

BIBLIOMETRIC ANALYSIS OF MORATORIUM

Nur Ain Nazihah Muhammad Rizal¹
Hasyeilla Abd Mutalib^{2*}
Afiffudin Mohammed Noor³

¹Academy of Contemporary Islamic Studies, Universiti Teknologi MARA, Cawangan Perlis, Kampus Arau, 02600 Arau, Perlis, Malaysia, (E-mail: nazihahain@gmail.com)

²Faculty of Business and Management, Universiti Teknologi MARA, Cawangan Perlis, Kampus Arau, 02600 Arau, Perlis, Malaysia, (E-mail: hasyeilla798@uitm.edu.my)- corresponding author

³Academy of Contemporary Islamic Studies, Universiti Teknologi MARA, Cawangan Perlis, Kampus Arau, 02600 Arau, Perlis, Malaysia, (E-mail: afiffudin@uitm.edu.my)

Article history

Received date : 5-9-2022
Revised date : 6-9-2022
Accepted date : 4-11-2022
Published date : 5-11-2022

To cite this document:

Muhammad Rizal, N. A. N., Abd Mutalib, H., & Mohammed Noor, A. (2022). Bibliometric Analysis of Moratorium *Journal of Islamic, Social, Economics and Development (JISED)*, 7(49), 15 - 25.

Abstract: *This article presents a bibliometric analysis on moratorium which have been analyzed using the VOS viewer 1.6.18 to evaluate the global research trends, specifically the publication growth, publication outputs by countries, topics of interest, and co-occurrences of author keywords. Approximately 247 articles published between 1976 to 2022 were retrieved from the Scopus database. The findings have shown a growing trend in terms of publication outputs. Most of the publications were by the researchers from United States followed by United Kingdom and Canada. The keyword 'moratorium' has the highest occurrence in the publications followed by 'United States'. A closer look at the co-occurrences of author keywords revealed that 'moratorium' has 7 links. It can be concluded that the results from the analysis could be used by future researchers to explore under research areas related to workplace moratorium.*

Keywords: *Bibliometric Analysis, Finance, Moratorium, Scopus Database, VOS viewer*

Introduction

A moratorium is the temporary suspension of financing payments. According to Lohia (2021), suspensions of moratoriums are often enforced by the government or the private sector. Typically, a moratorium is imposed during economic crises such as COVID-19. Almost the whole nation implemented the moratorium. Moratorium is one of the financial mechanisms that may assist in balancing cash flow and the economy (Drabancz et al., 2021). However, the implementation of the moratorium will have a significant impact on a variety of factors. During the COVID-19 breakdown, for instance, might cause the bank to run out of money to pay its expenditures and also cause a reduction in the bank's revenue and profits (Shean, 2020).

Numerous moratorium-related studies have been done by prior scholars. Scopus has relatively little research on moratorium in the fields of economics, econometrics, and finance. There were just 247 publications of moratorium between 1976 and 2022. However, there is less study on moratoriums that use scholar databases and bibliometric techniques. In light of this, the researchers will conduct a bibliometric analysis of moratorium using Scopus as a database.

Next, the data will be evaluated using software called VOSviewer. This study aims to determine the publishing pattern associated with moratorium in terms of year, type of access, subject area, subject title, country, document type, citation scores, source type, and keywords used by researchers. According to the findings of this study, fresh researchers will be able to conduct moratorium studies that meet existing requirements.

Following this part is a review of relevant prior studies on moratorium, followed by an explanation of the methodology used to achieve the aims of this study. The findings and discussion of the bibliometric moratorium constitute the next and most crucial component of this study. A conclusion to the full investigation will be offered at the end of this article.

Literature Review

According to Somasundaram (2020), a moratorium is a temporary suspension on specific activity. Mehta & Kaul (2020) define a moratorium as a temporary stoppage or deferral of activity until the situation that prompted the moratorium is rectified. While, based on Haryono (2018), moratoriums are often implemented in the form of loan deferrals or conditional payments on rules to prevent a deepening of the financial crisis. This indicates that debtors are not required to make their monthly payments during the moratorium period set at a predetermined time rate. The goal of the moratorium is to provide liquidity and prevent financial exemptions before resuming economic activity after a delay caused by health emergencies (Zunzunegui, 2020). Nonetheless, a moratorium on commercial whaling was implemented in 1985 (Holt, 1985).

