# Covid-19 and The Role of Islamic Economics & Finance

### Aisyah As-Salafiyah<sup>1</sup>, Nun Maziyyah Mahsyar<sup>2</sup>

<sup>1</sup>Sharia Economic Applied Research and Training (SMART), Indonesia <sup>2</sup>Sakarya University, Turkey

This study aims to determine the development map of Covid-19 outbreak research that is published by journal in the theme of Islamic economics and finance. The data analyzed were more than 50 publications of indexed research publications. The entire sample journal publications have published in 2020. The export data is then processed and analyzed using the VOSviewer application program to find out the bibliometric map of the development of economic of the role of islamic economics and finance in times of Covid-19 outbreak. The results showed that the number of publications on the development of the role of Islamic economics and finance research experienced a significant increase. Network visualization showed that the map of the development of Covid-19 research was divided into 4 clusters. Cluster 1 consists of 20 topics, cluster 2 consists of 20 topics, cluster 3 consists of 11 topics, and cluster 4 consists of 12 topics. The findings of this study are that there is special attention to the development of the halal industry, especially halal food and Islamic social finance in order to mitigate the impact of the prolonged health and economic crisis.

Keywords: Covid-19, Islamic Economics & Finance, Bibliometrics

#### **OPEN ACCESS**

ISSN 2775-4251 (Online)

\*Correspondence: Aisyah As-Salafiyah assalafiyahsmart@gmail.com

Received: 5 October 2022 Accepted: 13 October 2022 Published: 2 November 2022

Citation:
(2022) Covid-19 and The Role of
Islamic Economics & Finance.
Journal of Islamic Economic

## INTRODUCTION

The whole world is currently experiencing a long crisis due to the Covid-19 pandemic since the beginning of 2020. The virus, which first originated in China, has resulted in severe economic damage (Brodeur et al., 2020). Inflation experienced by Indonesia in March 2020 was recorded at 0.10% (month to month) and 2.96% (year on year). This not only affects the Indonesian rupiah exchange rate against the US dollar, but also the problem of meeting the availability of food raw materials and other supporting commodities properly (Suar et al., 2020).

In addition, the attention of world countries has shifted from the problem of the spread of disease, now to the problem of the economic and financial consequences of the country and its people, underproduction will have an impact on the lack of supply and end in many layoffs for millions of people around the world (Syed et al., 2020). The state has made various efforts in fulfilling the state budget to deal with the problems of the impact of covid-19 as soon as possible, for example by issuing sukuk which is quite influential for the economy due to its low risk investment (Asiyah et al., 2020).

In addition, another instrument that can be used to maintain the country's economic circulation is through financial technology, in this period, fintek will be very attractive to be given further attention by various levels of society (Ilyas & Salim, 2020). The importance of the economy during this pandemic shows that social inequality and inequality in people's income are the source of all forms of urgent problems for improvement (Murshed, 2020).

There are more than 50 scientific research papers published by various journals both nationally and internationally in the period of early 2020 observations until the time this paper was written, namely August 2020, which discusses the role of sharia economics and finance during the Covid-19 pandemic. Paper with this theme is interesting to discuss considering the importance of scientific research to be carried out in order to generate ideas and innovations that can answer the country's economic problems.

This research is structured as follows. The second part reviews in general the research method, namely the bibliometric method. The third section presents and reports the results of descriptive research while providing content analysis of each cluster category in the meta-analysis consisting of the number of papers on the theme of the role of sharia economics and finance during the Covid-19 pandemic, the methodological approach used, top agencies and country as the top object of study. The fourth section will explain the visualization of bibliometric mapping ranging from keyword trends, top authors to journals that publish papers on the theme of the role of the economy and Islamic finance during the Covid-19 pandemic. The fifth

part is the closing of the paper which contains a summary of the main discussion and conclusions.

## RESEARCH METHOD

Bibliometric mapping is an important research topic in the bibliometric field (Börner et al., 2003). Two distinguishable bibliometric aspects are the construction of the bibliometric map and the graphical representation of the map. In the bibliometric literature, the greatest concern is in the construction of the bibliometric map. Research on the effects of differences in similarity measures (Ahlgren et al., 2003; Klavans & Boyack, 2006; Van Eck & Waltman, 2009), and they tested it with different mapping techniques (Boyack et al., 2005; Van Eck & Waltman, 2007a; White, 2003). The graphic representation of the bibliometric map has received less attention. Although some researchers seriously study the issues associated with graphic representation (Chen, 2003, 2006; Skupin, 2004), Most articles published in the bibliometric literature rely on simple graphical representations provided by computer programs such as SPSS and Pajek.

In Islamic economics and finance research, the bibliometric method, for example, has been carried out by Srisusilawati et al. (2021), Laila et al., (2021), Rusydiana et al., (2021) and also Marlina et al., (2021) on Indonesia Islamic bank research mapping using biblioshiny-R.

