BIBLIOMETRIC ANALYSIS OF ISLAMIC LETTERS OF CREDIT

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ABSTRACT

Research mapping is essential to describe the topic and appropriate references before conducting research, including Islamic letters of credit. This research aims to review the literature on Islamic letters of credit. This research is a literature review using bibliometric methods with the Dimensions database. The keyword used in the article search is Islamic letter of credit. The data found and processed was 56 articles published from 2010-2023. The data was processed using Microsoft Excel and Bibilioshiny R programs. This research shows that most of the most productive writers come from Malaysia and Turkey. A topic that can be developed for further research is Islamic economic contracts linked to Islamic letters of credit. This research can be used as a reference for future research, as well as information regarding research gaps and an overview of research conditions regarding Islamic letters of credit, which will be developed to be broader and more varied.

Keywords: Islamic letter of credit, bank regulation, business financing.

INTRODUCTION

The existence of international trade creates the need for appropriate payment facilities to facilitate unknown parties to conduct transactions safely. One of the most popular payment facilities for international trade is a Letter of Credit (L/C) (Ermakov et al. 2018; Hassan, Sajid, and Kanwel 2023). L/C has an important role in facilitating the payment of export transactions, securing the funds provided by the importer to pay for imported goods, and guaranteeing the completeness of shipping documents. Therefore, L/C guarantees the repayment of goods to be sent by the exporter (Utami, Djuwityastuti, and Adiastuti 2016). Letter of credit is a product of conventional and Islamic banking. Letter of credit products in conventional banks are not Islamic-compliant because there is an element of interest in these products, so there is a Islamic letter of credit with a Islamic contract that is a solution to the problem (Khoiruddin 2010).

Research on Islamic letters of credit is quite interesting because this topic has yet to develop significantly every year. Meanwhile, much research on letters of credit is published yearly. Seeing this gap, it is necessary to map the literature regarding Islamic letters of credit using bibliometric analysis. Bibliometric analysis maps the literature visually, helping researchers identify the most influential studies and map research areas without subjective bias, even before reading related articles. This method provides a systematic, transparent and reproducible review process, thereby improving the quality of reviews (Kemeç and Altınay 2023). Bibliometric networks consist of nodes in the form of circles.
or circles that represent keywords, while the edges or nodes of the network represent the relationship between pairs of nodes (Donthu et al. 2021; Susanti et al. 2022). Bibliometric analysis in information science is an analysis that can reveal patterns of document utilization, literature development or information sources in a field of study (Donthu et al. 2021).

This research offers a significant novelty in that it complements the limited literature review using a bibliometric approach to Islamic letter of credit research. Research using a bibliometric approach to map Islamic letters of credit is still minimal. Previous bibliometric research topics instead focused more on management, information systems, and medicine (Ellegaard and Wallin 2015). The average discussion of Islamic letters of credit is about the law of Islamic transaction contracts used in L/C products, analysis of the implementation of the Fatwa of the National Sharia Council regarding L/C, an overview of Islamic issues related to the application of L/C (Othman, Hashim, and Aziz 2010; Khoiruddin 2011; Utami, Djuwityastuti, and Adiastuti 2016; Fahmi, Malik, and Senjati 2018; Rizal and Surisno 2018).

The purpose of this study is to describe the authors, author collaboration relationships, sources, and topics that can develop from previous studies on Islamic letters of credit taken from the Dimensions database, which is then processed using Bibilioshiny R. Journals on this topic are interesting to discuss considering the limited scope of research on this topic so that it can be one of the references for researchers who are interested in researching Islamic Letter of Credit more broadly and deeply. This research provides a comprehensive picture of opportunities for researching Islamic letters of credit. It makes it easier for further research to browse previous journals related to the topic and describes research topics that can be developed so that existing research developments can do research.

LITERATURE REVIEW

Letter of Credit

Letter of credit (L/C) is a financial instrument provided to clients to assist them in their import or export business. Letter of credit (L/C) is the most reliable and widely used form of payment for international trade (Kim 2015; Puneri 2021). Through a letter of credit, exporters can get direct payment, an international payment mechanism, instead of waiting for news from abroad to receive payment (BI 2020). Furthermore, Islamic banks provide financing through letters of credit (L/C), especially L/C financing for Islamic imports and exports. A letter of credit offers secure payment to two parties who are unrelated but wish to make a transaction. Secure payments help exporters or importers make transactions in the era of globalization, where trade has experienced rapid and open growth (Aliyah and Indra 2017).