In the COVID-19 period, moratorium issues are popular, passionate, and frequently argued. Malaysia imposed a six-month moratorium from April 1, 2020, to September 30, 2020 (Ministry of Finance, 2020). The moratorium applies to all retail and small- and medium-sized (SMEs) business financing instruments (excluding credit cards) (Azmuddin & Mohammad Amir, 2021). Malaysia's offer and execution of the moratorium drew international interest, particularly from Asian countries such as Singapore, Indonesia, Thailand, and others (Ismail et al., 2021). Apart of Asian countries, there are also have other countries that are implementing moratorium such as India (Dey, 2020; Dey & Juan, 2020; Mehta & Kaul, 2020; Somasundaram, 2020; Tiwari et al., 2021), Spanish (Zunzunegui, 2020), Hungary (Drabancz et al., 2021) and Bulgaria (Marinov, 2020).

However, the implementation of the moratorium for each country is different, for example India, has instituted a 3-month embargo on all sorts of term loans, including mortgage loans, auto loans, personal loans, agricultural loans, and crop loans, as well as credit card payments (Geetha, 2020). Each country has its own way of implementing it. In addition, throughout the execution of the moratorium, various complications arose, including the customer's agreement to participate in the moratorium (Amir, 2020), adjustments to instalments imposed after the moratorium period has expired (Azmuddin & Mohammad Amir, 2021) and restructuring and rescheduling the contract (Muhd Ramadhan Fitri, 2021).

Several studies in the topic of bibliometrics have been done. Bibliometric analysis approaches are significant because they allow researchers to map literature studies accurately, allowing them to identify and visualize a network of study contributions and linked authors (Van Eck & Waltman, 2007). However, no research has been conducted on the topic of bibliometric moratorium.

Methodology

A bibliometric analysis study was undertaken in this study. Researchers use the Scopus database to analyze worldwide research trends by evaluating its publications. The Scopus database was mined for data on May 19, 2022. (TITLE-ABS (moratorium)) was the query string used for the search. The query string returned 3,003 results from 1976 to 2022. Only Economics, Econometrics, and Finance are chosen as test subjects from the entire query string which consist of 247 items. The results of the Scopus search were then examined based on access title type, year, country, topic area, language, and source title. In order to organize publications in phases, researchers also considered the quantity of citations for publications. The researchers will next export the citation, bibliographic, and abstract data to VOS viewer version 1.6.18. Using this software, the researchers analyzed the co-occurrence of author keywords by creating a bibliometric map, and then determined the item with the highest frequency of occurrence. The researchers then assessed both the item and the strength of the association.

Result And Discussion

This study aims to evaluate and provide visual and statistical analysis of the pattern moratorium publications. The following analyses evaluate moratorium publications based on the Scopus database and the analysis using VOSviewer version 1.6.18.

Analysis by Year

The search result using the query string yielded 247 results in the Scopus database. This study reviewed 247 publications from 1976 to 2022, that is, for 46 years. Based on Figure 1 publications by year, the first publication was in 1976. At the start of the 22-year publishing embargo, from 1977 to 1998, only one, two, or three publications were issued. In 1999, the number of publications increased to 7 publications. However, publications decreased to 5 and 2 in 2000, and 2001 and the publication increased to 2 and 3 in 2002, 2003 and soared up to 11 in 2004. Yet, the publications dropped to 3 in 2005, and the publications slowly grew from 2006 to 2008 with 5, 6 and 8 publications. In 2009, publications decreased to 3 and increased to 8 and 9 in 2010 and 2011. However, in 2012, the number of publications dropped one from the previous. From 2013 until 2017, the number of publications fluctuated 11, 10, 16, 10 and 9. In 2018, the publications jumped to 20 and fell to 10 in 2019. The number of publications increased to 18 in 2020 and got the highest number of publications in 2021 with 27 publications. Finally, in 2022, the publishing collapsed to 7 issues.