This section discusses the use of VOS, which is to build a bibliometric map. The purpose of VOS is to place items in such a low dimension that the distance between the two items accurately reflects the uniformity or association of the items. For each pair of items i and j, VOS requires a similarity input sij (sij  $\geq$  0). VOS treats the equation sij as a measure on a ratio scale. The equation sij is usually calculated using the power of association defined in Equation 1 (Van Eck et al., 2006; Van Eck & Waltman, 2007b). VOS determines the location of items in the map by minimizing,

$$V(x_i, ..., x_n) = \sum_{i < j} s_{ij} ||x_i - x_j||^2$$
 (1)

 $\frac{2}{n(n-1)} \sum_{i < j} ||x_i - x_j|| = 1$  (2)

Therefore, the idea of VOS is to minimize the weighted sum of the squares of the distance between all pairs of items. The square of the distance between pairs of items is weighted by the equation between those items. To avoid worthless solutions, where all items have the same location, a limit is imposed so that the average distance between two items must be equal to one.

There are two computer programs that have implemented the VOS mapping technique. Both are available free of charge. A simple open source program is available at www.neesjanvaneck.nl/vos/, and a more advanced program called VOSviewer (Van Eck et al.,

2010) available at www.vosviewer.com. Both programs use the variant of the SMACOF algorithm mentioned above to minimize Equation 1 to Equation 2.

This study uses paper publication data sourced from various journals with research on the theme of the role of the economy and Islamic finance during the Covid-19 pandemic. Data collection through tracing papers within the last year. From the search results, there were 52 published articles. Data in the form of the number of published papers on the theme of the role of sharia economics and finance during the Covid-19 pandemic, methodological approaches, the top agencies that contributed to publishing published articles were analyzed using Microsoft Excel 2010. As for the development trend of the publication of the theme of the role of sharia economics and finance during the Covid-19 pandemic were analyzed using VOSViewer software.

# **RESULTS AND DISCUSSION**

This section explains the number of published papers on the theme of the role of sharia economy and finance during the Covid-19 pandemic. There were 52 papers published in the observation period of the last year. The distribution of papers with a large number dominates the themes in economic and social journals. The publication of papers on the theme of the role of sharia economics and finance during the Covid-19 pandemic to August 2020 which we made as the object of study totaling 52 papers. However, this is because 2020 has not been completed until the period December 2020, the number of papers is still possible to increase and increase, the data collection of papers studied in this study is until August 2020.

Of the 52 papers published on the theme of the role of sharia economics and finance during the Covid-19 pandemic in the past year, the title of the longest paper is "An Artificial Intelligence and NLP based Islamic FinTech Model Combining Zakat and Qardh-Al-Hasan for Countering the Adverse Impact of COVID 19 on SMEs and Individuals" (Syed et al., 2020) which proposed artificial intelligence innovation (Artificial Intelligence) and integrated NLP based on the sharia fintek model by combining zakat and Qardhul Hasan in order to help reduce the impact of Covid-19 on the economy, especially SMEs.

While the shortest paper title is "Islamic Responses to Covid-19" (Thurston, 2020) which discusses the various phenomena of the impact of Covid-19 on the rules of some worship in Islam, for example, such as restrictions on the implementation of Hajj, prohibition of prayer in mosques, prohibition of holding Friday prayers in mosques, and so on in Islamic view.

#### Research Approach

Based on Punch (2013), there are 3 types of research approaches, namely the qualitative approach, the quantitative approach and the mixed method approach. Table 3 shows the research methodology used by each published paper from 2003 to 2020. In this observation, the most widely used research approach is the qualitative approach, namely 44 papers (84.6%), followed by the quantitative approach of 8 papers (15.4%) and the approach mixture of 0 paper (0%).

Table 1: Research Approach

Research Approach	Total	Percentage
Qualitative	44	85%
Quantitative	8	15%
Mix	0	0%
Total	52	100%

The results of the research findings show that the number of empirical research on the role of economics and Islamic finance during the Covid-19 pandemic is far less than that of conceptual research. The research model that is widely used in qualitative methods is descriptive. The empirical research model that is widely used is linear regression modeling. However, there are no papers that use mix method which colaborate between qualitative and quantitative methods.

#### Top Institutions

Table 2 shows the ranking of the top 8 institutions affiliated with the authors over the past year in a paper on the theme of the role of the economy and Islamic finance during the Covid-19 pandemic. The total number of institutions affiliated with the authors of the paper is 74 institutions from various countries around the world.

