

A BIBLIOMETRIC STUDY ON TAKAFUL LITERATURE FROM 2000 TO 2023: EMBARKING TOWARD AGRICULTURE PROTECTION

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Abstract: *This study aims to understand the trends of scientific publications related to takaful in the world and to show how authors, institutions, and countries interact with each other in those studies in the field of takaful or Islamic insurance. This study is a quantitative research that employs bibliometric analysis. A time limit was set to examine the current data and the results between the years 2000 to 2023. The journals and articles are acquired from the Scopus scientific database. Overall, there are 321 articles related to the field of takaful were retrieved. This study perceived several variables, including authorship patterns, number of articles published, research approach, geographical affiliation, and subject area. The contribution of this study illustrates that most of the previous studies discussed economic and social development, which are positively influenced by the importance of takaful worldwide. This study finds that the number of takaful literature has increased significantly and consistently over the last 23 years. While there is a positive direction for future research related to takaful areas, however, there is no article produced in the scientific database touching on agriculture takaful. Thus, this will open a vast opportunity for future scientific research collaboration and publications in agriculture takaful. This study also found that Malaysia, Pakistan, Indonesia, Saudi Arabia, and United Kingdom have become the five countries that have played a major role in creating collaborative takaful research. The findings of this study provide important implications for improving the practice of takaful globally.*

Keywords: Bibliometric analysis, Takaful, Agriculture, Zero hunger

1. Introduction and Objective

The concept of takaful was originally developed to protect people from financial harm. The establishment of takaful as Islamic insurance has promoted elements of brotherhood, solidarity and mutual assistance throughout society. Takaful can be used as a risk management tool to lessen the financial burden and damage to daily life and business operations. Additionally, it emphasizes the importance of fund accumulation in society for overall economic growth (Hasan & Salman, 2021). Takaful is available to everyone as a socio-safety net and a guarantee of financial protection. In the agriculture sector, the farmers can join the takaful scheme to claim casualties acquired due to the misfortunes and uncertainties of crop production. The implementation of the agriculture takaful scheme is crucial to reduce the financial effects of crop loss due to disease outbreaks, droughts, and excessive rains. This would ensure the stability of food supply in a nation toward the manifestation of Zero Hunger of the Sustainable Development Goals (SDGs). Meanwhile, in order to cater for the needs of the poor population

in mitigating risks, micro-takaful was introduced to specifically address the needs of the underserved population and at the same time promote financial inclusion in the community.

This study intends to analyse the research-related literature of takaful encompasses the number of articles, contribution patterns, keyword of articles, and other related data. The outcome will also demonstrate the current trend and development of scientific research publications in the area of agriculture takaful worldwide.

2. Method

Bibliometric analysis is a popular and rigorous method for exploring and analyzing large volumes of scientific data particularly in scientific databases such as Scopus and Web of Science. It gives us the opportunity to explore the subtle evolutionary aspects of a particular discipline while illuminating its frontiers. The term used to search and collect the result are "Takaful" or "Islamic Insurance " or "Shariah Insurance" from 2000 to 2023 which cover 23 years of literature. Gu's research (2004) found that the information gathered from bibliometric data aids organisations engaged in research, compares scientific inputs and outputs and helps evaluate the performance of a study field. By offering further explanations of the variables underlying the field's research contribution, the findings of the bibliometric study can also assist researchers in doing important research (Akhavan et al., 2016).

The current study uses only the Scopus database as its source of data extracted. Although Scopus is one of the largest databases for archiving all scholarly research not all published sources are included in it (Sweileh et al., 2017; Ahmi and Mohamad, 2019). The usage of other databases, such as Science Direct, Emerald, Springerlink, Web of Science, Google Scholar, Dimensions, and others, should be used for future studies. This output was obtained from sources published on Scopus in various conference papers, journals, and articles. The data pattern clearly shows that there is an increasing pattern of takaful-related publications from the Scopus database. There are a total of 321 journals identified from the database. The bibliometric evaluation focuses on a wide variety of literary works and articles by various authors in the field of Takaful. The extracted information on takaful performance and trends is important as it can be referred to by other researchers such as students, academics, and practitioners to have a better understanding of the takaful industry in identifying crucial areas that require further research and development in the future.

3. Findings and Argument

The results were mostly reported as frequency and percentage. After the data was extracted, related documents that showed the frequency of the data were produced. The data is presented as a further depth understanding of the information extraction for other details like affiliation, author, institutions, countries and publications. Scientific mapping is also created utilizing the VOSviewer software program from data that has been retrieved and presented as follows.

3.1 Publication Trend

Overall, the search on the Scopus database produced 321 scientific articles published from 2000 to 2023. The trend shows that Takaful research increased significantly in 2012 with 29 publications and decreased slightly in 2013. The number of articles rose gradually from then on till 2016. Since then, from 2017 to 2020, the number of publications on takaful has been rising but abruptly decreases starting in 2021. Table 1 provides information on the publishing trend

Table 1. Year of Publication

Year	Total Publications (TP)	Percentage (%)
2023	10	3.12
2022	23	7.17
2021	26	8.10
2020	35	10.90
2019	33	10.28
2018	34	10.59
2017	35	10.90
2016	24	7.48
2015	15	4.67
2014	16	4.98
2013	16	4.98
2012	29	9.03
2011	7	2.18
2010	5	1.56
2009	5	1.56
2007	5	1.56
2006	1	0.31
2004	1	0.31
2000	1	0.31
Total	321	100.00

3.2 Productive Authors, Institutions, and Countries

With regards to the most prolific and influential authors, institutions, and countries, based on the analysis in Scopus, Salman, S.A. was recorded as the author with the highest number of publications with 20 documents of takaful. While the second author, Ghazali, P.L. has recorded 14 publications that are relevant to the area of takaful in Scopus. Meanwhile, with a total of 79 publications, International Islamic University Malaysia (IIUM) scored as the most productive institution in terms of publications related to takaful. In addition to that, Malaysia is one of the Asian contingents that has contributed 210 publications in the takaful-related study.

