N-Vivo Analysis on Indonesia Islamic Insurance Studies

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This study seeks to map research related to Islamic insurance in Indonesia published by Dimensions indexed journals from 2006 to 2023. NVivo 12 Plus was used to conduct a thematic review and frequency was used to evaluate 207 publications in the scientific literature. The results found that the number of publications fluctuates from year to year related to Islamic insurance research in Indonesia, indicating that this topic is an interesting topic and must continue to be developed. In addition, various foci of discussion and cluster analysis that describe the research path in Islamic insurance research in Indonesia include Efficiency and Islamic Insurance in Indonesia, Policy and Islamic Insurance in Indonesia, Banking and Islamic Insurance in Indonesia, and Company and Islamic Insurance in Indonesia. This research can be used as a starting point for experts to build graphic visualizations of Islamic insurance research patterns in Indonesia in published scientific research.

Keywords: Islamic insurance, Indonesia, Qualitative
INTRODUCTION

Shariah insurance, also known as Takaful, is an Islamic insurance system that operates on the principles of mutual aid, shared responsibility, and risk sharing. It is a form of insurance that complies with Islamic law, which prohibits interest-based transactions and gambling. Islamic insurance is based on the concept of Tabarru which means voluntary contribution or donation, and Mudarabah which means profit sharing. The system involves participants contributing to a pool of funds, which is then used to compensate those who suffer losses. Profits generated from the pool of funds are shared between the participants and the insurance company. Islamic insurance has grown in popularity in recent years, particularly in Muslim-majority countries (Alam et al., 2023; Cahyandari et al., 2023).

One of the reasons that drives the development of insurance, especially sharia insurance, is changes in economic conditions. According to Wangi & Darmanto (2020) the insurance sector has 1,063 entities, of which 113 companies organize insurance business with sharia principles consisting of 20 companies in the form of full fledge and 93 in the form of sharia units. This explains that Islamic insurance has become an important component in supporting global Islamic financial development (Ardiantoro & Sukmaningrum, 2020). The growth of Islamic insurance is driven by the increasing income of the lower middle-class Muslim population, a higher level of consumer awareness about Islamic insurance and its benefits, the rise of group life insurance term policies and many credit-related term policies that provide relatively higher protection benefits without a savings or investment component and unit-linked and bancassurance products being a variety of products that are in great demand by the public (Ardiantoro & Sukmaningrum, 2020).

In addition to its role as a risk hedging service provider, Islamic insurance also has an additional role in generating liquidity, reducing financial losses, and facilitating long-term investment in the Islamic economy. Islamic insurance plays an important role in establishing the principle of mutual help (ta’awuni) and mutual protection (takafuli) between participants through the management of tabarur/ funds according to sharia principles to face certain risks. Islamic insurance also offers a number of benefits, namely first, based on the principle of justice, where customers and insurance companies are equally responsible for risks and benefits. Second, it is useful as savings and investment because it provides quite profitable returns. Third, it is more affordable than conventional insurance products, because premium costs are more affordable and guaranteed to be free of usury according to Islamic religious principles. Fourth, it is an ethical and attractive option for those who want to invest in a socially responsible way. Finally, Islamic insurance offers sustainability in overcoming the risk of economic loss based on the principles of Islamic law (Cahyandari et al., 2023).

However, developing Islamic insurance still faces several challenges, including juridical and philosophical differences with conventional insurance, the need to adhere to sharia principles, and dispute resolution through sharia arbitration (Heradhyaksa & Hikmah, 2019; Hartati, 2020). In addition, Islamic insurance companies face challenges in selecting Fatwa and Sharia Supervisory Boards, as well as in facing contemporary challenges in modern financial transactions (Maiga & Ibrahim, 2020). In addition, the fundamental difference between Islamic insurance and conventional insurance is also a challenge in developing Islamic insurance. Islamic insurance is based on the principles of Islamic law, while conventional insurance is governed by secular laws and regulations (Heradhyaksa & Hikmah, 2019). This difference in juridical basis can pose challenges in harmonizing the two systems. Sharia insurance emphasizes the importance of justice, fairness, and the avoidance of uncertainty, gambling, and interests in its operations (Tazuddin, 2020; Hartati, 2020). In contrast, conventional insurance is based on the principle of risk transfer from the insured to the guarantor (Heradhyaksa & Hikmah, 2019). This philosophical difference can complicate efforts to reconcile the two approaches. Then, Islamic insurance companies need to select a Fatwa Authority and Sharia Supervisory Board to ensure compliance with the principles of Islamic law (Maiga & Ibrahim, 2020). This process can be challenging as it requires finding qualified individuals and institutions with expertise in Islamic law and insurance.