**Table 2:** Top Institutions

Institution	Total Authors
International Islamic University Malaysia	6
Universiti Malaya	5
UIN Walisongo Semarang	5
University of Oxford	5
University of Ottawa	4
IAIN Tulungagung	4
UKM Bangi	4
Baqiyatallah University of Medical Sciences	4

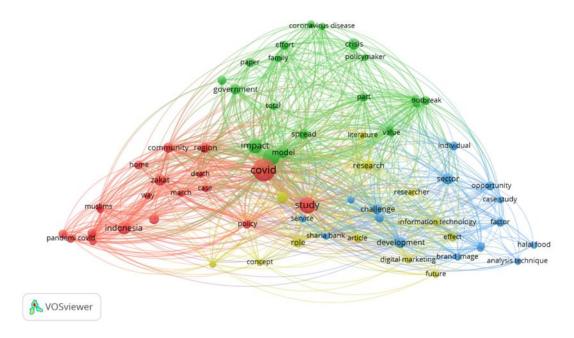
The results showed that the most productive author-affiliated institutions, in the first place were International Islamic University Malaysia (IIUM) which produced 6 authors, followed by Universiti Malaya, UIN Walisongo Semarang and University of Oxford, each of which produced 5 authors, then the University of Ottawa, IAIN Tulungagung, UKM Bangi and Baqiyatallah University of Medical Sciences with 4 authors each. Interestingly, institutions from Malaysia dominate the top 2 rankings, this shows that institutions in Malaysia are quite productive compared to other state institutions in conducting research on the theme of the role of sharia economics and finance during the Covid-19 pandemic.

#### **Bibliographic Analysis**

To explore the results of the meta-analysis in the third part, this fourth part will present a graphical visual mapping of the publication of a paper on the theme of the role of sharia economics and finance during the Covid-19 pandemic. The results of the keyword

mapping analysis form the basis for the co-occurrence mapping of important or unique terms contained in a particular article. Mapping is a process that allows a person to recognize elements of knowledge and their configuration, dynamics, interdependencies, and interactions.

Figure 1: Bibliometric Keyword Mapping



Related to bibliometrics, science mapping is a method of visualizing a field of science. This visualization is done by creating a landscape map that can display topics from science. The results of the visualization of the co-word map network publication of the paper on the theme of the role of the economy and Islamic finance during the Covid-19 pandemic can be seen in Figure 1 above.

In this mapping, several key words that often appear in papers on the theme of the role of sharia economics and finance during the Covid-19 pandemic in the past year are displayed and their relation to other keywords in 4 clusters, namely:

- Cluster 1 in red consists of 20 keywords, namely: case, community, covid, death, form, fund, home, Indonesia, march, muslims, pandemi covid, policy, region, resident, study, syariah, tersebut, use, way, zakat.
- Cluster 2 in green consists of 20 keywords, namely: coronavirus desease, country, crisis, design methodology approach, effort, familt, feature, government, impact, model, originality valuse, outbreak, pandemic, paper, part,policymaker, spread, support, total, value.

- Cluster 3 in blue consists of 11 keywords, namely: analysis technique, bank, banking industry, brand image, case study, challenge, development, factor, halal food, individual, opportunity, qualitative approach, secondary data source, sector, service, sharia bank.
- Cluster 4 in yellow consists of 12 keywords, namely: article, concept, descriptive qualitative approach, digital marketing, effect, future, information technology, literature, person, research, researchers, role.

The keywords which are divided into the 4 clusters above are arranged in the form of a colored circle indicating the clusters, this data can be used in determining the trend of the keywords in the last year. Bibliometric analysis shows several keywords that are widely used in the paper which is the object of study. The keywords that appear the most are indicated by the larger the circle. Meanwhile, the line relation between keywords shows how much it is related to other keywords. It was found that the most familiar keywords were covid, study, pandemic, model and impact.

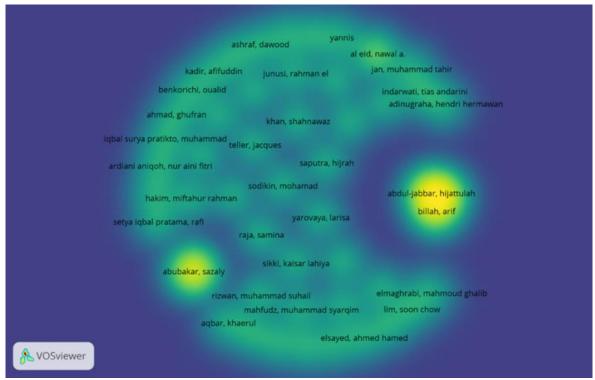
Furthermore, using the VOSViewer software, we found the bibliometric mapping of the authors as in Figure 2 below. The bigger and more glowing the circle of light the author's name shows, the more papers he has published in the paper on the theme of the role of the

economy and Islamic finance during the Covid-19 pandemic in the past year.