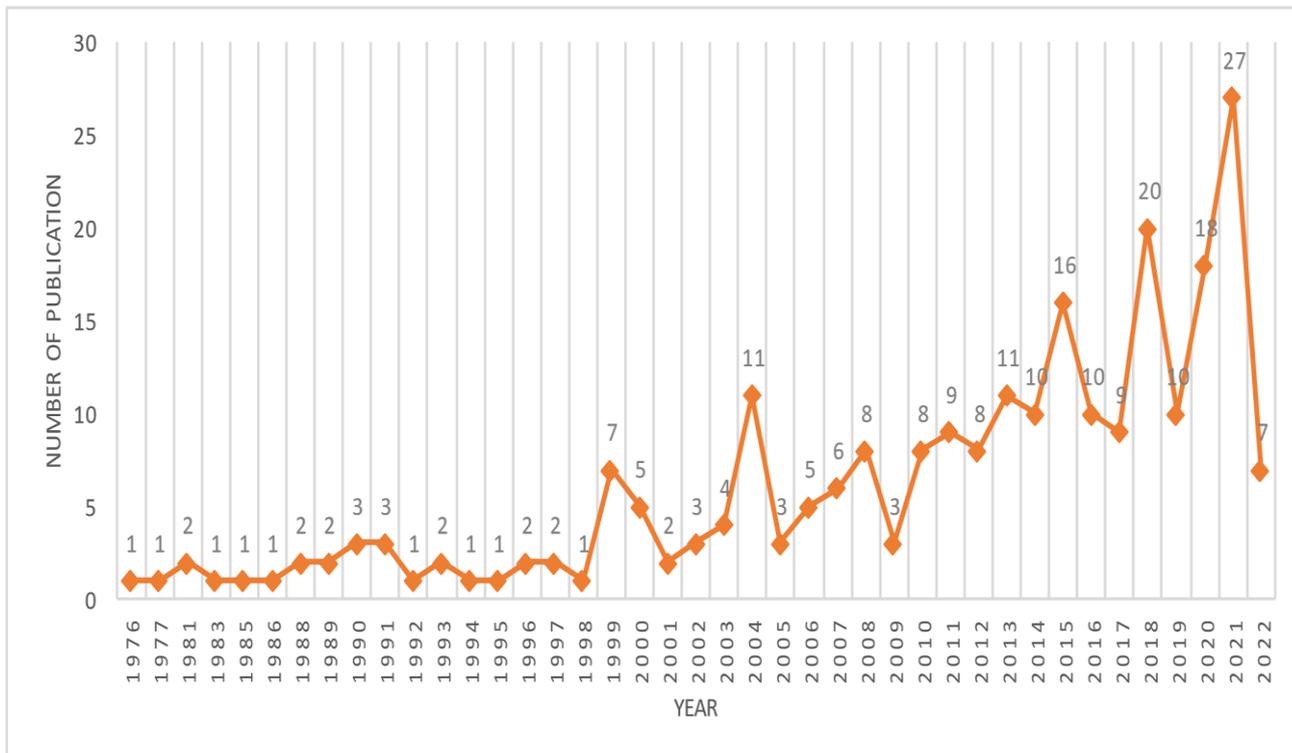


Figure 1: Publications by Year

Analysis of Subject Area, And Source Title

Figure 2 depicts the distribution of publications by subject area. With 247 publications, Economics, Econometrics, and Finance are the subject area with the greatest number of publications. Then, Social Sciences (118 articles), Business, Management, and Accounting (57 publications), and Environmental Science (52 publications). While Agricultural and Biological Sciences (48 publications), Arts and Humanities (10 publications), and Energy (7 publications). In addition, there are five publications for Biochemistry, Genetics and Molecular Biology, Engineering, and Mathematics.