To answer these challenges, and solve problems in terms of Islamic insurance in Indonesia, research is needed that can specifically examine and map the development of research related to Islamic insurance in Indonesia. One of the analytical tools that can be used to deepen this research is NVivo. NVivo analysis can be used to find out and visualize keywords, research developments or research topics on a topic, which in this study is Islamic insurance in Indonesia. A number of studies relevant to this research include Izza & Devi...
mapping research related to the efficiency of Takaful (Islamic Insurance). The results found that the number of publications that fluctuate from year to year related to Takaful efficiency research shows that this topic is an interesting topic and should continue to be developed. In addition, various focus discussions and cluster analysis that illustrate the research path in Islamic insurance efficiency research include cost efficiency in the Islamic insurance industry, comparison of the efficiency level of Islamic insurance and conventional insurance, Islamic insurance from a macro (industry) perspective.

Md Husin & Haron (2020) synthesized and categorized previously published research to identify gaps and provide future research directions related to takaful or Islamic insurance. The results found that not much has been written and published on takaful demand in quality journals. The first two articles were published in 2009, but it was not until 2017 that coverage of the topic grew rapidly. While there were no articles published in 2018 on takaful demand, there was one article published on the topic in 2019. This study also found that not much attention has been paid to takaful demand from the corporate sector. Khan et al (2020) discussed the existing contributions to Islamic insurance through a meta-literature methodology that includes bibliometric (quantitative) and content (qualitative) analysis. By reviewing 69 articles, this study aims to provide an in-depth background of the Islamic finance industry, society and its economy, academic research, and policy makers. The research also identified and reviewed three prominent streams of research on Takaful namely its overview, growth path and model; governance mechanisms; products/services and customer perceptions. In addition, the research also identified leading academic institutions, countries, journals, as well as authors, co-author networks, and their positions within these streams. Finally, the research results derived and summarized 16 key future research questions.

Adriana et al (2023) studied Islamic insurance and SDGs. This research reveals that Islamic insurance in developing countries is very important in advancing SDGs while making a major contribution to welfare. In addition, it is recognized that increasing Islamic insurance for SDGs requires great support from the government, regulators, and related organizations. Chusaini & Apriantoro (2023) reviewed the Islamic insurance literature that has been published in journals of international repute. Briefly reviewed the current status of various issues raised in the Islamic insurance literature. Then it tries to define and suggest for the overall purpose of the Islamic socio-economic and financial system with the foundation of Islamic insurance. In this study insurance can be seen as a useful form of aggregate, which develops gradually and depending on the circumstances. This research can be used as a reference, evaluation and source of improvement with the aim of providing benefits for companies and non-sharia insurance companies to improve performance and existing knowledge, as well as changing views with the concept of takaful that has been improved and away from the concept of takaful system of "gharar" and "riba" inherent in the minds of the people of the economic system in circulation. And in the end it leads to a healthy work system by using sharia insurance.

Based on these studies, there is no research that specifically examines Islamic insurance in Indonesia using NVivo analysis. Therefore, this study seeks to map research related to Islamic insurance in Indonesia published by Dimension indexed journals from 2006 to 2023.

**METHODOLOGY**

As for the analysis of 207 this paper combines qualitative methods with descriptive statistics. Qualitative deepening is a research technique that focuses on exploring the meaning, characteristics, symptoms, understanding, concepts, symbols, and descriptions of a phenomenon using many methodologies and narrative styles. Qualitative methods are seeking, collecting, evaluating, and interpreting extensive visual and narrative data to gain deeper knowledge about an event or topic of interest. Descriptive research is qualitative in nature; it studies the techniques of collecting, compiling, and summarizing research data in a statistical discipline. Data must be frequently and adequately summarized for evaluation in tables, graphs, and other graphical displays. In addition, other advantages of qualitative methods are richness in data collection, valid coding, and reliable interpretation (Moretti et al., 2011).

