

Tracing Islamic Fintech Research in Indonesia and Malaysia: a Bibliometric Approach

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ARTICLE INFO	ABSTRACT
Volume: 2	Indonesia and Malaysia are countries that have a rapidly growing financial industry, especially in Southeast Asia. This research aims to examine the development of Islamic fintech studies in Indonesia and Malaysia which are published in Scopus indexed publications. Analysis was conducted on 76 articles discussing Islamic fintech in Indonesia and Malaysia. The method used is bibliometric by utilizing R Biblioshiny to generate bibliometric maps. The results show that Islamic fintech research in Indonesia is more dominated by sharia Peer to Peer Lending studies, while in Malaysia it is more dominated by Islamic crowdfunding. This research contributes to an understanding of the Islamic fintech study map for academics.
KEYWORDS	
Islamic Fintech, Sharia Peer to Peer Lending, Islamic Crowdfunding, Bibliometric	

1. Introduction

The rapid development of technology certainly provides opportunities to be applied in various fields, one of which is economics and finance. The existence of financial technology is projected to be an attractive technology and enable various companies to compete effectively in the future. The presence of fintech has changed the transaction model to be simpler by combining financial services with technology. The Islamic finance sector has successfully used it for the development of innovative products according to Islamic principles.

This provides a competitive advantage for the Islamic finance sector and provides opportunities to increase product offerings to the public (Jamil & Seman, 2019). This is evidenced by the increase in Islamic financial assets which reached US\$3.3 trillion in 2020 and increased by 17% to reach US\$4 trillion in assets in 2021 (Refinitiv Islamic Finance, 2022). This increase is in line with the increasing research on Islamic fintech (Assalafiyah et al., 2022) by discussing various themes, such as the role (Chenguel, 2023), prospects (Soemitra et al., 2021), and its implementation (Hudaefi et al., 2023), and several other topics. Thus, studying the dynamics of research related to Islamic fintech is important.

This study will discuss the development of Islamic fintech research in Indonesia and Malaysia. The two countries are countries that have contributed greatly to the development of Islamic financial assets globally. This is inseparable from the contribution of the Islamic fintech platform which is able to accelerate services so that it can easily reach and offer various Islamic financial industry products (Muneeza & Mustapha, 2021). Based on the 2022 Global Islamic Fintech Report, the two countries are included in the 10 largest countries that have Islamic fintech (Dinar Standard & Elipses, 2022). This progressive development

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is supported by excellent market infrastructure, supportive regulatory bodies, and the active participation of industry players from each country.

This article examines various studies exploring Islamic fintech in Indonesia and Malaysia using bibliometric analysis methods. Although there has been some previous research discussing this topic with a similar analysis, the metadata (Assalafiyah et al., 2022) and the approach/application (Hassan et al., 2022) used are different. Based on our research, this research is one of the first literature reviews on Islamic fintech that compares the development of Islamic fintech on a regional basis. The metadata used are articles published in the Scopus index. This research is the first literature research that raises the topic of Islamic fintech by analyzing research related to Islamic fintech by comparing its development in Indonesia and Malaysia through bibliometrics. Bibliometric analysis is used to evaluate scientific publications and understand the state of publication on a particular theme. The data is obtained from articles that have been published and indexed by Scopus. This research has significance for various parties, especially academics and can be a reliable reference for obtaining information on the theme of Islamic fintech.

2. Literature Review

Islamic fintech is a combination of the words fintech and Islam. The emergence of the word "Islam" to distinguish between sharia-based and conventional interest-based (Alshater, 2022). Syed et al. (2020) consider Islamic fintech to be an innovation to support finance. In the same vein, Hudaefi (2020) emphasized that it is an innovation in Islamic finance technology based on sharia principles. The bottom line is that Islamic fintech is a means of broadening the customer base of Islamic finance which is capable of increasing operational efficiency and reducing costs and being able to present a wider range of products. The goal is to make the Islamic finance sector more competitive (Muneeza & Mustapha, 2021).

Fintech that is categorized as Islamic fintech must prioritize maqashid sharia (the goal of Islamic law), so it must adopt and implement sharia contracts. As well as crowdfunding and Fintech that comply with sharia principles and conclude that crowdfunding that complies with sharia is one that invests in halal products and shares investment risks (Biancone et al., 2019). Not only that, sharia fintech companies must also comply with existing fatwas (legal opinions) and follow rules and regulations issued by their respective authorities (Alshater, 2022; Sofyan et al., 2022) because sharia compliance is central in integrating fintech with Islamic finance. Thus, Islamic Fintech companies must ensure that the business model is shariah-compliant (Hasan et al., 2020).