The cluster density view, is the item (label) which is marked the same as the visible item. Each item dot has a color depending on the density of the item at that time. This identifies that the color of the points on the map

depends on the number of items associated with other items. This section is very useful for obtaining an overview of the general structure of the bibliometric map by paying attention to which parts of the items are considered important to be analyzed. Through this worksheet, we can interpret the authors who have written the most publications.

Figure 2: Bibliometric Author Mapping



Based on these results, a density map is displayed which is the result of an analysis using all published articles on the theme of the role of sharia economics and finance during the Covid-19 pandemic, both related and unrelated. There are many clusters if sorted by author. The most popular authors wrote publications related to the role of sharia economy and finance during the Covid-19 pandemic based on bibliometric mapping, namely Hijjatullah Abdul-Jabbar, Arif Billah and Salazy Abubakar.

The order in this mapping may have a difference with the author's top ranking if we calculate manually, for example by meta-analysis, but in addition to

calculating the quantity of papers published on the theme of the role of sharia economics and finance during the Covid-19 pandemic, VOSViewer also takes into account the number of links and terms. with other authors so as to produce more comprehensive data.

Furthermore, the visualization of the journal mapping is depicted in the bibliometric figure 3 below. Based on this figure, there are several journal clusters that appear to be listed in a glowing circle, indicating the journal's productivity in contributing to publishing its paper on the theme of the role of sharia economics and finance during the Covid-19 pandemic.

journal of public affairs

journal of islamic civilizatio airlangga journal of innovatio

human vaccines & immunotherape living islam; journal of islam oeconomicus journal of economi

agriculture and human values

ssrn electronic journal

international journal of socio international journal of manag

peace economics, peace science

al-lijtima is international journal of econo

journal of tourism, hospitalit

al-tafaqquh; journal of islami jurnal inovasi ekonomi

journal of digital marketing a

Figure 3: Bibliometric Journal Mapping

Most journals in terms of number of publications and number of links to other journals, where a paper writer can write many papers in different journals. The top journal rankings include the first rank, namely the Journal of Digital Marketing and Halal Industry, followed by the International Journal of Sociology and Social Policy in the second place and the SSRN Electronic Journal in the third place.



Figure 3: Bibliometric Citation Mapping

The results of data processing show that Billah et al. (2020) is the most cited paper compared to other papers, with the title "Factors influencing Muslim and non-Muslim consumers' consumption behavior: A case study on halal food" which discusses the state of Covid-19 which makes people careful of consuming food and drinks carelessly, therefore Billah describes consumer behavior and the factors that influence the desire to buy halal products from the country's perspective. This study also shows that attention in choosing food needs to be done in order to maintain health and avoid and anticipate things that are not according to sharia and medical.

## **FINDINGS**

The period of the Covid-19 pandemic shows that there is enormous urgency in the need for hygienic food supplies to maintain health (Kasdi & Saifudin, 2020), especially halal food (Chow, 2020). This is because the cause of the Covid-19 pandemic, one of which is the problem of food, has not paid attention to its health, so the rules applied by Islam in the recommendation of food selection are very important to pay more attention to (Farnoosh et al., 2020), Amalia et al. (2020) also stated that consumption of halal food in a sustainable manner can reduce the risk of a pandemic such as Covid-19 in the future.

A report from The State of the Global Islamic Economy 2018 shows that Indonesia ranks first as the largest consumer of food products in the world with a value of USD 154.9 billion, however, the Indonesian government has not been able to maximize this market potential as indicated by Indonesia's ranking which is still at in tenth place in the category of world halal food producing countries (Mubarok & Imam, 2020). Therefore, Indonesia needs to improve the quality and quantity of halal food provision, especially during this pandemic because the increasing demand creates opportunities, for example tourists who come to visit certain countries, they are asked to remain in the room during the quarantine period but are still allowed to order food via room service (Karim et al., 2020).

In contrast to Indonesia, there are many communities, both individuals and organizations, that have begun to coordinate long-term anticipatory actions from the impact of Covid-19, one of which is carried out by Feed Buffalo, an emergency food pantry or public kitchen that provides healthy and halal food for the community (Raja, 2020). Durban, one of the cities in KwaZulu-Natal has also begun to pay attention to the provision of halal food for its people by improving access to halal food services, even Durban was chosen to host the World Halal Day 2020, whose implementation was delayed due to Covid-19 (Bhoola, 2020).

The halal food industry in Europe has also continued to develop rapidly in the past few years, Islamic shops that provide halal food are in great demand because the needs according to Muslim circumstances are still not widely provided in shops in general (Boujjoufi et al., 2020), one of the reasons for this development is the increasing demand for halal certification and quality assurance in line with the development of the tourism sector (Aniqoh & Hanastiana, 2020).

