

A Bibliometric Analysis of Sharia Bonds (Sukuk) in Islamic Capital Market

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Abstract

Sharia bonds (Sukuk) are one of the products of the Islamic capital market; the development of Islamic bonds is rapid in countries where most of the population is Muslim, using Islamic law principles. This study systematically explores the development of Sharia bond research (Sukuk) in the Islamic capital market in the observation period for six years, namely from 2017 to 2022. Bibliometrics is a data analysis approach in this study using the VOSviewer application. *Quantitative description* is an analysis method used in this study to describe the econometric literature with a network visualization model on the topic to be discussed. The sample is obtained using the publish or perish application with data from Google Scholar and Scopus, so the data obtained is then sorted to become relevant sample data of 760 articles related to Sukuk in the Islamic capital market. The results of the first VOSviewer mapping are ten articles with the most citations, network visualization, overlay visualization, and density visualization, and there are five clusters between item relationships; the keyword "Sharia Bond" became a popular keyword during the observation period, so that Islamic Bonds have been in great demand as evidenced by the development of research related to Sharia bonds.

Keywords: Sharia Bond, Islamic Capital Market, Bibliometrics

INTRODUCTION

Bibliometric data analysis displayed visually through mapping tools is needed in this era of rapid technological growth (Rahman et al., 2020). Mapping tools are used to obtain overview results and various information regarding the development of the field of science and the performance of research that has been carried out. Research performance that has been carried out. One of the tools that can be used to map bibliometric data analysis and one example of a mapping tool is VOSViewer (Al-Ashmori et al., 2020).

VOSviewer has recently been very popular in analyzing the development of research conducted and the measurement of novelty in research (Azizah et al., 2021). We can display large bibliometric maps in an easy way to interpret relationships through VOSViewer. VOSviewer has several features or characteristics, such as being able to support database items in the main bibliometric, map tiger types of bibliometric analysis, ignore dimensional time, on text processing functions, limitations in the analysis of small to medium amounts of data, use cluster and layout techniques, and use visualization density and overlay (Al Husaeni & Nandiyanto, 2022).

The development of Sharia-based financial concepts is very rapid; this condition shows that the market share in Islamic financial institutions is growing significantly (Rani et al., 2022). Islamic bonds (Sukuk) in Islamic history are not new; this term has been known since the first century Hijri. In his day, Muslims used Sukuk in international trade transactions. Traders use it as a document that shows proof of financial obligations resulting from economic activities and trade ventures (Doumpos et al., 2017). Some authors explain that Sakk is the root of the word "Check" in Latin, which has become common in contemporary trade transactions (Atika et al., 2018).

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In the development of contemporary Islamic finance, Sukuk is one of the most innovative forms of Islamic financial products. Corporate companies and governments can use sukuk as a funding alternative by offering Islamic products on the Islamic capital market (Azhgaliyeva et al., 2020). Sukuk has now become the strongest segment of Islamic finance. According to Paltrinieri et al., (2023), In international trade, sukuk is certainly involved in the international market so that it can affect financial cash flows outside the domestic market. Balanced growth and development can be a potential opportunity for all countries to expand the role of Islamic finance to contribute to financial stability and global growth (Lahsasna et al., 2018).

The Islamic capital market and finance industry have experienced unprecedented expansion over the past decade, driven by the growing demand for Shariah-compliant investment products due to the tremendous accumulation of oil wealth in Islamic countries (Narayan & Phan, 2019). The strong will of regulators to support the development of Islamic financial markets and the resilience of Islamic investments. The Islamic capital market is a system that is closely related to the capital market as a whole, so it is not a separate system. Kuran, (2018) Islamic capital market transaction activities and conventional capital markets do not have significant differences. However, the Islamic capital market differs in special characteristics, such as mechanisms and transaction products that do not contradict Sharia principles. The Hadith of the Prophet Muhammad SAW and the Koran as the highest law on applying these sharia principles. Furthermore, it becomes the science of fiqh resulting from the source of the two highest laws (Shahzad et al., 2017). Muamalah is one of the discussions in the science of fiqh, namely the relationship between fellow humans in commerce. From that background, the activities in the Islamic capital market developed with the concept of fiqh muamalah.