3. Methodology

This study uses bibliometric analysis to measure and quantitatively analyze scientific works (Andrés, 2009), which in this study are articles included in the Scopus category. The first step we took was to look for articles from Scopus using some related Islamic fintech. The results obtained are then filtered by criteria outside of journal articles and proceeding articles are excluded. The next step is because it is possible for several articles to appear repeatedly, we combine them. To check relevance to our research objectives, it is continued at the reading stage of the title, abstract, and keywords with the following conditions: 1) the title, abstract, and keywords explicitly discuss Islamic fintech, 2) if the words "Islam" and "sharia" does not appear together with the words "fintech" or "financial technology" in the title of the article, then it is continued with reading the abstract, and 3) the research was carried out in Indonesia and Malaysia (see figure 1). Based on the steps taken, 76 articles were obtained. The data in the final sample were then analyzed using the bibliometric R-package software to obtain a more accurate analysis and which was developed by Aria and Cuccurullo for quantitative research with the latest version of the web/Biblioshiny interface application (Aria & Cuccurullo, 2017).

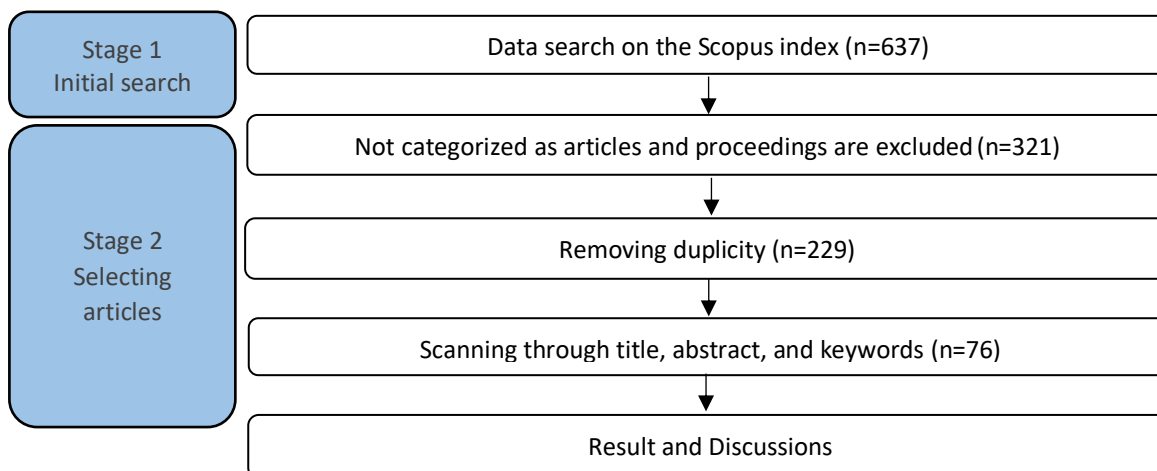


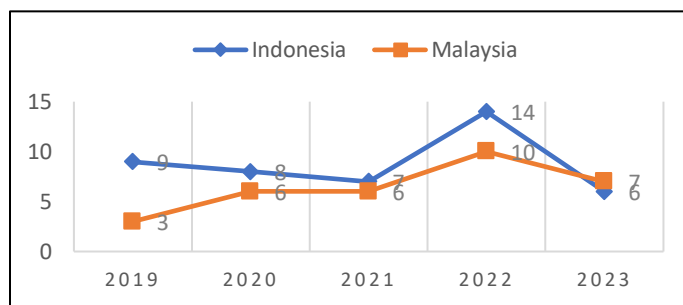
Figure 1. Data Collection Steps

4. Results and Discussion

Islamic fintech research is increasing along with the increasing use of fintech until now (Sofyan et al., 2022). This study discusses analyzing the development of Islamic fintech research in Indonesia and Malaysia through research that has been published in Scopus. Based on application data processing, it was found that there were 76 articles included in the scope with details of 60 journal articles and 16 conference papers published between 2019 and mid-2023. All articles were published in 42 journal publications involving 188 authors. The growth of articles on Islamic fintech in Indonesia and Malaysia is 2.02% with an average of 1.84 articles per year with a citation rate per document of 5,526 per year.

Figure 2 describes the graph of the development of scientific publications with the theme of Islamic fintech in Indonesia. It was found that in the period 2019 to mid-2023 the number of scientific article publications in Indonesia was greater with 44 articles compared to Malaysia with 32 articles. Even though this research was conducted in the middle of 2023, it is estimated that the Islamic fintech theme for each country will increase until the end of the year.

Figure 2. Annual Scientific Production



Source: Secondary data processed through R Biblioshiny, 2023.