On the other hand, Billah et al. (2020) found that understanding the meaning and urgency of halal food is part of influencing consumer behavior and their intention in relation to sustainable consumption, so knowledge and education about halal food needs to be improved. Nowadays, many companies have produced Islamic products but their business is still related to the production process which is not acceptable in Islam (Junusi, 2020), So an understanding of the true meaning of halal in terms of both hygienic and Islamic perspectives needs to be understood by both parties, both from the consumer and producer side as a business actor.

In addition to the topic of the halal industry, another popular topic discussed in many papers which are the object of study is the topic of innovation in the financial sector in order to improve the economic crisis that has occurred, for example Ansari & Alanzarouti (2020), Ashraf et al. (2020), Basya et al. (2020), Eid & Arnout (2020), Faisal & Nirmala (2020), Khan (2020), Mardhiyaturrositaningsih & Mahfudz (2020) especially Islamic social finance (Elmaghrabi et al., 2020; Kadir et al., 2020) which is expected to be a solution to the problems that occurred during the Covid-19 pandemic. The impact we are currently experiencing is from the micro side, for example financial problems, including cash flow imbalances, access to the stimulus provided, to the risk of bankruptcy (Omar et al., 2020), while from the macro side, among others, is the economic crisis that has spread to almost all countries, therefore, the policies in the financial sector which will be determined by the government will determine the sustainability of public finances in general (Jaelani & Hanim, 2020).

In a time of uncertainty such as today caused by various concerns about the Covid-19 pandemic, the roles of non-profit organizations, charities and the government need to be collaborated in order to mitigate the impact of this pandemic on people who are at the forefront (Bin-nashwan et al., 2020), one of them is by applying various Islamic social financial instruments that have an influence both from the spiritual, religious and voluntary aspects (Jaelani & Hanim, 2020) by setting aside a portion of their income to help those who are more in need, either through direct gifts or distributed by the government or institutions engaged in the field.

Islamic social finance can also be said to play an important role in social safety net programs for affected

communities (Malik & Senjiati, 2020) at the same time increasing knowledge literacy about the types of Islamic social financial instruments such as zakat, infaq, shadaqah and waqf (ziswaf) so that they are better known by the public in addition to Islamic commercial financial literacy which is currently still being promoted (Iskandar et al., 2020). The form of Islamic social finance contributions can vary greatly depending on the needs of the community, for example with direct cash assistance (BLT), assistance with material needs such as basic necessities, health service assistance, and so on.

Islamic social finance is a way of life that is complete, comprehensive and an effective means of helping society and anticipating greater damage that may be caused by a prolonged crisis (Syed et al., 2020). Islam has made social finance an effort that can be used to address social inequality and meet the needs of people in need (Dulaijan, 2020), innovative instruments have also been developed in line with technological developments making them easier to apply.

In the end, Islamic social finance has the potential to become a means to increase aggregate demand and aggregate supply back to the right, so that the economic surplus is formed again and helps accelerate economic recovery (Iskandar et al., 2020) by mitigating the crises faced by the middle to lower class fairly, regardless of differences in ethnicity, race or skin color.

# CONCLUSION

The focus of this research is to try to find out the development of the theme of the role of Islamic economics and finance during the Covid-19 pandemic in research, especially related to Islamic economic and financial research. Research on the theme of the role of sharia economics and finance during the Covid-19 pandemic has been carried out by many methods, the most used research approach is a qualitative approach, namely 44 papers (86.4%), followed by a quantitative approach of 8 papers (15.4%), the most productive in the first place, namely International Islamic University Malaysia with a total number of authors of 6 people.

The bibliometric mapping visualization shows that the map of research developments in the field of the role of the economy and Islamic finance during the Covid-19 pandemic is divided into 4 clusters. Cluster 1 consists of 20 topics, cluster 2 consists of 20 topics, cluster 3 consists of 11 topics, and cluster 4 consists of 12 topics. It was found that the most popular writers were Hijjatullah Abdul-Jabbar, Arif Billah and Salazy Abubakar. The journals that publish the most articles related to the theme of the role of the economy and Islamic finance during the Covid-19 pandemic, namely Journal of Digital Marketing and Halal Industry, followed by International Journal of Sociology and Social Policy, in second place SSRN Electronic Journal in the third place. The paper with the most citations based on bibliometric mapping is Billah et al. (2020).

It should be noted that the purpose of this study is to present an overview of the research trends on the theme of the role of sharia economics and finance during the Covid-19 pandemic, but its limitations have only been in the last few months. Although research has been carried out using specific bibliometric indicators so that readers get a general representation of the most significant data on this theme, the results presented are still dynamic and can change over time with new trends that emerge or variables that increase and decrease in the future.