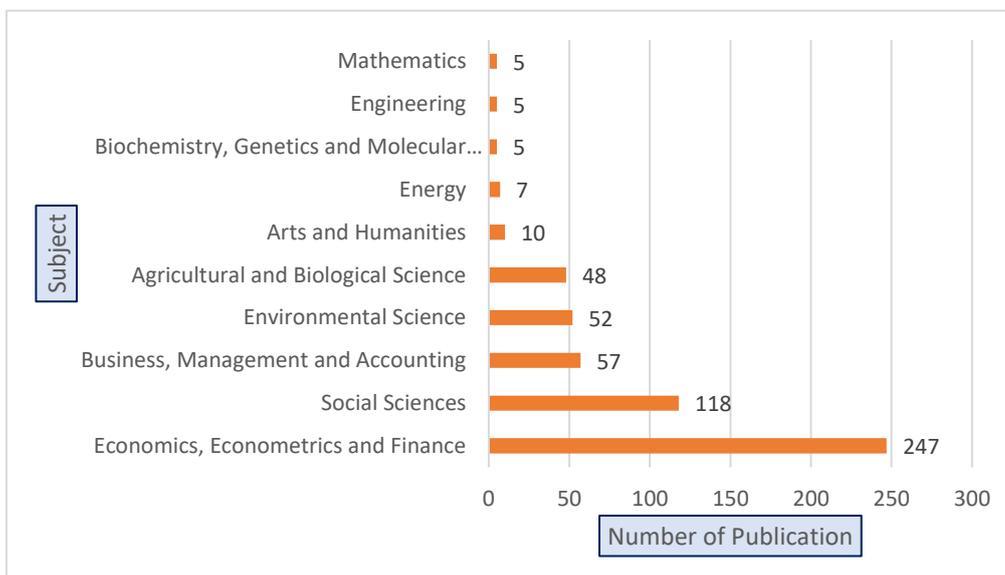


Figure 2: Publications by Subject Area

Figure 3 below represents the number of publications by source title. Researchers have compiled a list of the 10 source categories with the largest number of articles. Based on source title with 10 publications, the highest publication is from the Marine Policy with 22 publications. Economic and Political Weekly ranks second with 7 publications. International Insolvency Review and American Journal of Agricultural Economics are tied for third place with 6 publications for each. Agbioforum, Applied Economics, Ecological Economics, European Company and Financial Law Review, Journal of Environmental Economics and Management, and Journal of World Trade have the fewest number of publications with 4 issues.

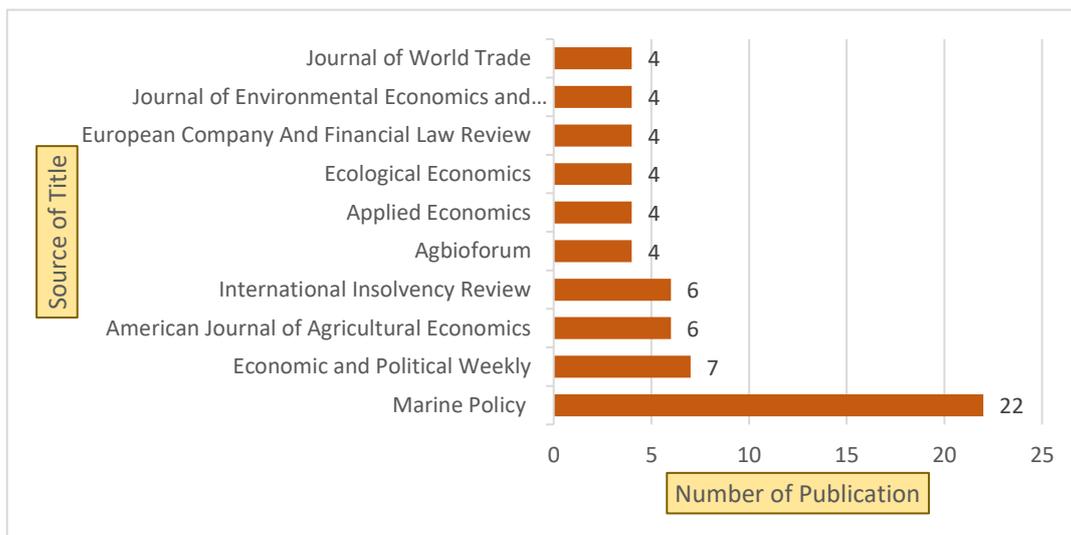


Figure 3: Publications by Source Title

Analysis of Document Type

According to the Scopus database, the majority of publications are articles (201), whereas erratum, editorial, and book have the fewest number (1 each). The number of published reviews was 17, while the number of book chapters was 16. There are also 3 note publications and 7 conference publications. Publication by document type is seen in Figure 4.

