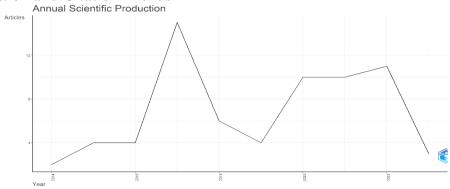


Figure 2. Annual Scientific Production

The earliest publication found on Scopus using the keyword 'Islamic banking globally' dates back to 2014. The number of articles steadily increased until 2017, reaching its peak at 15 articles during that year. Within the time range of 2014 to 2017, a prevalent theme emerged regarding the perceptions of Islam and banking. There was a lingering stigma associated with the understanding of values that were deemed to hinder economic growth. As a result, this theme frequently surfaced in discussions within various articles.

Subsequently, the number of articles decreased to 6 and 4 articles in 2018 and 2019, respectively. However, there was a resurgence in interest during the period of 2020 to 2022, with 10 articles published. Unfortunately, the trend reversed again in 2023, with a decrease in the number of articles on this topic. This fluctuating pattern in article publications reflects the evolving attention and interest in the theme of 'Islamic banking globally' over the years, indicating shifts in research focus and scholarly discussions.

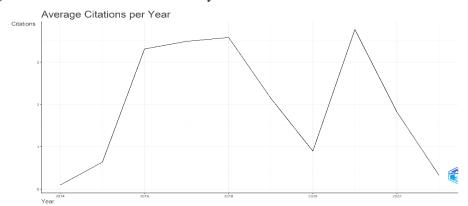


Figure 3. Annual Scientific Production

The overall publication trend in the theme of 'Islamic banking globally' exhibits a fluctuating pattern. Meanwhile, the trend in citation rates has also experienced fluctuations. In the early years, citations showed a downward trend: 2014 had an average growth of 0.10% citations per year, 2015 saw growth at 0.64% citations per year, followed by 2020 with 0.90% 78

citations per year. In 2022, there was a notable increase at 1.82% citations per year, followed by a decrease in 2023 to 0.33% citations per year. After this initial decline, there was arenewed upward trend in citation rates from 2016 to 2018, with average growth rates of 3.31%, 3.49%, and 3.58% citations per year, respectively. 2019 exhibited a growth rate of 2.15% citations per year. The peak of citations occurred in 2021, which saw an average growth of 3.77% citations per year.

This pattern of fluctuations in both publication and citation rates reflects the changing research focus and interest levels in the field of 'Islamic banking globally' over time, as well as the evolving influence of the scholarly work in this area.

Most Relevant Journals and Most Citation

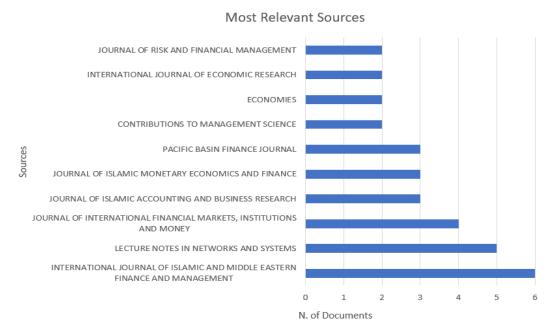


Figure 4. Most Relevant Sources

The journal that has published the highest number of articles on the theme 'Islamic banking globally' is the 'International Journal of Islamic and Middle Eastern' with a total of 8 articles. These articles were authored by Alqahtani F, Mayes DG, and Brown K in 2017, and they garnered 81 citations with an average annual citation of 11.57%. The discussed topic revolved around the efficiency of Islamic banks compared to conventional banks during the global crisis, specifically in the GCC region.

In the second position, also with author Alqahtani F and Mayes DG, the same journal published articles in 2018. These articles addressed the financial stability of Islamic banking in the context of the global financial crisis, specifically within the Gulf Cooperation Council (GCC). These articles received 72 citations, averaging 12% citations per year. These findings highlight the prominence of the 'International Journal of Islamic and Middle Eastern' in contributing substantial research related to Islamic banking, particularly in the areas of efficiency and financial stability during times of crisis.