An important finding is that the Islamic economy and finance during the Covid-19 Pandemic played an important role, especially in the issue of the halal industry, more specifically halal food. Likewise with regard to the contribution of Islamic social finance including zakat, infaq and waqf in mitigating the risk of the impact of Covid-19. In addition, the Islamic microfinance sector also plays a role in providing financing solutions for small businesses with various soft financing schemes ranging from Qard Hasan to other social schemes.

## REFERENCES

- Ahlgren, P., Jarneving, B., & Rousseau, R. (2003). Requirements for a cocitation similarity measure, with special reference to Pearson's correlation coefficient. *Journal of the American Society for Information Science and Technology*, 54(6), 550–560. https://doi.org/10.1002/asi.10242
- Amalia, F. A., Wang, K.-J., & Gunawan, A. I. (2020).

  Covid-19: Can Halal Food Lessen the Risks of the

  Next Similar Outbreak? INTERNATIONAL

  JOURNAL OF APPLIED BUSINESS

  RESEARCH, 2(2), 86–95.

  https://doi.org/10.35313/ijabr.v0i0.112
- Aniqoh, N. A. F. A., & Hanastiana, M. R. (2020). Halal Food Industry: Challenges And Opportunities In Europe. *Journal of Digital Marketing and Halal Industry*, 4810, 43–54. https://doi.org/10.21580/jdmhi.2020.2.1.5799
- Ansari, R. Al, & Alanzarouti, F. (2020). ESG and Islamic Finance: An Ethical Bridge Built on Shared Values. *Journal of Islamic Financial Studies*, 1(1). https://doi.org/10.12785/jifs/060101
- Ashraf, D., Rizwan, M. S., & Ahmad, G. (2020). Islamic Equity Investments and the COVID-19 Pandemic\. SSRN Electronic Journal. https://doi.org/10.2139/ssrn.3611898
- Asiyah, B. N., Aini, I. N., Mahardika, R. P., & Laili, L. N. (2020). Analisis Dampak Sukuk pada Perekonomian Nasional di Tengah Wabah Covid 19. El-Qist: Journal of Islamic Economics and Business (JIEB), 10(1).

- Basya, M. M., Pratama, R. S. I., & Pratikto, M. I. S. (2020). STRATEGI PENGEMBANGAN FINTECH SYARIAH DENGAN PENDEKATAN BUSINESS MODEL CANVAS DI INDONESIA. *OECONOMICUS Journal Of Economics*, 4(2), 180–196. https://doi.org/10.15642/oje.2020.4.2.180-196
- Bhoola, S. (2020). Halal Food Tourism: Perceptions of Relevance and Viability for South African Destinations. *African Journal of Hospitality, Tourism and Leisure*, 9(3), 288–301. https://doi.org/10.46222/ajhtl.19770720-19
- Billah, A., Rahman, A., & Hossain, T. Bin. (2020). Factors influencing Muslim and non-Muslim consumers 'consumption behavior: A case study on halal food. *Journal of Foodservice Business Research ISSN*:, May. https://doi.org/10.1080/15378020.2020.1768040
- Bin-nashwan, S. A., Al-Daihani, M., Abdul-Jabbar, H., & Al-Ttaffi, L. H. A. (2020). Social solidarity amid the COVID- 19 outbreak: fundraising campaigns and donors' attitudes. *International Journal of Sociology* and Social Policy. https://doi.org/10.1108/IJSSP-05-2020-0173
- Börner, K., Chen, C., & Boyack, K. W. (2003). Visualizing knowledge domains. *Annual Review of Information Science and Technology*, 37(1), 179–255. https://doi.org/10.1002/aris.1440370106
- Boujjoufi, M. El, Mustafa, A., Benkorichi, O., & Teller, J. (2020). COVID-19 and ethnic-oriented shopping. Advance Social Sciences and Humanities, March 2020, 1– 6. https://doi.org/10.31124/advance.12497867.v1
- Boyack, K. W., Klavans, R., & Börner, K. (2005). Mapping the backbone of science. *Scientometrics*, 64(3), 351–374. https://doi.org/10.1007/s11192-005-0255-6
- Brodeur, A., Gray, D., Islam, A., & Bhuiyan, S. J. (2020). A Literature Review of the Economics of COVID-19. In *GLO Discussion Paper*, No. 601.
- Chen, C. (2003). Mapping the mind. In *Mapping Scientific Frontiers: The Quest for Knowledge V isualization* (pp. 67–99). https://doi.org/10.1007/978-1-4471-0051-5\_3
- Chen, C. (2006). CiteSpace II: Detecting and visualizing emerging trends and transient patterns in scientific literature. *Journal of the American Society for Information Science and Technology*, 57(3), 359–377. https://doi.org/10.1002/asi.20317
- Chow, L. S. (2020). FOODSERVICE WAGING WAR AGAINST COVID-19 CRISIS. Journal of Tourism, Hospitality and Environment Management (JTHEM), 5(19), 41–49. https://doi.org/10/35631/JTHEM.519004