In the US Department of Commerce (2012), the L/C mechanism is positioned as an agreement issued by the bank on behalf of the buyer (USDC 2012). The exporter will be paid if the requirements written in the L/C have been met and the submission of the necessary documents has also been authorized. Then, the buyer makes a credit and pays the bank that issued the L/C. When reliable credit information on a foreign buyer is complex to obtain, but the
exporter is confident that the foreign bank represents the buyer's creditworthiness, an LC can help. The LC also protects the buyer since there is no payment obligation until the product is delivered as promised. In this case, L/Cs can maintain security and facilitate payment for international trade between exporters and importers (Kerr J. 1977).

Islamic Letter of Credit

In Islamic law, L/C operations can be harmonized with Islamic finance and banking regulations in international trade. Transaction contracts by Islamic law in the application of L/Cs that can be used include wakalah, mudharabah, musyarakah, hawalah, and ijarah (Rizal and Sutrisno 2018; Yutika 2018). These Islamic contracts accommodate the needs of Islamic businesses in international trade using an Islamic letter of credit (Puneri 2021). Moreover, the contracts must comply with Islamic compliance to create comprehensive customer security (Rachmad 2021). It is the answer to the fundamental problem related to the need for L/C by Muslim importers and exporters. Islamic L/C can use L/C by eliminating usury/interest banks give (Khoiruddin 2010; 2011).

Business Financing

Business financing is the distribution of funds originating from banks, both conventional and Islamic. Based on Bank Indonesia regulations, financing is the investment of funds through rupiah and foreign currencies provided to bank customers or other parties who transact with customers (Sari 2020). Myers (1984) classifies business financing into two main categories: debt and equity. Firm owners provide equity in the form of shares, while debt results from borrowed money. Furthermore, research conducted by Rajan and Zingales (1995) emphasizes the importance of financial institutions in facilitating business financing. Financial organizations like banks and capital markets provide financing services promoting business expansion and development. Nonetheless, economic conditions and laws can impact business financing globally. Demirgüç-Kunt and Maksimovic (1999) research shows how variations in banking laws and financial systems affect business financing in different countries.

METHOD

This research is included in a literature review that uses bibliometric analysis. Bibliometrics is a systematic method for analyzing the distribution mapping of published and cited research, the most prolific authors, and the journals with the most contributions to research on a chosen topic (Kemeç and Altınav 2023). Bibliometrics is usually used to measure periodic publications, such as magazines or scientific journals (Budianto 2023; Syamlan and Antonio 2023). This research uses secondary data from articles taken from the Dimensions website with the keyword "Islamic Letter of Credit" with a research year span of 14 years from 2010-2023. This period was chosen because it has enough to process. Metadata was obtained from Dimensions because the number of articles indexed by Dimension regarding Islamic Letters of Credit is more than Scopus and explains that Dimensions is an indexation alternative with the criteria that all
articles have a certain DOI (Rusydiana 2021). The data obtained was 56 articles, which were then processed using Microsoft Excel and Biblioshiny R.

Biblioshiny is a free research document analysis software supported by R environment (Aria and Cuccurullo 2017). This software provides analysis tools that can be used for qualitative and bibliometric research. The outputs of the Biblioshiny R method described in this study are the most relevant sources, most globally cited documents, and cumulative occurrences. Biblioshiny R software generally produces more complete output than VosViewer or other similar software. The use of this method in the study is based on several things, namely that the output obtained is objective, transparent, and reproducible (Eck and Waltman 2014). In addition, this method also represents a visualization of research trend mapping related to the chosen topic. This method provides comprehensive search results with systematic analysis (Hu and Zhang 2017). This research discusses research trends, journal contributions, author productivity, collaboration networks, relevant sources, and thematic maps.

RESULTS AND DISCUSSIONS

Research Trends

This section explains the data used and research trends regarding Islamic L/C. Based on Table 1, the first publication related to Islamic L/C was done in 2010. Since then, 56 articles have been published by 49 publishing journals, and 105 authors have worked on Islamic L/C-related articles. Figure 1 reflects the annual trend of publications and citations of Islamic L/C between 2010 and 2023. Regarding citation performance, the trend decreased in 2014-2015 as there was no research on Islamic L/C in that year and increased in 2022 with the highest publication compared to the year before and after.