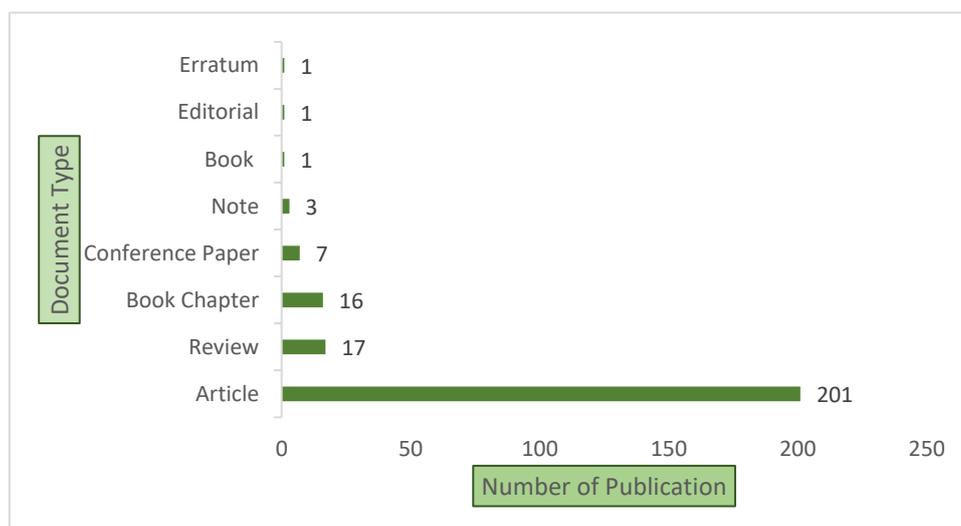


Figure 4: Publications by Document Type

Analysis of Citation Scores

Researchers were thus interested in analyzing the publications with citation ratings. Table 1 displays the titles of the 10 publications with the greatest citation ratings for publication moratorium. This table reveals that moratoriums have been explored since the 1980s. The publication with the greatest number of citations is Journal of Accounting and Economics. This paper has been cited 166 times. Economy and Society, Journal of Financial Economics, and Marine Policy collected 138, 136, and 111 citations, respectively, for further moratorium-related papers. Next, Journal of Finance and Journal of Regulatory Economics publications received 80 citations apiece. Marine Policy, Journal of Public Economics, and International Journal of Health Care Finance and Economics had scores of 72, 71, and 64, respectively. The publication with the fewest citations is National Tax Journal, with 59 citations.

Table 1: The top ten highest cited publication in the moratorium area

No	Document title	Year	Source	Citation Score
1.	Determinants of the corporate decision to capitalize interest	1981	Journal of Accounting and Economics 3(2), pp. 151-179	166
2.	Compressed modernity and its discontents: South Korean society in transition	1999	Economy and Society 28(1), pp. 30-55	138
3.	Dual-class recapitalizations as antitakeover mechanisms. The recent evidence	1988	Journal of Financial Economics 20(C), pp. 129-152	136
4.	The global potential for whale watching	2010	Marine Policy 34(6), pp. 1273-1278	111
5.	How Do Exchanges Select Stocks for Option Listing?	2004	Journal of Finance 59(1), pp. 447-471	80
6.	The impact of state incentive regulation on the U.S. telecommunications industry	2002	Journal of Regulatory Economics 22(2), pp. 133-160	80
7.	The Newfoundland fishery: Ten years after the moratorium	2005	Marine Policy 29(5), pp. 407-420	72
8.	\$2.00 Gas! Studying the effects of a gas tax moratorium Open Access	2008	Journal of Public Economics 92(3-4), pp. 869-884	71
9.	A longitudinal study of Medicaid payment, private-pay price and nursing home quality.	2004	International journal of health care finance and economics 4(1), pp. 5-26	64
10.	Evaluating the Costs and Benefits of Taxing Internet Commerce	1999	National Tax Journal 52(3), pp. 413-427	59

Analysis of Source Type

Based on the Scopus database, the researchers determined that the majority of articles (225) were published in journals while the fewest were published in conference proceedings (1 publications). The number of books that have been published is 15, followed by trade journals and book series, which each have 3 publications. Publications are shown in Figure 5 depending on the document type.

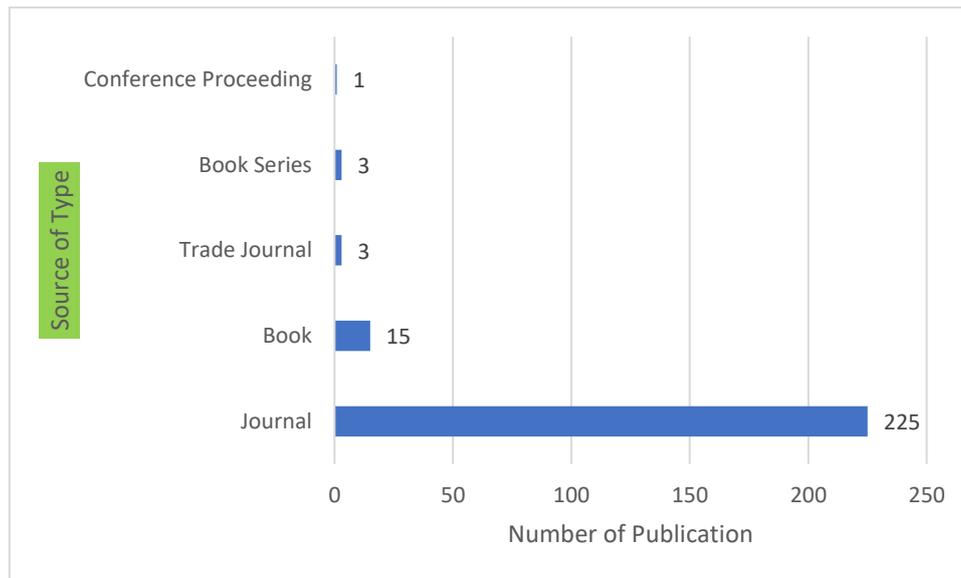


Figure 5: Publications by Source Type

Analysis of Productive Country

This research evaluated nations by author affiliation in order to rank those having the most moratorium-related publications. At least ten nations with the highest citation were eligible for participation. In this analysis, 247 of the total number of articles were evaluated. With a total of 93 publications, the United States has produced the greatest number of articles about moratorium. The United Kingdom follows with 29 publications. Canada and Germany are next with 16 and 12 publications on moratorium, respectively. Australia, the Netherlands, and Switzerland all have ten publications in common. France, India, and Norway have the fewest publications, with 9 for each. Figure 6 depicts the distribution of publications per country.