4.1 Author Analysis

The author's analysis in bibliometric studies is important in investigating everything that influences and contributes to a particular research theme. Table 1 below describes 5 authors who have significant influence in the publication of scientific articles related to Islamic fintech. Fianto BA, Hendratmi A, Hudaefi A, Kasri RA, and Muryanto YT are the authors most involved in research with the theme of Islamic fintech in Indonesia. However, in terms of impact measurement, Hendratmi A and Kasri RA are in the top ranks with 44 citations and 21 citations respectively. Furthermore, regarding the theme of Islamic fintech in Malaysia, Baber H has contributed the most with a total of 4 articles, followed by Ishak MSI Ahmad K with 2 articles each, and several other authors with 1 article each. As for impact measurement, Baber H occupies the top rank with a total of 45 citations, followed by Ishak MSI with 22 citations, and Aderami AMR with 5 citations and several other authors.

Table 1. Top 5 Authors from Indonesia and Malaysia Based on Number Publication (NP), Impact Measurements, and Total Citation (TC)

Indonesia					Malaysia				
Most Relevant		Impact Measurements			Most Relevant		Impact Measurements		
Authors	NP	Authors	h_index	TC	Authors	NP	Authors	h_index	TC
Fianto BA	2	Hendratmi A	2	44	Baber H	4	Baber H	4	45
Hendratmi A	2	Kasri RA	2	21	Ishak MSI	2	Ishak MSI	2	22

Hudaefi FA	2	Abduh M	1	1	Ahmad K	2	Aderemi AMR	1	5
Kasri RA	2	Afandi MA	1	1	Aderemi AMR	1	Ahmad K	1	2
Muryanto YT	2	Ahmad S	1	1	Alam A	1	Alam A	1	3

Source: Secondary data processed through R Biblioshiny, 2023.

Figure 3 below explains the countries of origin of the authors involved in Islamic fintech research in Indonesia and Malaysia. There are 4 countries involved in Islamic fintech research in Indonesia, namely Indonesia with 112 authors, Malaysia with 6 authors, USA with 3 authors, and UK with 1 author. The Islamic fintech research in Malaysia involved 10 countries of origin of the authors, namely Malaysia with 56 authors, Indonesia with 16 authors, South Korea with 4 authors, followed by India, Pakistan, Saudi Arabia, UK, Australia and USA with 3 authors each, and Finland with 1 author.

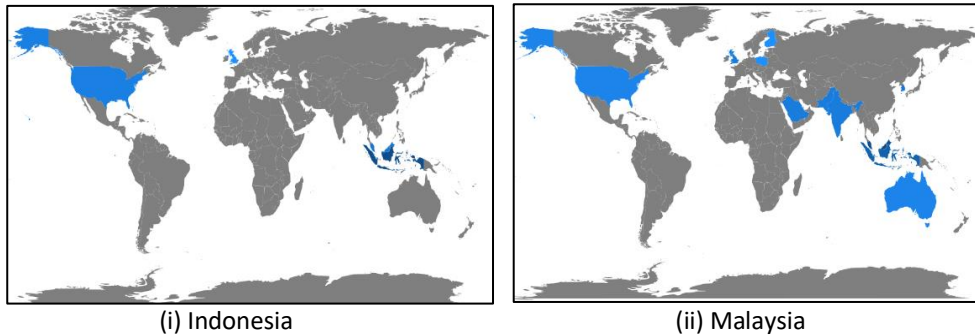


Figure 3. Country of the authors involved in the article on the theme of Islamic fintech

4.2 Word Analysis

Word analysis involves the use of methods and techniques in understanding and analyzing the words used. The aim is to identify trending topics and become the main focus. Figure 3 shows the keywords that are often used in articles with the theme of Islamic fintech. In Indonesia, keywords that are often used are "Islamic fintech, sharia fintech, pp lending, financial technology, Islamic banks, fintech companies" and several other words. Meanwhile, the words most frequently used in Malaysia are "Islamic fintech, Islamic banks, Islamic crowdfunding, financial technology, fintech services, fintech companies" and several other words.