- Dulaijan, H. D. Al. (2020). The Economy of Inspiration and Its Role in Achieving Food Security during the Covid-19 Pandemic (An Applied Study Kingdom of Saudi Arabia). *International Journal of Inspiration & Resilience Economy*, 4(2), 50–57. https://doi.org/10.5923/j.ijire.20200402.02
- Eid, N. A. Al, & Arnout, B. A. (2020). Crisis and disaster management in the light of the Islamic approach: COVID-19 pandemic crisis as a model (a qualitative study using the grounded theory). *Journal of Public Affairs*, May, 1–14. https://doi.org/10.1002/pa.2217
- Elmaghrabi, M., Mohammed, M. O., & Jan, M. T. (2020). Towards Developing Standards for the Zakat Administration in the Republic of Sudan. *International Journal of Management and Applied Research*, 7(2). https://doi.org/10.18646/2056.72.20-010
- Faisal, M., & Nirmala, M. P. (2020). COVID-19 and Economic Policy Options: What Should the Government do? *Jurnal Inovasi Ekonomi*, 05(02), 45–52. https://doi.org/10.22219/jiko.v5i3.11834
- Farnoosh, G., Alishiri, G., Reza, S., Zijoud, H., Dorostkar, R., & Farahani, A. J. (2020). Understanding the Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) and Coronavirus Disease (COVID-19) Based on Available Evidence A Narrative Review. *Journal of Military Medicine*, 22(1), 1–11. https://doi.org/10.30491/JMM.22.1.1
- Ilyas, A., & Salim, K. (2020). CHALLENGES FACING MALAYSIA IN EXPANDING ITS ISLAMIC FINTECH LANDSCAPE & POSSIBLE REMEDIES. International Journal of Islamic Economics (IJIE), 02(01), 1–18. https://doi.org/10.32332/ijie.v2i01.2250
- Iskandar, A., Possumah, B. T., & Aqbar, K. (2020).
  Peran Ekonomi dan Keuangan Sosial Islam Saat
  Pandemi Covid-19. *SALAM: Jurnal Sosial Dan Budaya Syar-I*, 7(7), 625–638.
  https://doi.org/10.15408/sjsbs.v7i7.15544
- Jaelani, A., & Hanim, T. F. (2020). Sustainability of Public Finances During The COVID-19 Outbreak in Indonesia. *Al-Amwal: Jurnal Ekonomi Dan Perbankan Syariah*, 12(1), 109–123. https://doi.org/10.24235/amwal.v1i1.6557
- Junusi, R. El. (2020). Digital Marketing During the Pandemic Period; A Study of Islamic Perspective. Journal of Digital Marketing and Halal Industry, 4810, 15–28. https://doi.org/10.21580/jdmhi.2020.2.1.5717
- Kadir, A., Hakim, M. R., Syam, F., & Karim, M. S. (2020). Penggunaan dana zakat pada korban covid-19 perspektif maqashid syariah. *Al-Tafaqquh: Journal*

- of Islamic Law, 1(2), 107–116. https://doi.org/10.33096/al-tafaqquh.v1i2.61
- Karim, W., Haque, A., Anis, Z., & Ulfy, M. A. (2020). The Movement Control Order (MCO) for COVID-19 Crisis and its Impact on Tourism and Hospitality Sector in Malaysia. *International Tourism and Hospitality Journal*, 3(2), 1–7. https://doi.org/10.37227/ithj-2020-02-09
- Kasdi, A., & Saifudin. (2020). Resilience of Muslim Families in the Pandemic Era: Indonesian Millennial Muslim Community's Response Against COVID-19. *Jurnal Penelitian*, 17(1), 81–94. https://doi.org/10.28918/jupe.v17i1.2640
- Khan, M. R. (2020). Ethical business practice and short term earning intensity during the Covid-19 crisis in Bangladesh. *International Journal of Financial, Accounting, and Management (IJFAM)*, 2(2), 79–93. https://doi.org/10.35912/ijfam.v2i2.167 Ethical
- Klavans, R., & Boyack, K. W. (2006). Identifying a better measure of relatedness for mapping science. *Journal of the American Society for Information Science and Technology*, 57(2), 251–263. https://doi.org/10.1002/asi.20274
- Laila, N., Rusydiana, A.S., Irfany, M. I., Imron, H. R., Srisusilawati, P., & Taqi, M. (2020). Energy Economics in Islamic Countries: A Bibliometric Review. *International Journal on Energy Economic and Policy*, 11(2), 88-95.
- Malik, Z. A., & Senjiati, I. H. (2020). Efficiency Service Handling COVID 19 The Institute of Zakat By Method of Data Envelopment Analysis (DEA). Journal of Islamic Business and Economic Review, 3(2), 72– 80.
- Mardhiyaturrositaningsih, & Mahfudz, M. S. (2020). Dampak pandemi covid-19 terhadap manajemen industri perbankan syariah: analisis komparatif. *POINT Jurnal Ekonomi Dan Manajemen*, 1–10. https://doi.org/10.46918/point.v2i1.576
- Marlina, L., Rusydiana, A. S., Hidayat, P., & Firdaus, N. (2021). Twenty years of Islamic banking in Indonesia: A biblioshiny application. *Library Philosophy and Practice (e-journal)*, 4999.
- Mubarok, F. K., & Imam, M. K. (2020). Halal Industry in Indonesia; Challenges and Opportunities. *Journal of Digital Marketing and Halal Industry*, 4810, 55–64. https://doi.org/10.21580/jdmhi.2020.2.1.5283
- Murshed, S. M. (2020). Capitalism and COVID-19: Crisis at the Crossroads. *Peace Econ. Peace Sci. Pub. Pol.*, 1–8. https://doi.org/10.1515/peps-2020-0026
- Omar, A. R. C., Ishak, S., & Jusoh, M. A. (2020). The impact of Covid-19 Movement Control Order on SMEs' businesses and survival strategies.