<table>
<thead>
<tr>
<th>Description</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Timespan</td>
<td>2010-2023</td>
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<tr>
<td>Sources</td>
<td>49</td>
</tr>
<tr>
<td>Publication Type:</td>
<td></td>
</tr>
<tr>
<td>• Article</td>
<td>56</td>
</tr>
<tr>
<td>• Chapter</td>
<td>5</td>
</tr>
<tr>
<td>• Preprint</td>
<td>2</td>
</tr>
<tr>
<td>Average Citation Per doc</td>
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<tr>
<td>Annual Growth Rate</td>
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</tr>
<tr>
<td>Co-Author Citation Per doc</td>
<td>1.96</td>
</tr>
<tr>
<td>Author</td>
<td>105</td>
</tr>
</tbody>
</table>

*Source: secondary data (processed, 2024)*
Journal Contributions

Journal contributions are seen from the highest number of citations. Table 2 shows the top 3 contributing journals on Islamic letter of credit research. The first rank is the journal ISRA International Journal of Islamic Finance, with a total of one publication and a total of four citations. The following ranks are the Journal of Risk and Financial Management and the Airlangga International Journal of Islamic Economics and Finance, with one publication, each journal with three total citations. The three most relevant journal article publications are researched by Othman, Hashim, and Aziz (2010) entitled "An Overview of Shari'ah Issues Regarding the Application of the Islamic Letter of Credit Practice in Malaysia" and research by Alwi, Ibrahim, and Sawari (2013) entitled "An Issue on Uniform Customs and Practice for Documentary Credits (UCP) No 600 for Islamic Letter of Credit"

<table>
<thead>
<tr>
<th>Nu.</th>
<th>Journal</th>
<th>Total Publications</th>
<th>Total Citation</th>
<th>Publisher</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>ISRA International Journal of Islamic Finance</td>
<td>1</td>
<td>4</td>
<td>INCEIF</td>
</tr>
<tr>
<td>2</td>
<td>Journal of Risk and Financial Management</td>
<td>1</td>
<td>3</td>
<td>MDPI</td>
</tr>
<tr>
<td>3</td>
<td>Airlangga International Journal of Islamic Economics and Finance</td>
<td>1</td>
<td>3</td>
<td>Airlangga University</td>
</tr>
</tbody>
</table>

Source: secondary data (processed, 2024)

Author Productivity

The most prolific author is Uzaimah Ibrahim from International Islamic University Malaysia, with a total publication of two articles related to Islamic letters of credit in reputable journals. In terms of quality, one article has been cited seven times. Next is Sharifah Faigah Syed Alwi from Universiti Teknologi
MARA, Malaysia, who has published one article in reputable journals. In terms of quality, the article has been cited seven times. Then Ahmad Azam Othman from the International Islamic University Malaysia with a total publication of one article, and in terms of quality, the article has been cited six times. The majority of the most productive authors come from Malaysia.

### Table 3 Most Prolific Authors

<table>
<thead>
<tr>
<th>Nu.</th>
<th>Author</th>
<th>Institution</th>
<th>Country</th>
<th>Total Publications</th>
<th>Total Citation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Uzaimah Ibrahim</td>
<td>International Islamic University Malaysia</td>
<td>Malaysia</td>
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<td>7</td>
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<tr>
<td>2</td>
<td>Sharifah Faigah Syed Alwi</td>
<td>Universiti Teknologi MARA</td>
<td>Malaysia</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>3</td>
<td>Ahmad Azam Othman</td>
<td>International Islamic University Malaysia</td>
<td>Malaysia</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>4</td>
<td>Umar Aimhanosi Oseni</td>
<td>Istanbul Sabahattin Zaim University</td>
<td>Turki</td>
<td>1</td>
<td>14</td>
</tr>
<tr>
<td>5</td>
<td>Mohd Fuad Sawari</td>
<td>International Islamic University Malaysia</td>
<td>Malaysia</td>
<td>1</td>
<td>4</td>
</tr>
</tbody>
</table>

*Source: secondary data (processed, 2024)*

### Collaboration Network

![Collaboration Network](image)