Furthermore, the research process used NVivo 12 Plus software. NVivo, one of today's most popular qualitative data management programs has its roots in NUD*IST. Software developers have described it as an improved and expanded version of NUD*IST3. NVivo has features such as character-based coding, rich text analysis capabilities, and multimedia functions that are essential for qualitative data management. One of
NVivo’s strengths lies in its high compatibility with research design. The software is not methodologically specific and works well with a variety of qualitative research designs and data analysis methods such as discourse analysis, grounded theory, conversation analysis, ethnography, literature review, phenomenology, and mixed methods (Zamawe, 2015). In addition, another advantage of using NVivo 12 Plus is that it can collect, organize, analyze, and visualize unstructured or semi-structured data by importing data in various file formats, organizing demographic data, source code, capturing ideas, running queries, and visualizing project items (Izza & Rusydiana, 2022).

Finally, data in excel and csv formats were processed and then analyzed using NVivo 12 Plus software to automatically utilize and separate data in files with sentences, paragraphs, or unique text strings by utilizing the autocode wizard. From the sources analyzed, the Auto Code Wizard was used to provide results related to the topic of Islamic insurance in Indonesia.

RESULTS
Word Frequency Query

The analysis through the word frequency tool aims to find the research problem with the highest repetition in terms of the searched material. Frequently used words and terms in the text are shown in Figure 1 based on automatic coding. The word size in the word frequency results shows a higher frequency of occurrence than others.

Based on the results of word frequency from 207 indexed publications Dimensions themed Islamic insurance in Indonesia obtained from mapping and percentages calculated automatically by Nvivo 12 Plus Wizard. The words with the highest frequency in published research after the word Islamic insurance are "financial" with a percentage of 0.90%, followed by "investment" at 0.55%, and followed by the third highest word, "takaful" at 0.35%. In addition, the automatic coding results also show several other interesting terms such as economic, bank, risk, law, capital, funds, industry, management, efficiency, health, BPJS, products, tabarru, and fatwa.

Hierarchy Chart
Based on the coding, the hierarchical chart on the title automatically generates several relevant themes that often appear, including Islamic insurance, contract, efficiency, economy, finance, development, policy, and sharia. Among these charts, the word "sharia insurance" has a larger square size than the others.

Based on the coding, it automatically generates a hierarchical chart based on the author’s keywords. Figure 3 presents relevant themes that frequently appear including insurance, companies, sharia, Islamic insurance, and banking. The word "insurance" has a larger square size than the others.
The next tool presented from Word Frequency analysis is a treemap. A treemap is a diagram that shows data in hierarchical order, as a collection of nested rectangles with different dimensions, sizes, and shapes. The size shows the number by frequency and percentage. Treemaps are scaled to fit the space offered. The size of the rectangles should be considered in the network's relationship to each other which results in a larger area view at the top left of the chart, versus, a smaller rectangle view at the bottom right (Help NVivo, 2020). From the Word frequency analysis in the form of a treemap generated from this analysis has shown two different aspects, namely:

a) **Concerns** are the main concern in the grouping of related general topics. Among the related topics is Islamic insurance in Indonesia.

b) **Focus**, this section discusses the focus of discussion in financial research, growth, investment, economy, banks, takaful, funds, risk, law, management, industry, health, tabarru' and others.

### Cluster Analysis

**Items clustered by word similarity**

Furthermore, Figure 5 shows cluster analysis, which is a technique used in exploring and visualizing patterns in the theme of Islamic insurance in Indonesia in general in scientific research by grouping similar or related sources or words using automatic codes from NVivo 12 software based on titles and abstracts. This is
used to obtain detailed and comprehensive results so that it can determine the research path related to Islamic insurance in Indonesia research. There are 4 main clusters in general that group words and their relationships.

- **Cluster 1 Efficiency and Islamic Insurance in Indonesia**
  Indriani et al (2019) explained the efficiency of Islamic insurance companies and the factors that influence it. The results showed that the efficiency level of Islamic insurance companies in Indonesia fluctuated during the research period and from several research objects used, there were several Islamic insurance companies that achieved optimal efficiency. Furthermore, the factors that influence the level of efficiency in Islamic insurance companies in Indonesia are ROE and LNTA. Aryonindito et al (2020) examined whether efficiency can be used as an intermediary variable in linking market share and company size to the profitability of Islamic insurance in Indonesia. The results showed that market share and company size have a significant positive and negative effect on efficiency. This shows that market share is the variable that shows a significant positive effect on profitability compared to the other two variables. Meanwhile, the result of Sobel test shows that efficiency cannot be used as an intermediary in this research model.