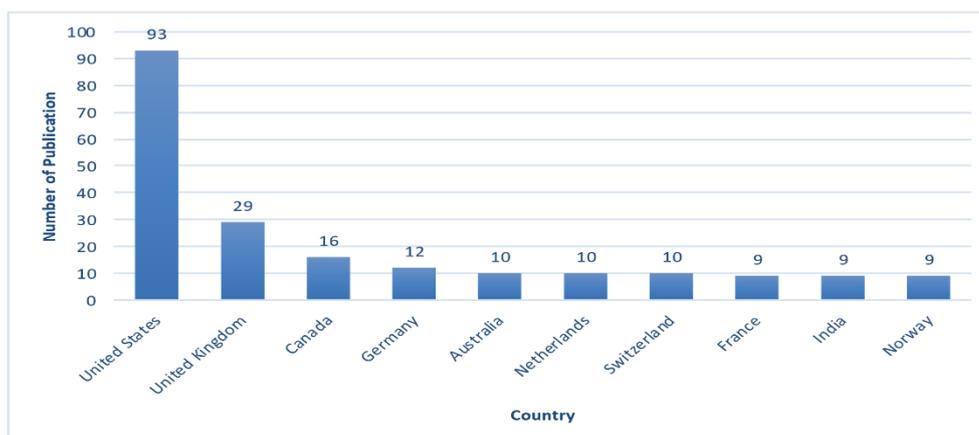


Figure 6: Publications by Countries

Analysis of Keyword Co-occurrence

Using VOSviewer version 1.6.18, a bibliometric map was constructed for the keyword cooccurrences moratorium. Figure 7 illustrates the bibliometric map of author keyword co-occurrences. When using the overlay visualisation option, the size of the bubble indicates the frequency of occurrence, the width of the lines and the distance between the bubbles indicate the strength of the relationship, and the colours identify clusters.

The author's keyword frequency the association between fisheries management and moratorium is the greatest since it has the brightest colours compared to other phrases. The government use a moratorium to contain and calm a crisis. Numerous nations have fisheries challenges as a result of extensive fishing, which has impacted their economies. This may be one of the reasons why fisheries management and moratorium have the highest link.

To produce the network, only terms that occurred at least five times were included. Table 2 illustrates the summary topics of interest for moratorium. The most co-occurred terms were “United States” (26 times), “fishery management” (21 times), “whaling” (15 times), “Canada” (11 times), “climate change” (11 times), “debt” (16 times), “environmental policy” (11 times), “European Union” (8) times and “biotechnology” (51times).