*Figure 2 Collaboration Network*

*Source: secondary data (processed, 2024)*

The author collaboration map reflects scientific research cooperation between authors. Figure 2 shows the collaboration between authors who wrote
about Islamic letters of credit. The larger the circle indicates a more extensive total citation, the more significant the author's contribution to the research. It can be seen that Ahmad Azam Othman, Sharifah Faigah Syed Alwi, and Sharifah Faigah Syed Alwi are authors who contribute significantly to the letter of credit research, indicated by the size of the circle and the size of the most prominent name. Academic collaboration between authors facilitates knowledge and exchange, thus expanding the field of research. Visualization of the collaboration network is done using Biblioshiny R. Rectangles/nodes indicate authors; the size of circles/nodes indicates the number of items. The lines show the authors' strength of collaboration, and each colour represents a cluster. Notably, the thickness of connections between nodes displays the frequency of collaboration (Ogunsakin et al. 2022).

**Most Relevant Sources**

![Graph showing the number of documents published by each journal based on their relevance to Islamic letters of credit based on metadata. The results show a list of the top and lowest published journals with a blue bar-shaped diagram. The darker the colour, the more relevant the journal is to the topic under study. There are ten journals listed in the relevant data sources. The number of journal documents published ranges from one to four issues. Most journals are published in the Journal of Islamic Economics Theory and Application as many as four documents. One of the journals articles that are relevant to the list in Figure 3 is the research of Puneri (2021) entitled "Conventional and Islamic Letter of Credit: Comparison and Implementation" and the research of Triyawan and Novitasari (2020) which is entitled "The Influence of Islamic Commercial Bank's Letter of Credit Financing and Exchange Rate Towards Indonesia's Exports From 2014 To 2018".](https://ejournal.stiesyariahbengkalis.ac.id/index.php/jps)

**Figure 3 Most Relevant Sources**

*Source: secondary data (processed, 2024)*

Thematic Maps

Thematic Maps show the development of topics as indicated by the description of the position of each topic in a quadrant divided into four parts by
comparing the density and centrality of topics. Figure 4 shows that each quadrant has its topic. In simple terms, if the density increases, more is being examined, such as trend issues and many papers related to the topic. Centrality is related to several topics relevant to the big topic being examined. The more to the right the topic is considered, the more or the more relevant and the more impactful it is (Afifandasari, Suluri, and Ramadhan 2023).

![Thematic Maps](source: secondary data (processed, 2024))

The thematic map is divided into four quadrants: basic themes, motor themes, niche themes, and emerging/declining themes (Bachtian and Setiawan 2023). Basic themes are quadrants that show the themes that appear the earliest; these themes include "Islamic", "Financial", and "Financing". The author groups these themes with the label Islamic financial and financing. The motor theme is a quadrant that shows essential themes in the research; the motor theme is labelled letter of credit regulation. A niche theme is a theme that rarely appears or has just emerged from the existing themes labelled Islamic economic contracts. Emerging/declining theme is a theme that has begun to be widely used, so it has decreased in density from the themes in the quadrant labelled international trade finance.

Discussions

Based on the results previously presented regarding the mapping of journal articles on the topic of Islamic letters of credit, the amount of research on this topic is still limited, and this is shown by the total journal articles obtained from Dimensions, namely only 56 articles published from 2010 to 2023. This small amount of research is also found from the results of metadata searches from Scopus, which provides a smaller number of journals from Dimensions, namely,
only 12 articles from the same research year. This fact shows that research on Islamic letters of credit is still limited and has an excellent opportunity for further research. The journal article data found on Google Scholar is because several studies were not indexed by Scopus or Dimension, such as journal articles by Lahsasna (2007); Azzahro and Amir (2023); Hassan, Sajid, and Kanwel (2023).

If look at the total journals published each year based on research trend results, the research trend on this topic tends to increase from 2010 to its peak in 2022, but the trend decreased in 2023. This trend reinforces the previous statement that research on this topic is limited. The number and the type of methodology used by previous researchers can be expanded by future researchers. On average, previous studies used doctrinal or normative legal research methodologies, such as in studies conducted by Utami, Djuwityastuti, and Adiastuti (2016); Rizal and Sutrisno (2018), descriptive analysis such as research conducted by Hassan, Sajid, and Kanwel (2023), descriptive quantitative used by Triyawan and Novitasari (2020).

Furthermore, to determine the top 3 contributing journals relevant to Islamic letters of credit, the data is processed manually based on the information provided by Dimension, which appears when entering keywords. The research explains that each journal has a low number of publications and citations, with a publication number of one piece and the highest citation of four. It is different from the findings obtained from Biblioshiny R in the results section of the most relevant sources, and it is stated that the Journal of Economics and Applied achieved the highest rank with 14 journal articles. This difference occurs because the journals processed in Biblioshiny R are metadata with a broader scope than the information provided by Dimension, which is more specialized and automatically selected.