- **Cluster 2 Policy and Islamic Insurance in Indonesia**
  Iskandar et al (2020) analyzed the level of efficiency and productivity of Islamic insurance during the 2016-2018 period. The analysis results show that the majority of Islamic life insurance and Islamic general insurance are inefficient during the 2016-2018 period. Company size which represents total assets is a factor that has a positive and significant effect on the efficiency value. The results of the productivity analysis show that the level of productivity of both Islamic life insurance and Islamic general insurance during the 2016-2018 period is influenced by technological change factors. And research from Ulansari & Septiarini (2020) explains the comparison of the efficiency of conventional and Islamic insurance in Indonesia. The results of his research explain that from the type of industry there are differences between conventional insurance and sharia insurance, where sharia insurance uses Islamic principles. Then when viewed from the efficiency value between the two industries, there is no difference in the level of efficiency. Both conventional insurance and sharia insurance have the same level of efficiency. Although Islamic insurance in Indonesia is still relatively new, its performance is as good as conventional insurance, and it can utilize its resources well.


- **Cluster 3 Sharia Principles**
  From the results of his research, it can be concluded that after the existence of Law No. 10 of 1998 concerning Amendments to Law No. 7 of 1992 concerning banking and Law No. 21 of 2008, the development of Islamic banking is getting faster. Both laws provide opportunities and a solid legal basis in the development of Islamic banks in Indonesia. The same thing also happens in the field of insurance. The laws and regulations governing insurance in Indonesia include Article 1774 of the Civil Code, Law No. 2 of 1992 concerning Insurance and Insurance Business, Minister of Finance Number 18 / PMK.010 / 2010 concerning the Implementation of Insurance Business and Reinsurance Business with Sharia Principles.

- **Cluster 4 Financial Services Regulation**
  Lathif & Habibaty (2019) explain Indonesian banking and insurance law in the perspective of Islamic law. From the results of his research, it can be concluded that other relevant studies include Ikhwan & Rasydiana (2022) analyzing the stability of insurance efficiency during the Covid-19 pandemic with a comparative study of Islamic and conventional insurance in Indonesia. Astuti & Suprayogi (2017) examined the differences in the efficiency of Islamic and conventional life insurance companies in Indonesia with the data envelopment analysis (DEA) method. Sabiti et al (2017) explained the efficiency of Islamic insurance in Indonesia with the Data Envelopment Analysis approach. Tuffahati et al (2019) explained the measurement of Islamic insurance efficiency with Data Envelopment Analysis (DEA). Pusptasari (2015) discussed hybrid contracts and fund efficiency management in Islamic general insurance companies in Indonesia.

Ownership and leverage on the financial performance of the Islamic insurance industry. The results showed that the board had no effect on Takaful's financial performance. Commissioners, managerial ownership, institutional ownership and leverage have a positive effect on the financial performance of the Islamic insurance industry in Indonesia. Company size weakens the relationship between the number of directors and leverage on financial performance, and does not moderate the relationship between the number of commissioners, managerial ownership and institutional ownership on the financial performance of the Islamic insurance industry.

Nugraheni & Fauziah (2019) examined the effect of corporate governance on customer satisfaction and customer loyalty in Islamic insurance companies in Indonesia. The results found that corporate governance has a positive effect on customer satisfaction and customer loyalty. Other results show that customer satisfaction has a positive effect on customer loyalty. This study recommends strengthening the implementation of corporate governance to increase the attractiveness of Islamic insurance companies and have an impact on customer satisfaction and customer loyalty. Mafula & Mi’raj (2022) analyzed the opportunities and challenges of the Islamic insurance industry in Indonesia. The results of the study concluded that the possibilities that might occur are: the domino effect of the Halal Value Chain and the development of other state-owned enterprises; digitalization in the field of Islamic Finance; and the potential market for micro Islamic insurance. The challenges require a regulatory framework established as a catalyst to drive supply and demand; low market penetration, insurance Islamization issues and inadequate product development of Islamic insurance, limited liability companies and issuance of qard hassan funds in Islamic reinsurance.