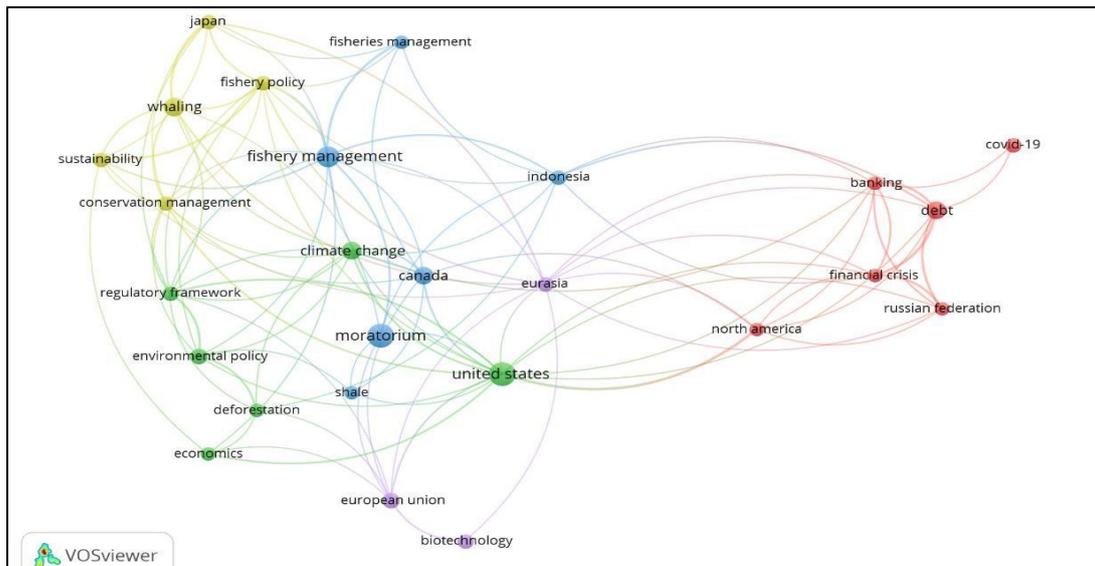


Figure 7: Bibliometric Map by VOS viewer

Table 2: Summary of Topic of Interest for Moratorium

No	Item(s)	Link Strength
1.	Moratorium	7
2.	United States	26
3.	Fishery Management	21
4.	Whaling	15
5.	Canada	11
6.	Climate Change	11
7.	Debt	16
8.	Environmental Policy	11
9.	European Union	8
10.	Biotechnology	3

Conclusion

Bibliometric analysis is a modern and exciting method for investigating the current structure and trend of past research. This article investigated moratorium research from a broader perspective, taking into consideration all related articles that looked into the phenomenon. The evolution of moratorium research from 1976 to 2022 might thus be shown by a bibliometric study. However, the quantity of articles declined drastically in 2022. In the topic of moratorium, Scopus indexed a total of 3003 publications. The results showed that the bulk of moratorium-related articles are centred on Economics, Econometrics, and Finance. As shown by the predominant document type, an article, Marine Policy was the most significant publication about moratorium study. According to the findings of the citation analysis, the most cited sources or scientific publications in moratorium research are the Journal of Accounting and Economics, and the most often used source format is the journal. U.S. writers and institutions make major contributions to moratorium research in terms of geography.

Bibliometric analysis, which investigates moratorium as a research subject and the patterns of moratorium research, provides a different perspective on moratorium research. In addition, these results support the notion that moratorium research is still in its infancy. As more data becomes available, it is anticipated that research on the effectiveness of moratoriums will continue to expand, and this information will be crucial for moratoriums.

This study may pave the way for several future research avenues. Future studies could conduct a bibliometric analysis of moratorium research using a variety of methods or platforms. According to the experts, more research should be undertaken on the moratorium, particularly the financial moratorium. Internet publishing on moratorium is still in its infancy, thus there is room for expansion. This study intends to aid future academics or stakeholders, particularly the government and the banking industry, in enhancing the public's awareness of the moratorium's implementation and its effects. Given the dearth of published research on this subject, future researchers are highly encouraged to examine it.

Economics, econometrics, and finance-related moratorium papers have the highest total publication volume, followed by Business management and accounting. This indicates that this discipline gives a fundamental grasp of the moratorium, including its definition, financing methods, and beginning attempts on how to measure the effectiveness of mass sourcing on projects and its repercussions. These study topics may give indirect guidance and help to the appropriate parties.

Our research reveals that the United States, fisheries management, debt, and whaling are the most frequently utilised search terms. The overlay visualisation map of moratorium-related phrases serves as a resource for future moratorium-related research. This research is limited by two factors. The first limitation is that it only utilises Scopus data, allowing future research to use a wider range of databases, such as Google Scholar or Web of Science. Second, this research is confined to the moratorium. Future researchers may investigate the moratorium by analysing the financial instruments subject to the moratorium during the financial crisis.

Acknowledgements

Nur Ain Nazihah Muhammad Rizal, Hasyeilla Abd Mutalib, and Afiffudin Mohammed Noor developed and prepared the tests. Nur Ain Nazihah Muhammad Rizal was in charge of the testing and data processing. Hasyeilla Abd Mutalib planned and ran the simulations. Afiffudin Mohammed Noor aided in the results' analysis. The lead author of the text was Nur Ain Nazihah Muhammad Rizal. Each

contributor provided insightful feedback and contributed to the research, analysis, and publishing. We affirm that the article is the original work of the authors and co-authors.

This is the first time the content has been made available to the general public. This work has never been submitted for publication in its whole or in part. We attest that all Authors made substantial contributions to the research, authenticity, and validity of the data, as well as their interpretation for submission of this work. This study has received no support from outside sources.