Authors with writings that can be the primary reference for further research are Uzaimah Ibrahim, Sharifah Faigah Syed Alwi, Ahmad Azam Othman, Umar Aimhanosi Oseni, and Mohd Fuad Sawari. Uzaimah Ibrahim and Sharifah Faigah Syed Alwi are the authors of the article Alwi, Ibrahim, and Sawari (2013) entitled "An Issue on Uniform Customs and Practice for Documentary Credits (UCP) No 600 for Islamic Letter of Credit" and Alwi et al. (2022) entitled "Issues of Letter of Credit in Malaysian Islamic Banks". Then Ahmad Azam Othman is one of the authors of the article Othman, Hashim, and Aziz (2010) entitled "An Overview of Shari'ah Issues Regarding The Application of The Islamic Letter of Credit Practice in Malaysia". The research conducted by Othman, Hashim, and Aziz (2010) is one of the journals regarding the Islamic letter of credit indexed by Scopus. In addition, the collaboration network results show that Uzaimah Ibrahim, Sharifah Faigah Syed Alwi, and Ahmad Azam Othman have the most contributions to Islamic letter of credit research as measured by the number of citations and the number of collaborations with other authors.

The discussion of rarely researched topics is an important thing that must be known by writers interested in researching Islamic letters of credit. According to the results found, the topic that the future author can develop is the topic of Islamic economic contracts associated with the Islamic letter of credit; the niche theme quadrant indicates this; although all the circles in the quadrant intersect with other quadrants, this shows the novelty of research on the Islamic letter of
credit is more diverse in the future as well as the topic that the author labelled is still very closely related to important topics and also common topics that are starting to decline.

The research topic that can be developed based on the niche theme quadrant is Islamic economic contracts related to Islamic letters of credit practice in the industrial field. It can be seen from the latest research that leads to this topic, one of which has a specific discussion of a contract and its application to Islamic letter of credit products, such as research by Maulana (2020) entitled "Wakalah Agreement Application in Bank Syariah Mandiri Letter of Credit (Aplikasi Akad Wakalah Dalam Letter of Credit Bank Syariah Mandiri)", Mawadah and Pibriani (2022) entitled "Implementation of Wakalah on Domestic Letters of Credit in Islamic Banking (Implementasi Wakalah Pada Surat Kredit Berdokumen Dalam Negeri Di Perbankan Syariah)", Ramadanti (2022) entitled "Application of the Wakalah Agreement in the Islamic Letter of Credit System (Penerapan Akad Wakalah pada Sistem Letter of Credit Syariah)" and other research related to this topic.

CONCLUSIONS

Research on Islamic letters of credit is quite interesting because research on this topic only develops yearly. Metadata obtained from Dimensions, research on Islamic letters of credit only amounted to 56 articles from the initial year of research conducted until 2023. It is very different from research on letters of credit, which totaled 1,903 studies. Based on the results of 56 articles published from 2010-2023, it is found that most of the most productive authors writing research on Islamic letters of credit come from Malaysia and Turkey. As for the collaboration network, it shows that Ahmad Azam Othman, Sharifah Faigah Syed Alwi, and Sharifah Faigah Syed Alwi are authors who contribute significantly to the letter of credit research based on the number of citations and the number of collaborations with other authors. The topic that future authors can develop is the topic of Islamic economic contracts associated with the Islamic letter of credit.

Before conducting research, researchers need a map that describes the topic and the correct references to the study. With this research, future research can make the results of this study an illustration of the conditions of research on Islamic letters of credit that will be developed to be broader and more varied. Developing the research topic regarding Islamic letters of credit leads to discussions about Islamic economic contracts in Islamic letters of credit products. This topic could be researched more widely if refined with a detailed analysis of practice in the field. Topics that should be avoided for research are topics related to international trade finance.

The weakness of this research is the small number of journals contained in the metadata originating from Dimension with the keyword "Islamic Letter of Credit" so that future authors can use other metadata that is more complete and has a more significant number of journals, with more varied keywords come from more than one dataset. The research year is limited to only 14 years so that future researchers can research different years with a more complete discussion.
REFERENCES