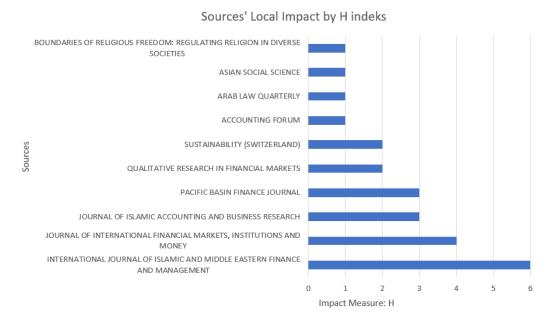


Figure 5. Sources Local Impact by H indeks

In Figure 5, the most influential journals are depicted based on local totals. This is derived from the dataset containing 69 articles, where the 'International Journal of Islamic and Middle Eastern Finance and Management' emerges as the most frequently cited journal with a total of 8 citations. In contrast, other journals have citations ranging from 1-4.

The visualization in Figure 5 underscores the notable impact of the 'International Journal of Islamic and Middle Eastern Finance and Management' in terms of local citations within the examined articles. This prominence suggests that this particular journal has played a significant role in contributing to the scholarly discourse on the theme of 'Islamic banking globally' within the specified timeframe.

Most Affiliates and Most Citations

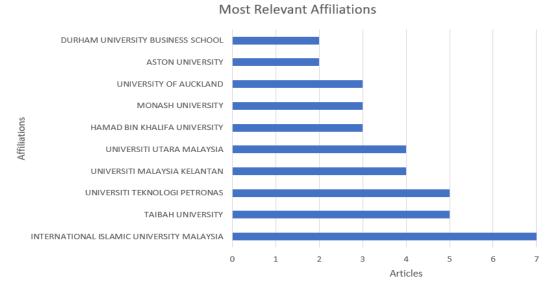


Figure 6. Most Relevant Affiliations

In terms of affiliations, the institution most frequently associated with the published documents is the 'International Islamic University Malaysia,' with a total of 7 articles. Following closely is 'Taibah University,' which has contributed to 5 documents (as shown in Figure 6). Based on the information presented in Figure 7, the most impactful publications, as evidenced by global citation counts, are attributed to the articles authored by Alqahtani F and Mayes DG, published in the year 2016. These articles have garnered significant attention and citations, reflecting their influence within the field of Islamic banking globally.

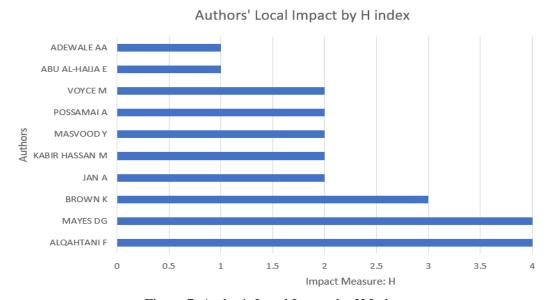


Figure 7. Author's Local Impact by H Index

The Most Productive Countries and The Most Citations

Table 2. Country Scientific Production

Regions	Frequency
MALAYSIA	28
SAUDI ARABIA	12
PAKISTAN	11
INDIA	9
INDONESIA	9
UK	9
USA	9
TURKEY	8
AUSTRALIA	7
NEW ZEALAND	6

Source: R-Biblioshiny data processing

Referring to Table 2, the most prolific authors originate from Malaysia, contributing a substantial 28 articles. Following Malaysia, Saudi Arabia has produced 12 articles, while Pakistan has contributed 11 articles. Additionally, authors from India, Indonesia, the United Kingdom, and the United States have each produced 9 articles, placing them in fourth position in terms of prolific contributions to the field of 'Islamic banking globally.' This distribution of prolific writers from various countries highlights the global nature of research in this domain.