3.3 Co-occurrence Analysis of Author's Keywords

The outcomes of the related popular keyword used by researchers in the takaful study have been analyzed and produced by VOSviewer. The analysis by using the software tools of VOSviewer. shows that the major terms of "Takaful," "Islamic Insurance," "Insurance," "Malaysia," and "Islamic Finance" were among the top 5 most popular terms found in the Scopus database as depicted in Figure 4, Figure 5, and Figure 6. The co-occurrence of the keyword between takaful and agriculture seems to be overlooked. It is as the following Figure 1.

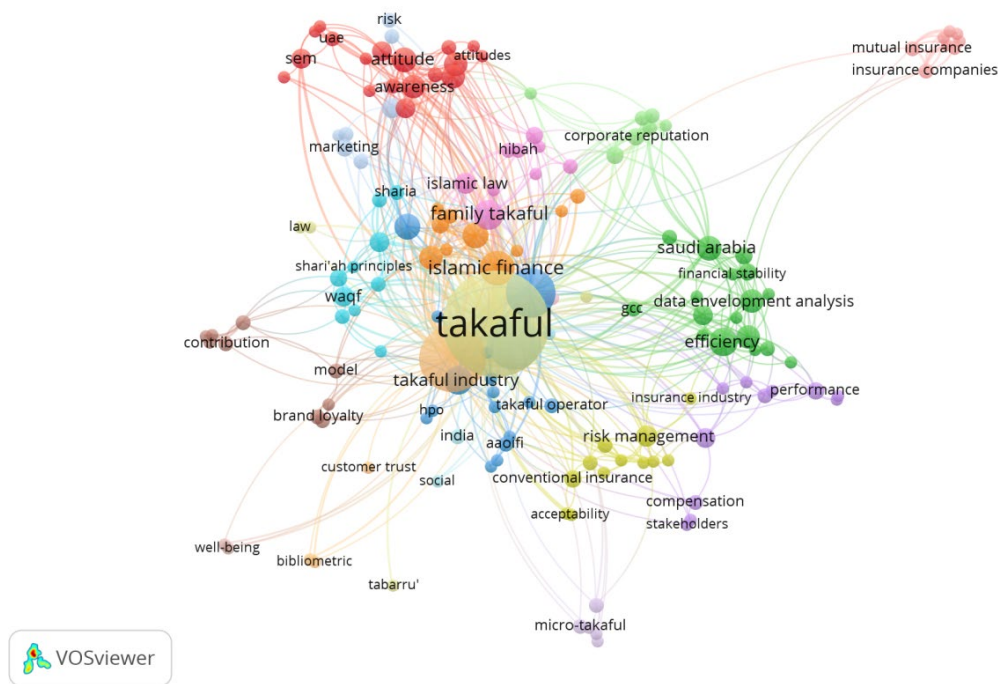


Figure 1. Network Visualization of the Author's Keywords

3.4 Current and Future Research Directions

Based on the analysis in Scopus, database, the research in the area of takaful is mostly focused on the historical background, ideas, models, and risk management in Takaful industry. The top three terms that were frequently used in this research were takaful, Islamic insurance, and insurance. Based on further analysis of the data, no papers related to takaful and agriculture were found in Scopus, Consequently, this has created a huge possibility for additional future scientific research to be carried out in order to improve the literature in the said field. As one of the most important topics, especially to address the uncertain agricultural productions to protect national food security, more concentrated efforts must be done to enhance future research in the agriculture takaful field. In tandem with the Value-Based Intermediation Takaful (VBIT) framework and *maqasid* Shariah, the concept must be prioritised. Thus, this study submitted that for future research, academics should concentrate on this aspect of agricultural takaful.

Another latest development to ponder is that the research regarding agricultural takaful has received appalling attention and become one of the important topics in Malaysia since concentrated efforts have been conducted by the related authorities to introduce agricultural takaful in this country. In order to launch agricultural programmes soon, steps of piloting, planning, and preparation are currently being carried out in Malaysia, Cambodia, Viet Nam, and Myanmar (Panda, 2021). Additionally, as the risk to the agriculture sector is unanticipated, this topic was also examined in various other countries. There is extensive literature on the agricultural takaful which covers the crops, livestock, fishery, and forestry that could be retrieved from other search engines like Google Scholar. However, Scopus does not reflect the same trend. The majority of the articles included in Scopus are on conventional insurance.

4. Conclusion and Suggestions

The results of the bibliometric analysis highlight the increasing trend in takaful research worldwide underlining the increased awareness of the importance of takaful for business and life affairs protection including the gaining interest in agriculture takaful worldwide. Indirectly, its impact would reverberate the researchers and takaful industry players worldwide on the promising results from takaful research would eventually lead to increased demand for takaful protection.

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