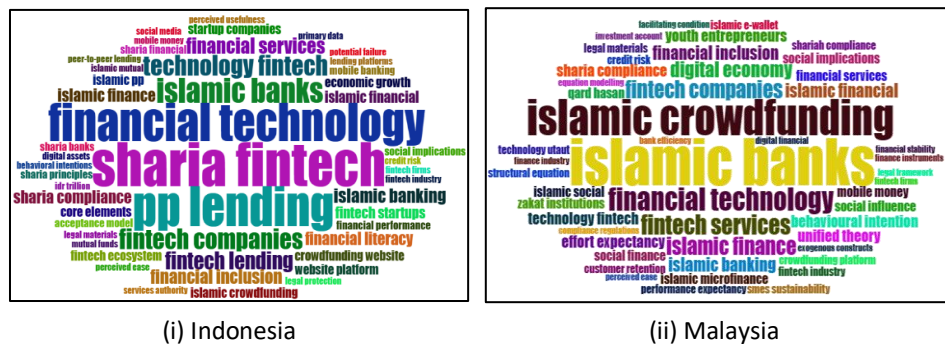


Figure 3. Visualization of keywords in Islamic fintech research

5. Discussion

The theme of Islamic fintech is a new topic when compared to topics related to Islamic banking which are the main focus in the development of Islamic finance. The interest of researchers is increasing along with the presence of the covid-19 pandemic which causes economic growth to slow down and triggers a financial crisis (Rabbani et al., 2020). Fintech is growing rapidly and is a driving force for the development of Islamic finance (Sun et al., 2020). The community is also increasingly benefiting from the use of fintech, which has attracted the interest of researchers to make it an object of research. This can be seen from the development of Islamic fintech research in Indonesia and Malaysia. The results of our investigation into the results of application data processing found that although research on Islamic fintech in Indonesia is very dominant both in terms of the number of published articles and the number of authors involved, Malaysia is a country capable of attracting the interest of researchers from abroad to raise the theme of Islamic fintech. in Malaysia. This was proven by the presence of several other researchers such as Indonesia, South Korea, India, Pakistan, Saudi Arabi, UK, Australia, USA and Finland. The author who has researched Islamic fintech in Malaysia the most is Baber H, who has been able to produce 4 articles. Unlike

the case with Indonesia, which is dominated by Indonesian researchers themselves and researchers from other countries, namely Malaysia, the USA and the UK.

In addition, our investigation of word analysis through application data processing found that research with Islamic themes in Indonesia tends to be dominated by topics on peer to peer lending (P2PL). P2PL is an online platform that connects borrowers with lenders without intermediaries, making it possible to get loans more quickly than traditional systems (Abidat et al., 2019; M A Afandi & Muta'ali, 2019; Firdaus et al., 2022). This is inseparable from Indonesia's position as the top position country in the number of sharia fintech in the world, which reaches 61 sharia fintech or 16.27% of total sharia fintech globally (Dinar Standard & Elipses, 2022). Until now, there are 6 sharia fintech lending companies that have obtained permits from OJK as of March 2023 (OJK, 2023). Some of the topics raised regarding P2PL are community interest and consumer issues (Abidat et al., 2019; M A Afandi & Muta'ali, 2019; Ichwan & Kasri, 2019; Wirani & Ibrahim, 2022), risk (Firdaus et al., 2022; Khilfah & Faturohman, 2020; Muhammad et al., 2021), its potential (Musjtari et al., 2022; Rosavina et al., 2019). Unlike Malaysia, which tends to raise the topic of Islamic crowdfunding, which is a platform that facilitates the funding of various forms of projects and businesses that are in accordance with Islam, including small business financing, infrastructure development, and so on (Abd Rashid et al., 2021). This topic is always associated with MSMEs, especially their role in MSME development. Islamic crowdfunding has apparently increased capacity to encourage the sustainability and development of MSMEs in Malaysia. Some of the topics that have developed regarding Islamic crowdfunding in Malaysia are the role in MSME development (Abd Rashid et al., 2021), development models (Aderemi & Ishak, 2023; Ishak & Rahman, 2021), issues related to customers such as the use of technology (Baber, 2021; Salim et al., 2021).

Although the above trends seem different, there are similarities in placing Islamic fintech and bank studies as the main study. In Indonesia, some of these studies include customer issues (Muhammad Anif Afandi & Muta'ali, 2019; Fatmawati et al., 2023), roles (Aminah et al., 2020; Shah et al., 2023), security (Azizah, 2023; Rahman et al., 2021), regulation (Nastiti & Kasri, 2019), and others. While in Malaysia, it is related to bank customer issues (Baber, 2020; Mohd Thas Thaker et al., 2022), roles (Banna et al., 2023), impact (Safiullah & Paramati, 2022), and others.

6. Conclusion

The theme of Islamic fintech is relatively new, so there are opportunities for researchers to conduct large research. Indonesia and Malaysia as countries can become centers in understanding the development of Islamic fintech. This can be seen from research trends from the two countries, where Islamic fintech research in Indonesia is more dominated by P2PL sharia, while Malaysia is more likely to be dominated by Islamic crowdfunding topics. This research contributes greatly to understanding the conditions of research on Islamic fintech so that it can become a reference for future researchers.

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