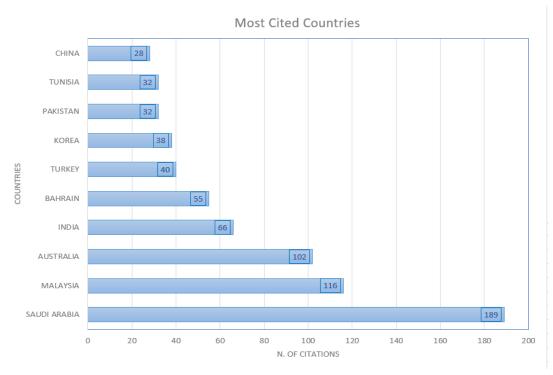


Figure 8. Most Cited Countries

In terms of the most influential countries based on citation counts, Saudi Arabia takes the lead with 189 citations. Following Saudi Arabia, Malaysia has accumulated 115 citations, Australia with 102 citations, India with 66 citations, and Bahrain with 54 citations. Other countries fall within the range of 28 to 38 citations. These insights are visually presented in Figure 8, showcasing the varying degrees of impact across different nations in contributing to the literature on 'Islamic banking globally.'

Collaboration of Writers between Countries

Country Collaboration Map



Figure 9. Country Collaboration Map

As depicted in Figure 9, the authors from Australia, Malaysia, and Saudi Arabia have been the most collaborative across countries. Australian authors notably collaborate frequently with authors from New Zealand. Meanwhile, Malaysian authors predominantly collaborate with authors from India, Qatar, and the USA. Saudi Arabian authors have established substantial collaboration with authors from New Zealand.

This geographical distribution suggests that research related to 'Islamic banking globally' is notably concentrated within regions such as West Asia (Saudi Arabia), South Asia (Pakistan), and Southeast Asia (Malaysia). This observation aligns with the study's findings and corresponds to the prevailing research trends. The dominant contributions from countries like Saudi Arabia, Pakistan, and Malaysia underscore their significant influence in this field (World Bank, 2015).

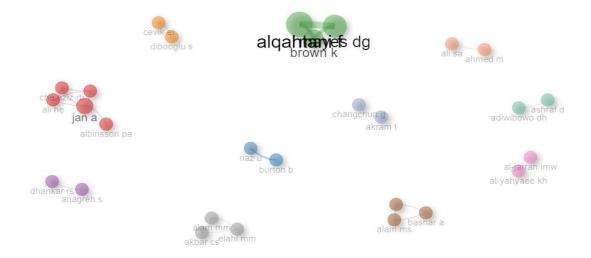


Figure 10. Collaboration Network

Figure 10 illustrates the collaboration between authors, with the most productive authors being Alqahtani F, Mayes DG, and Brown K, who form a cohesive cluster. These authors have collaborated closely within their research endeavors, resulting in a notable impact on the field of 'Islamic banking globally.' This collaborative cluster signifies their collective contributions and highlights the synergistic outcomes of their joint efforts. Alqahtani and Mayes conducted joint research during the 2016-2018 period consistently which was published in the Pacific Basin Finance Journal, Economic System and Journal of International Financial Markets, Institutions and Money, followed by Brown K, but not as much as the research conducted by Alqahtani F and Mayes DG. Meanwhile, the results of other collaborations show clusters with vague or unclear results, due to their contribution is not as much as the others.

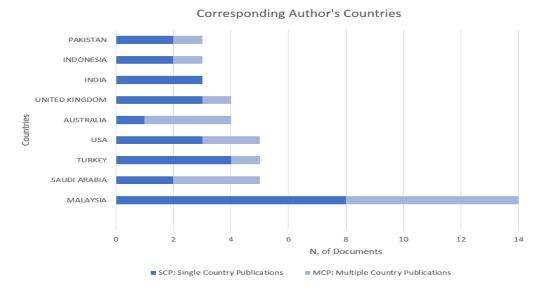


Figure 11. Corresponding Author's Countries

Examining Figure 11, which considers the corresponding authors, it becomes evident that Malaysia occupies the primary position, followed by Saudi Arabia, Australia, and the United Arab Emirates in second place. The pattern that emerges suggests that authors from these countries tend to collaborate predominantly within their respective countries. This phenomenon, where authors from the same country collaborate more frequently with each other than with authors from other countries, is known as Single Country Publication (SCP), as opposed to Multiple Country Publication (MCP). This observation underscores the importance of intra-country collaboration in the context of 'Islamic banking globally' research.