RESEARCH METHOD

Descriptive qualitative is the analytical approach in this research in describing the research data. Research data were searched from various sources such as Google Scholar, Crossref, PubMed, and Scopus databases with the search keywords "Sukuk" OR "Sharia Bonds" OR "Islamic Bonds" with a six-year observation period from 2017 to 2022. This bibliometric method has been explained in previous studies with detailed information from the reference manager stage, as well as research sample data collection (Azizah et al., 2021), and (Al-Ashmori et al., 2020). The author uses the Publish or Perish reference manager application to collect the data needed in this study. This reference manager application can search for data and literature according to the searched theme, thus producing the expected database.

The development of data mapping in this study uses VOSviewer software. VOSviewer is a bibliometric method that previous studies have widely used; VOSviewer can create maps of researchers and journals from search sources with keywords on research topics. The stages in creating an overview and research map are, of course, the search for reference data and data collection using the Publish or Perish application; the data is then sorted based on the topics needed and credible with the Excel application, and then the good ones are mapped with bibliometric analysis using VOSviewer. The research data refers to Sukuk research or Islamic bonds traded in the Islamic capital market and is available on the Google Scholar database and Scopus according to the research criteria.

RESULTS AND DISCUSSIONS

From 2017 to 2022, there were 760 articles discussing Sukuk in the Islamic capital market; these were the results of searching the Publish or Perish application from each year of observation in the study. Research that discusses Sukuk is quite significant every year: in 2017, as many as

120 articles; in 2018, as many as 110 articles; in 2019, as many as 172 articles; in 2020, as many as 119 articles; in 2021, as many as 123 articles, and in 2022 as many as 116 articles.

Table 1. Most article citations related to Sharia Bonds (Sukuk)

No	Cites	Authors	Title	Year	Source
1	206	H Farag, C Mallin, K Ow-Yong	Corporate governance in Islamic banks: New insights for dual board structure and agency relationships	2018	Journal of International Financial Markets, Institutions and Money
2	184	T Kuran	Islam and economic performance: Historical and contemporary links	2018	Journal of Economic Literature
3	170	A Paltrinieri, MK Hassan, S Bahoo, A Khan	A bibliometric review of sukuk literature	2019	International Review of Economics & Finance
4	162	SJH Shahzad, R Ferrer, L Ballester, Z Umar	Risk transmission between Islamic and conventional stock markets: A return and volatility spillover analysis	2017	International Review of Economics & Finance
5	159	PK Narayan, DHB Phan	A survey of Islamic banking and finance literature: Issues, challenges and future directions	2019	Pacific-Basin Finance Journal
6	140	ER Ahmed, MA Islam, TTY Alabdullah, ...	Proposed the pricing model as an alternative Islamic benchmark	2018	Benchmarking: An International Journal
7	139	M Doumpos, I Hasan, F Pasiouras	Bank overall financial strength: Islamic versus conventional banks	2017	Economic Modelling
8	139	F Alqahtani, DG Mayes, K Brown	Islamic bank efficiency compared to conventional banks during the global crisis in the GCC region	2017	Journal of International Financial Markets, Institutions and Money
9	132	R Hasan, MK Hassan, S Aliyu	Fintech and Islamic finance: Literature review and research agenda	2020	International Journal of Islamic Economics and Finance (IJIEF)
10	123	D Azhgaliyeva, A Kapoor, Y Liu	Green bonds for financing renewable energy and energy efficiency in South-East Asia: a review of policies	2020	Journal of Sustainable Finance & Investment

Source: Publish or Perish (2023)

Table 1 shows the ten hacked ranking articles related to Islamic bonds (Sukuk) most cited in the observation sample. The first rank of Farag et al., (2018) with the article titled "Corporate governance in Islamic banks: New insights for dual board structure and agency relationships", published in the Journal of International Financial Markets, Institutions and Money, with 206 citations. Then, the last rank with 123 citations from the article Azhgaliyeva et al., (2020) titled "Green bonds for financing renewable energy and energy efficiency in South-East Asia: a review of policies" published in the Journal of Sustainable Finance & Investment.