- GEOGRAFIA Online, 2(2), 139–150. https://doi.org/10.17576/geo-2020-1602-11 139
- Punch, K. F. (2013). Introduction to Social Research: Quantitative and Qualitative Approaches.
- Raja, S. (2020). Planning and pandemics COVID 19 illuminates why urban planners should have listened to food advocates all along. *Agriculture and Human Values*, 37(3), 553–554. https://doi.org/10.1007/s10460-020-10090-0
- Rusydiana, A. S., Sanrego, Y. D., & Pratomo, W. A. (2021). Mathematical modeling on Islamic economics and finance: A scientometric. *Library Philosophy and Practice (e-journal)*, 4834.
- Skupin, A. (2004). The world of geography: Visualizing a knowledge domain with cartographic means. *Proceedings of the National Academy of Sciences*, 101(1), 5274–5278. https://doi.org/10.1073/pnas.0307654100
- Srisusilawati, P., Rusydiana, A. S., Sanrego, Y. D., & Tubastuvi, N. (2021). Biblioshiny R application on islamic microfinance research. *Library Philosophy and Practice*, 2021(5096), 1-24.
- Suar, A., Meirison, Elfia, & Hayati, I. (2020). AL MAQRIZI'S VIEW ON ISLAMIC ECONOMY AND IT'S RELEVANCE TO COVID-19 PANDEMIC IN INDONESIA. *Nurani*, 20(1), 83–95. https://doi.org/10.19109/nurani.v20i1.6025
- Syed, M. H., Khan, S., Rabbani, M. R., & Thalassinos, Y. E. (2020). An Artificial Intelligence and NLP based Islamic FinTech Model Combining Zakat and Qardh-Al-Hasan for Countering the Adverse Impact of COVID 19 on SMEs and Individuals. International Journal of Economics and Business Administration Volume, VIII(2), 351–364. https://doi.org/10.35808/ijeba/466
- Thurston, A. (2020). Islamic Responses to COVID-19. In *The COVID-19 Pandemic in the Middle East and North Africa* (Issue April).
- Van Eck, N. J., & Waltman, L. (2007a). Bibliometric mapping of the computational intelligence. International Journal of Uncertainty, Fuzziness and Knowledge-Based Systems, 15(05), 625–645. https://doi.org/10.1142/s0218488507004911
- Van Eck, N. J., & Waltman, L. (2007b). VOS: A new method for visualizing similarities between objects. In *Studies in Classification, Data Analysis, and Knowledge Organization* (pp. 299–306). https://doi.org/10.1007/978-3-540-70981-7\_34
- Van Eck, N. J., & Waltman, L. (2009). How to normalize cooccurrence data? An analysis of some wellknown similarity measures. *Journal of the American Society for Information Science and Technology*, 60(8), 1635–1651. https://doi.org/10.1002/asi.21075

- Van Eck, N. J., Waltman, L., Berg, J. Den, & Kaymak, U. (2006). Visualizing the computational intelligence field. *IEEE Computational Intelligence Magazine*, 1(4), 6–10. https://doi.org/10.1109/ci-m.2006.248043
- Van Eck, N. J., Waltman, L., Noyons, E. C. M., & Buter, R. K. (2010). Automatic term identification for bibliometric mapping. *Scientometrics*, 82(3), 581–596. https://doi.org/10.1007/s11192-010-0173-0
- White, H. D. (2003). Pathfinder networks and author cocitation analysis: A remapping of paradigmatic information scientists. *Journal of the American Society for Information Science and Technology*, 54(5), 423–434. https://doi.org/10.1002/asi.10228