The Most Prolific Writer

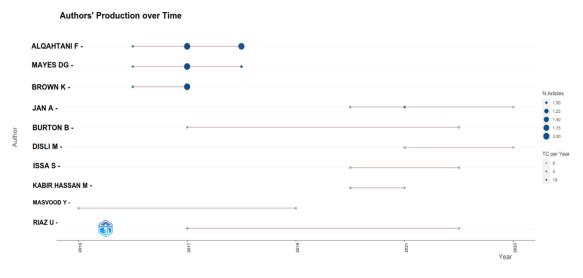


Figure 12. Authors' Production Over Time

In Figure 12, the ten most prolific authors within the articles related to the key theme of 'Islamic banking globally' are highlighted. The network analysis also enables the identification of author authority (Bilik, Damar, Ozdagoglu, & Damar, 2019). The blue dots represent the number of publications by each author, with larger circles indicating a greater number of publications. The color density, on the other hand, signifies the number of citations an increased color intensity corresponds to a higher number of citations.

The visualization of author productivity reveals that the top positions are held by authors such as Alqahtani F, Mayes DG, and Brown K, particularly in the period between 2016 and 2019. Jan A began contributing articles in 2020-2021 and had no publications in 2022, but resumed productivity in 2023. Similarly, Burton B commenced prolific writing in 2017, paused for a span of four years, and then resumed writing in 2022. This visualization not only showcases author productivity but also highlights the dynamic patterns in their publication and citation trajectories over the years.

Thematic Evolution

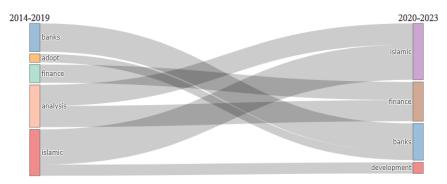


Figure 13. Thematic Evolution

In Figure 13, a notable shift in thematic focus is evident when comparing the periods of 2014-2019 and 2020-2023. While the themes of "Banks", "Islamic", and "Finance" have remained intriguing and relevant throughout both timeframes, it's evident that the theme of "Islamic" has emerged as a trending and enduring topic over the course of the last nine years. Where in 2014-2019 the "Islamic" theme (red) was the theme most widely used in research, followed by "analysis" (pink), then "banks" (blue). Meanwhile, in the 2020-2023 period, the "Islamic" theme (purple) is still an interesting theme to discuss, followed by "finance" (brown) and "banks" (blue). This observation suggests an ongoing interest and sustained research focus on Islamic banking and finance themes, reflecting their significance in the academic landscape.

Thematic Map

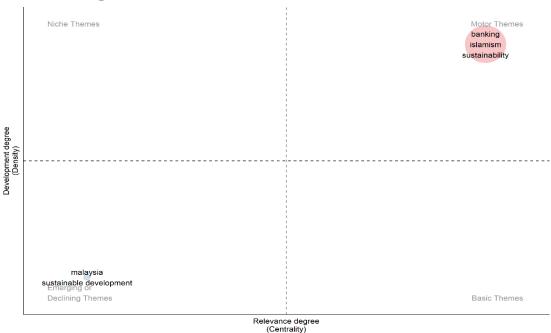


Figure 14. Density

In Figure 14, related to density it is shown that there are three groups identified here. The keywords that appear in each cluster represent flow of study on Islamic banking globally. In this study, thematic maps were constructed using an analysis of density and centrality, resulting in the division of themes into four distinct quadrants. This approach was facilitated by a semi-automatic algorithm that involved reviewing research titles, relevant keywords, and author-provided keywords. This comprehensive method enabled a more nuanced understanding of thematic variations.

The upper right quadrant represents driving themes marked by high density and centrality. These themes require further research and are essential for comprehensive exploration. Notably, topics like banking, Islamism, and sustainability exhibit this characteristic.