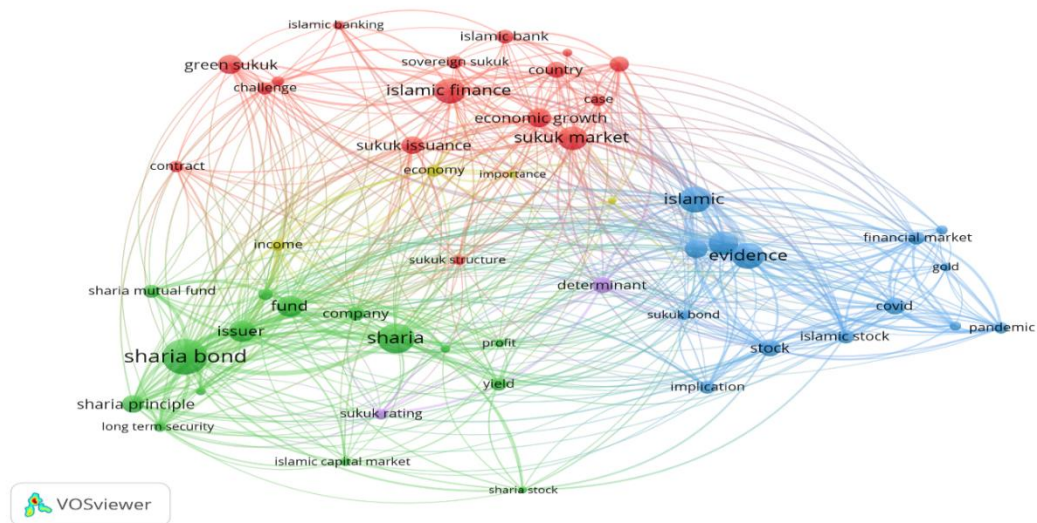


Figure 1. Network Visualization of the Sharia Bond (Sukuk)

Figure 1 is an illustration of the relationship between keywords. In network visualization, the relationship between correlations can be described by networks or lines connecting and connecting from one theme to another (Hasan et al., 2020). The results of network visualization with VOSviewer obtained 51 items in total with 5 clusters. The first cluster has 16 items that are connected, the second cluster has 15 items that are connected, the third cluster has 14 items that are connected, the fourth cluster has four items that are connected, and the fifth cluster has two items that are connected. The amount of items formed is the level of relationship often studied with other items. It forms a large network and is always present in every keyword related to Islamic bonds (Sukuk).

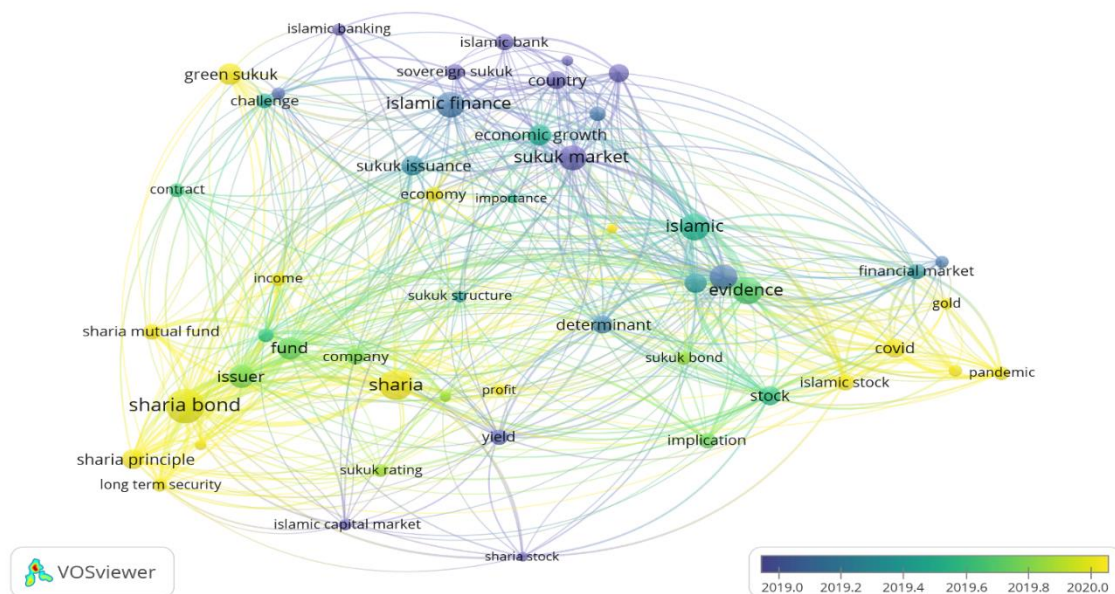


Figure 2. Overlay Visualization of Sharia Bond (Sukuk)