Hendra (2021) analyzed the determinants of financial stability of Islamic insurance companies registered with the Indonesian Financial Services Authority (OJK) from 2014 to 2018. The results showed that financial stability was significantly influenced by investment, insurance premiums, independent boards, and institutional ownership. Capital structure, sharia supervisory board, and board of directors have no effect on financial stability. Increasing the number of participant contributions and strategic investments must be a concern for Islamic insurance managers. The role of an independent board and supervision of institutional owners can strengthen the financial stability of Islamic Insurance.

Authority Regulation No.72/POJK.05/2016 (hereinafter POJK No.72/POJK.05/2016) as the basis for legislation that explains the standardization of sharia policy contracts. The results of this study conclude that in general the ABC Islamic Sharia insurance policy of PT XYZ is in accordance with POJK No.69/POJK.05/2016 and POJK No.72/POJK.05/2016, but there are some peculiarities in the policy so that it still needs to be questioned in terms of welfare.

- **Cluster 3 Banking and Islamic Insurance in Indonesia**
  Ronaldo et al (2019) analyzed the impact of Indonesian Islamic banks to build the growth of premium income of Islamic insurance companies in the Indonesian market. In 2017, Indonesian Islamic banks contributed premium income to Islamic insurance in Indonesia up to 1.8 billion. Among these Islamic banks are Bank Mandiri Syariah (BMS), Bank Muamalat Indonesia (BMI), Bank Negara Indonesia Syariah (BNIS), Bank Rakyat Indonesia Syariah (BRIS) and Bank Mega Syariah. This explains that Islamic banks contribute significantly to the growth of Indonesia's Islamic insurance premiums. As for other financial industries such as BPRS, Sharia Leasing does not make a significant contribution to Islamic insurance.

Effendi (2021) predicts the potential of Indonesia's Islamic insurance market, with the approach of calculating premium contributions from the banking sector and Islamic sukuk. The results of this study show that over the next five years, the total contribution of Islamic insurance will experience positive growth and is predicted to have a total contribution of IDR 11,568.40 billion in 2023 from the Islamic banking and sukuk sectors with the largest contributor from the Islamic banking sector. ARIMA forecasting results show a positive trend in the premium contribution of the Islamic banking and sukuk sectors from year to year. Even so, the growth will experience a slowdown. The predicted slowdown in the contribution of these two sectors to the Islamic insurance market in Indonesia is a sign of a possible decline in the total growth of Islamic banking financing. Similarly, the sukuk sector, both state and corporate sukuk, is predicted to experience a slowdown in the growth of Islamic insurance premiums.

- **Cluster 4 Company and Islamic Insurance in Indonesia**
  Hidayat & Firmansyah (2017) examined the role of the board of directors as operational executives, the board of commissioners as company supervisors, the proportion of managerial ownership and institutional
CONCLUSION

This study aims to identify and map research related to the extent of the development of Islamic insurance research in Indonesia in the scientific literature. The results show that there are 207 paper publications from 2006-2023 with Digital-Object-Identifier (DOI) indexed by Dimensions.

In addition, this review includes metadata information, co-occurrence, and sentiment analysis. This study also found that the number of publications fluctuates from year to year related to Islamic insurance research in Indonesia, which indicates that this topic is an interesting topic and must continue to be developed. In addition, various foci of discussion and cluster analysis that describe the research path in Islamic insurance research in Indonesia include Efficiency and Islamic Insurance in Indonesia, Policy and Islamic Insurance in Indonesia, Banking and Islamic Insurance in Indonesia, and Company and Islamic Insurance in Indonesia.

Thus, the results of this study are expected to be used as a basic reference to see how graphical visualization of the development of Islamic insurance research trends in Indonesia in published scientific research so that it can be further developed by experts. Recommendations for future research can refer to the most popular keywords that can be discussed further. In addition, it is possible to conduct a more complete bibliometric analysis with other types of software. Finally, it should be noted that this study has limitations in that the time frame is limited and the results offered are still dynamic. Suggestions for future research could use better databases such as Scopus or WoS and other sources for better results. In addition, the use of a bibliometric approach can be used to see results that may differ (Rahardjo, 2023; Maulida & Rusydiana, 2023; Uula & Kassim, 2023; Avedta, 2023; Maulida & Ali, 2023; Khairunnisa, 2020; Ruhana, 2021; and Mu’adzah, 2022).

REFERENCES