Moving to the upper left quadrant, themes are specific and less common but display high development potential. These themes possess high density but relatively lower centrality, indicating their specialized nature and potential for advancement. Conversely, the lower left quadrant contains themes that have been in use for an extended period but are experiencing a declining trend and possess very low centrality. The themes "Malaysia" and "sustainable development" are noteworthy examples in this quadrant.

Finally, the lower right quadrant encompasses basic themes marked by high centrality but low density. Although this quadrant lacks captured themes, its characteristic suggests fundamental concepts that may provide a strong foundation for further exploration. By employing this method, the study provides a nuanced understanding of thematic trends, their potential for development, and their relevance within the context of 'Islamic banking globally.'

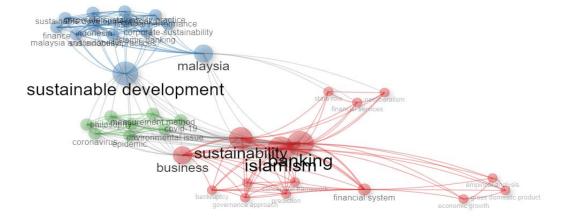


Figure 15. Thematic Map

There are three groups identified here. The keywords that appear in each cluster represent the flow of research on Islamic banking globally. The first cluster (red) with themes of Banking, Islamism, sustainability, and business. The second cluster (blue) with theme of sustainability development and the third cluster (green) with theme of environment issue. The visual representation in Figure 15 presents central topics and themes in the study of global Islamic banking. Through this analysis, this paper effectively answers questions regarding research trends, highlighting the relevance and exploration of Islamic banking with the theme of sustainable development as an important field of study to be discussed in future research.

Keywords



Figure 15. Co-occurrence Network (Overlay)

In Figure 15 shows a lot of keywords the articles used were banking and Islamism. The comprehensive analysis of data presented in this paper enables us to address questions regarding the research trends in global Islamic banking over the past decade or so. The findings align with the author's expectations, as the theme of Islamic banking continues to be of significant interest for discussion and research. Notably, the density visualization analysis, which involves measuring the co-occurrence network of keyword pairs reveals a compelling trend (Liu, Yin, Liu, & Dunford, 2015). The analysis indicates a frequent co-occurrence and similar density of keywords, specifically "banks" and "Islam," depicted as words of equal size. This suggests a strong interrelation and development in research within this domain.

CONCLUSION

The research findings reveal that a significant portion of global Islamic banking research focuses on themes related to "banks" and "Islam." This emphasis is highlighted by the frequent appearance of keywords like "bank" and "Islam." This persistent interest underscores the continued relevance of Islamic banking as a subject of study and discussion. Despite fluctuations in publication trends over the past nine years (2014-2023), Islamic banking remains an integral part of the global financial system and has demonstrated substantial growth. The development of Islamic banking is believed to contribute to both short-term and long-term economic growth and resilience during crises.

The study identifies Malaysia as the most prolific contributor to Islamic banking research, owing to the country's strong commitment to Islamic finance's development. Malaysia has implemented various initiatives, including regulatory frameworks and institutions, to promote Islamic banking. Indonesia, on the other hand, is lagging in terms of Sharia financial penetration, despite being the world's largest Muslim country. Saudi Arabia emerges as a significant center for Sharia banking, playing a pivotal role in the development and global recognition of Islamic banking.

The study also notes that the dominance of Asian countries, particularly those in the Muslim community, is notable in Islamic banking research. However, the research suggests that there is still room for improvement in disseminating information about Sharia products and services. While the study provides valuable insights, it acknowledges limitations. The research is based on a limited set of keywords and the Scopus database, which might restrict the breadth of findings. The potential for subjective assessment and human error also exists despite the use of formal software tools. It recommends future research to expand samples using different bibliometric analysis tools and databases, such as 'Hiscite', 'VosViewer', 'BibExcel', 'PoP (Publish or Perish)', and 'NVivo'.

In conclusion, the study suggests that further research is necessary to provide a more comprehensive understanding of the ongoing development of Islamic banking, given its growing significance within the finance industry.

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