Figure 2 illustrates the trend of research related to Islamic bonds (Sukuk) during the observation period, namely from 2017 to 2022. The visualization overlay illustrates the trend of periodic key glass items visualized by the colour of each renewable period (Al Husaeni & Nandiyanto, 2022). The dark blue colour identifies the keyword is an item in the previous research that is more past, such as keywords Islamic finance, sukuk market, Islamic banking, yield, sharia stock, Islamic capital market, determinant, sovereign sukuk, and others, the more advanced the research period will be a bright colour such as light blue and so on. The newest keywords are identified with a bright yellow colour as updated items related to the previous research keywords. The keyword "Islamic bonds", which is connected to the pandemic, COVID, the Sharia principle, green sukuk, Islamic stock, long-term security, and others, are keywords that are often used in research and are keywords that are more widely used in the period 2020 and above with light yellow visualization.

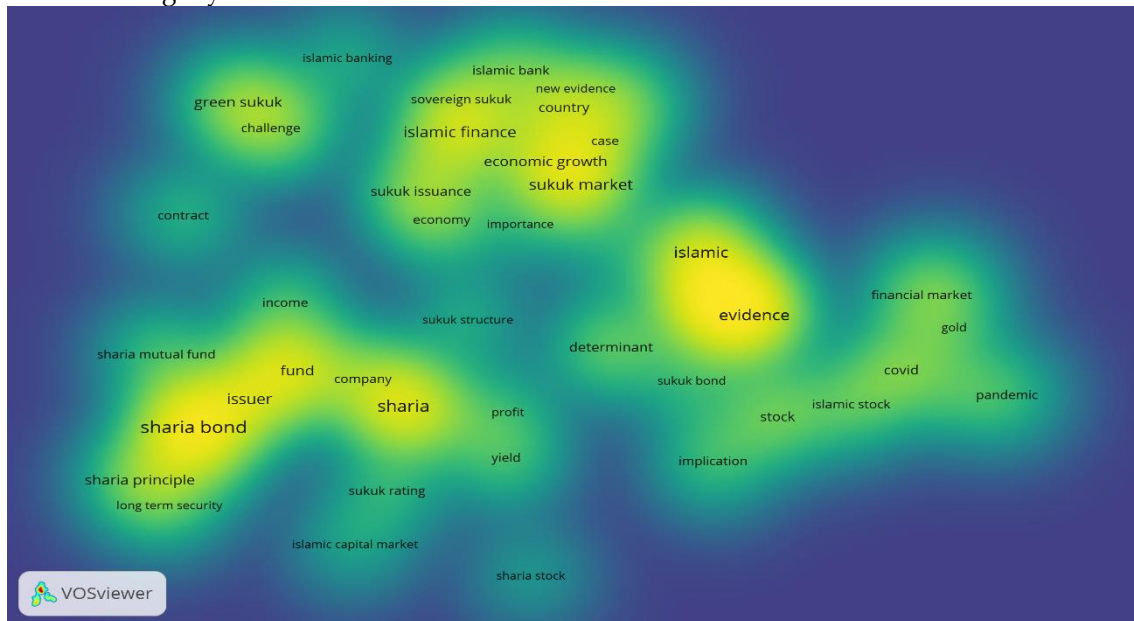


Figure 3. Density Visualization of Sharia Bonds (Sukuk)

Figure 3 shows the density of each research keyword related to Islamic bonds (Sukuk). The clearer and brighter the colour in the visualization, the more often the keyword is used in research throughout the observation period (Bacha & Mirakhor, 2019). In the density visualization, it can be seen that lighter colours are keywords that are widely researched, such as sharia bond, sharia, evidence, fund, issuer, sukuk market, green sukuk, sharia principle, Islamic finance, sovereign sukuk, and others. Meanwhile, faint colours are keywords that are still rarely researched, such as the words financial market, pandemic, long-term security, Islamic capital market, sharia stock, gold, sharia mutual fund, and others; keywords with faint colours can be recommended for further research because there are still limited discussions related to these keywords.

The next stage is cluster analysis; cluster analysis is the relationship between two or more items in each cluster (Fahamsyah & Hamdan'Ainulyaqin, 2023). The first keyword in cluster 1 is "Sharia Bond", which is the main focus of the research. Referring to Figure 4, the Sharia bond keyword is connected to 27 other items, namely Sharia principle, long-term security, Islamic capital market, rating rate, Sharia stock, implication, stock, evidence, covid, pandemic, profit, yield, issuer, company, fund, income, sharia mutual fund, green rate, issue rate, economy, economy growth, sovereign rate, Islamic bank, and others.