References

- Amir, S. (2020). Do Islamic Banks Act 'Islamic' During COVID-19 Pandemic? *The Journal of Muamalat and Islamic Finance Research*, 17(March), 3–12. <https://jmifr.usim.edu.my/index.php/jmifr/article/view/279>
- Azmuddin, R., & Mohammad Amir, W. H. (2021). *Moratorium In Islamic Hire Purchase Financing: A Shariah Perspective*. 18(1), 13–29.
- Dey, M. (2020). *Case Study Effect of Moratorium on RBI*. March, 59–61.
- Dey, M., & Juan, W. (2020). *Aftermath suffered by RBI due to moratorium*. 1(March), 1–6.
- Drabancz, Á., Grosz, G., Palicz, A., & Varga, B. (2021). Experiences with the Introduction of a Payment Moratorium in Hungary. *Financial and Economic Review*, 20(1), 5–42. <https://doi.org/10.33893/fer.20.1.542>
- Geetha, C. (2020). The Effectiveness Of The Monetary Transmission Channel On Aggregate Demand During The Health Pandemic. *International Journal Of Business And Economy*, 2(4), 104–114. <https://doi.org/10.1016/j.procs.2019.09.150>
- Haryono, H. (2018). Moratorium (Inzhar Ad-Dain) Dalam Tinjauan Hukum Islam. *Ad Deenar: Jurnal Ekonomi Dan Bisnis Islam*, 2(01), 73. <https://doi.org/10.30868/ad.v2i01.239>
- Holt, S. (1985). Whale mining, whale saving. *Marine Policy*, 9(3), 192–213. [https://doi.org/10.1016/0308-597X\(85\)90019-3](https://doi.org/10.1016/0308-597X(85)90019-3)
- Isamail, M. Z., Ya'acob, F. F., Sulaiman, Z., Aziz, S. N. A., Mohd Daud, N., & Zakaria, M. (2021). Implications of Moratorium on Islamic Financial Customers in Malaysia. *International Journal of Asian Social Science*, 11(5), 259–269. <https://doi.org/10.18488/journal.1.2021.115.259.269>
- Lohia, P. (2021). the Covid-19 Moratorium: a Reprieve and Not a Waiver. *Information Technology in Industry*, 9(1), 753–765. <https://doi.org/10.17762/itii.v9i1.196>
- Marinov, M. T. (2020). Application of the Moratorium Over the Payment of Loans in Connection with the COVID-19 Pandemic and its Impact on the National Security in the Republic of Bulgaria. *International Conference Knowledge-Based Organization*, 26(2), 199–204. <https://doi.org/10.2478/kbo-2020-0076>
- Mehta, M., & Kaul, R. (2020). Loan Moratorium 2020- Its Impact on Indian Banks. *Australian Finance & Banking Review*, 4(2), 1–14. <https://doi.org/10.46281/afbr.v4i2.919>
- Ministry of Finance. (2020). *Text Speech YAB Tan Sri Dato' Haji Muhyiddin Bin Haji Mohd Yassin Perdana Menteri Malaysia Pakej Rangsangan Ekonomi Prihatin Rakyat (PRIHATIN)*. <https://pre2020.treasury.gov.my/pdf/Teks-Ucapan-Pakej-Rangsangan-Ekonomi-PrihatinRakyat.pdf>
- Muhd Ramadhan Fitri, E. (2021). Isu-isu dalam Implementasi Moratorium. Muzakarah Cendekiawan Syariah Nusantara ke-15. Kuala Lumpur: *Akademi Penyelidikan Syariah Antarabangsa dalam Kewangan Islam (ISRA)*.
- Shean, K. S. (2020). COVID-19 and Malaysian Banking Industry: Problems Faced by Bank Marketing and Strategies to Promote Services and Bank Brands. *Journal of Emerging Technologies and Innovative Research (JETIR)*, 11(4), 204–217.

- Somasundaram, M. (2020). Merits and Demerits of Moratorium Offered By Banks and Non-Banking Financial Companies in India. *Asia Pacific Journal of Research ISSN*, August, 2347–4793. -
- Tiwari, K., Somani, R., & Mohammad, I. (2021). Covid19 Impact On Cibil Report And Loan Repayment Capacity Of Borrowers (Special reference to Loan Moratorium, Loan Restructuring & Loan default). *Wesleyan Journal of Research*, 14(02). www.economictimes.indiatimes.com
- Van Eck, N.J., & Waltman, L. 2007. Bibliometric mapping of the computational intelligence field. *International Journal of Uncertainty, Fuzziness and Knowledge-based Systems*, 15(5), 625-645
- Zunzunegui, F. (2020). The Spanish loan debt moratorium due to COVID-19, a minimal measure. *Regulacion Financiera, Revista de Derecho Del Mercado Financiero, Working Paper*, 2., 1, 1–6.