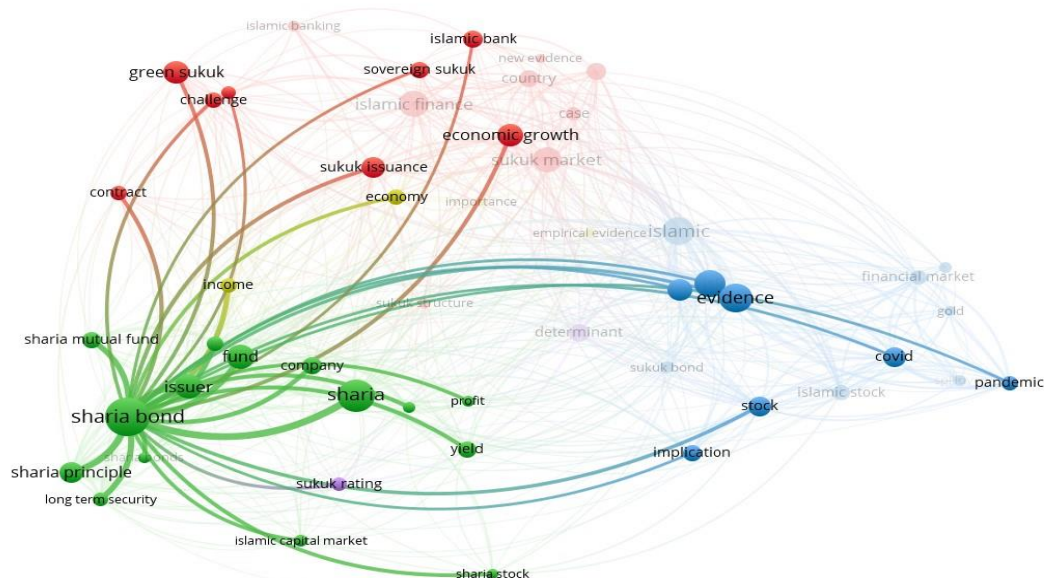


Figure 4. Network Visualization Cluster 1

Figure 5 is cluster 2 with the keyword "Case Study," one of the items always used in comparison related to the topics discussed in the research. In this cluster 2 with the keyword "Case Study" is connected to 14 other items, namely green tribe, contract, sovereign sukuk, tribe issuance, economy, sukuk market, bond market, determinant, sharia, company, fund, issuer, sharia bond, and sharia mutual fund.

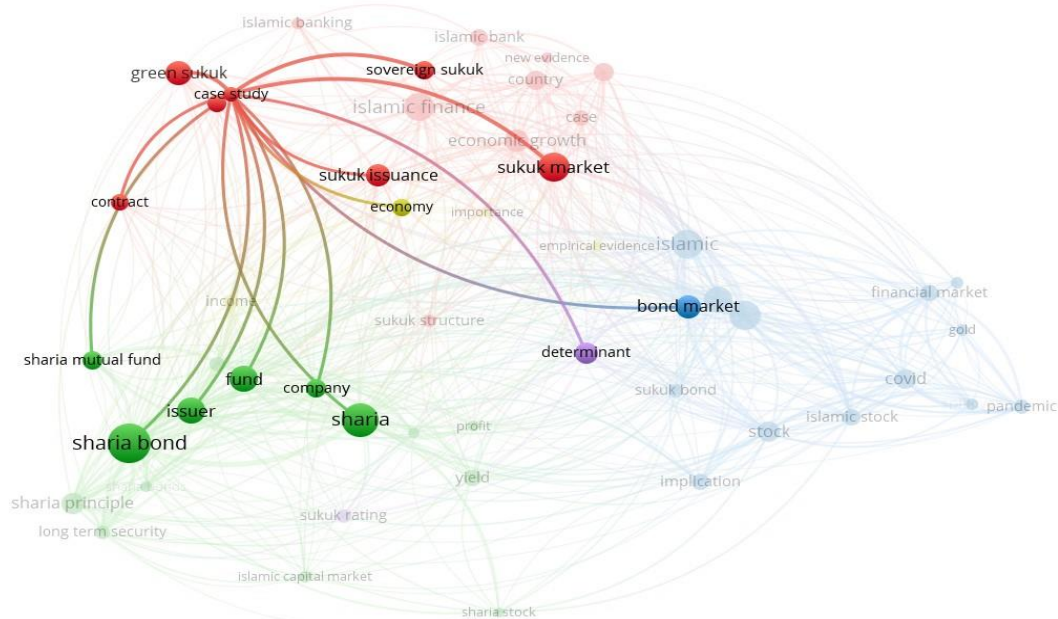


Figure 5. Cluster 2 Visualization Network

Figure 6 is cluster 3 with the keyword "Pandemic", one of the most popular items from 2020 to 2022 due to the emergence of a pandemic or COVID-19 outbreak. In this cluster 3 with the

sharia principle, sharia bond, issuer, fund, company, sharia, implication, determinant, sukuk structure, market rate, issuance rate, evidence, and others.

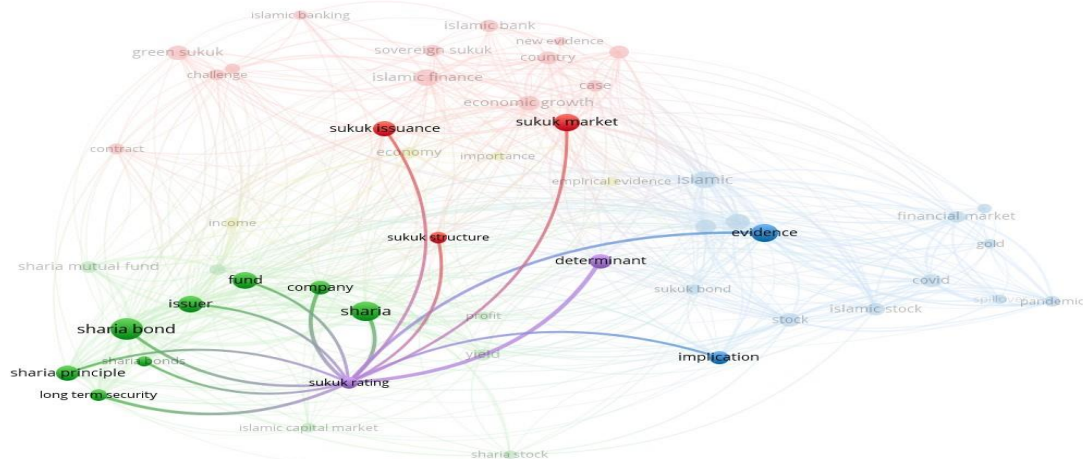


Figure 8. Network Visualization Cluster 5

CONCLUSION

This study aims to analyze the development of literature on Islamic Bonds (Sukuk) in the Islamic capital market. The research analysis technique uses the VOSviewer application for visualization mapping of research data and sampling of relevant articles from Google Scholar and Scopus using the Publish or Perish application. The research period was taken for six years, namely from 2017 to 2022, with the keywords "Sukuk" OR "Shari Bond" OR "Islamic Bond." From the keyword search results, 760 relevant articles were obtained through the final stage of sampling. The results obtained from mapping with VOSviewer are the first most citations grouped into the top 10 articles with the most citations from the research of H Farag, C Mallin, K Ow-Yong with the title "Corporate governance in Islamic banks: New insights for dual board structure and agency relationships" in 2018 published in the Journal of International Financial Markets, Institutions and Money with a total of 2016 citations during 2017 to 2022. The mapping results are five clusters with each item: Cluster 1 has 16 items, Cluster 2 has 15 items, Cluster 3 has 14 items, Cluster 4 has four items, and Cluster 5 has two connected items. The keyword "Sharia Bond" is a keyword that is often used in research, so the keyword is always connected to the items of each research period.

VOSviewer displays several cluster groups connected to items closely related to Sharia Bonds' development (Sukuk). The first relationship in cluster 1, namely the keyword "Sharia Bond", is related to 27 items as the main topic of research. The second relationship in cluster 2, the keyword "Case Study," is related to 14 items. The third relationship in cluster 3, namely the keyword "Pandemic", related to 15 items; the fourth relationship in cluster 4, namely the keyword "Income", related to 19 items; the fifth relationship in cluster 5, namely the keyword "Sukuk Rating", related to 13 items.

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