

Twenty-five Years of Global Takaful Trends: A Scopus Literature Exploration (2000-2025)

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Abstract

Purpose: This study examines the intellectual structure and research development of takaful (Islamic insurance) within the broader Islamic finance ecosystem. It aims to map the evolution of takaful research and identify emerging trends, influential contributors, and underexplored areas that align with global sustainability and financial inclusion goals.

Design/methodology/approach: A bibliometric analysis was conducted on 394 Scopus-indexed publications spanning from 2000 to 2025. Using bibliometric mapping and citation analysis, the study investigates publication trends, authorship patterns, institutional and country-level contributions, keyword evolution, and citation impact to reveal the intellectual landscape of takaful research.

Findings: Results show that Malaysia dominates takaful research, led by institutions such as the International Islamic University Malaysia (IIUM) and Universiti Malaya. While publication output has grown significantly in recent years, global engagement remains uneven. Research gaps persist in key policy areas, including the Value-Based Intermediation Takaful (VBIT) framework, agricultural or crop takaful, and sustainability-linked models. Despite recognition from global organizations such as UNDP and IsDB on takaful's potential for financial inclusion and climate resilience, these themes remain underrepresented in academic literature.

Research limitations/implications: The analysis is limited to Scopus-indexed publications, potentially excluding relevant works from other databases or grey literature. Future studies could expand coverage using multi-database searches and systematic literature review (SLR) methods to provide deeper conceptual synthesis and comparative regional analysis.

Practical implications: The findings offer insights for policymakers, regulators, and industry practitioners by identifying research trends and gaps that can inform the design of inclusive, sustainable, and innovation-driven takaful frameworks. Strengthening collaboration between

academia and industry is crucial to advancing takaful's contribution toward financial inclusion and sustainable development.

Originality/value: This study represents one of the first two-decade bibliometric overviews of takaful research, providing a comprehensive understanding of its intellectual evolution. It highlights influential authors, institutions, and collaboration networks, offering a roadmap for future research that supports the advancement of resilient and sustainability-oriented Islamic financial solutions.

Keywords: Takaful, Islamic Insurance, Bibliometric Analysis, Islamic Finance, Value-Based Intermediation (VBI), Financial Inclusion

Introduction

Takaful, an Islamic alternative to conventional insurance, has emerged as a promising tool for financial protection and resilience. While Shariah-compliant financial assets are expected to grow to US\$5 trillion by 2025, the takaful sector remains comparatively small, representing just around 10% of total Islamic finance assets (UNDP & IsDB, 2023). The global takaful market is projected to reach US\$97 billion by 2030. Yet, it remains overshadowed by conventional insurers, many of which already match that figure annually through premiums alone. Despite this modest footprint, Takaful holds considerable potential for enhancing financial resilience, particularly in vulnerable and underserved communities. In Muslim societies, takaful provides a Shariah-compliant mechanism that fosters collective responsibility and mutual assistance, thereby supporting economic stability (Hassan & Salman, 2021). It offers an ethical and Shariah-compliant model of mutual risk-sharing that can help protect households, farmers, and microenterprises from shocks associated with health crises, crop failures, or other socio-economic disruptions. Takaful can also contribute to broader financial inclusion by expanding access to risk protection mechanisms that align with Islamic principles. In many Muslim-majority countries, cultural and religious reservations have limited the reach of conventional insurance. This leaves large portions of the population vulnerable to uninsured risks. With targeted and inclusive strategies, takaful can help bridge this protection gap and reinforce community-level security.

Recent developments in the takaful industry further demonstrate its growing relevance. For instance, Malaysia introduced the Value-Based Intermediation for Takaful (VBIT) framework in 2021 to advocate financial inclusion, sustainability, and community empowerment into Takaful operations (MIFC, n.d.). Additionally, the introduction of agriculture-based Takaful models in several countries like Malaysia, Indonesia and Sudan marks a shift from conventional crop insurance towards more inclusive and faith-aligned risk solutions. At the same time, the joint efforts by IsDB and UNDP have advocated for the role of Takaful as a climate risk protection tool, particularly in countries facing growing environmental vulnerabilities (UNDP & IsDB, 2021).

The primary objective of this study is to conduct a bibliometric analysis of scholarly literature on takaful from the year of 2000 to 2025. Bibliometric analysis is particularly valuable for takaful research because, despite its critical role within the Islamic finance ecosystem, the field remains relatively underexplored and fragmented. A systematic mapping of the literature helps to identify influential authors, institutions, and collaboration networks, while also uncovering thematic gaps. By examining publication patterns, author and institutional productivity, thematic focus areas, and geographical distribution, this study evaluates the extent to which academic research aligns with emerging developments and innovations within the takaful

industry. In doing so, it identifies key research gaps and opportunities that can support the advancement of inclusive, and sustainable Islamic financial solutions. Specifically, this analysis addresses four main components:

- i. Mapping the distribution and growth of scientific publications related to Takaful;
- ii. Identifying the most prolific authors, institutions, and countries contributing to Takaful research;
- iii. Analyzing keyword co-occurrence to uncover prevailing research themes and topical trends; and
- iv. Assessing whether academic discourse has kept pace with recent developments in the takaful industry, such as the introduction of the VBIT framework, agriculture-based Takaful models, and global climate risk protection.

Literature Review

The Role of Takaful in Enhancing Socioeconomic Resilience Among Vulnerable Communities

Takaful plays a pivotal role in safeguarding individuals and communities against unexpected shocks and financial hardships. As noted by Che Mohd Salleh et al. (2020), Razak et al. (2021), and Fikri et al. (2022), financial protection is essential in maintaining social well-being, particularly during times of crisis. It acts as a socio-economic safety net, reducing the financial burden on affected individuals. This protective mechanism is indispensable in regions where conventional insurance may conflict with cultural or religious beliefs. By aligning with local values, takaful broadens access to financial services for vulnerable populations. It empowers individuals and families to seek support without compromising their principles, promoting economic inclusion and long-term regional stability (Alam, 2023). Essentially, the takaful model is rooted in the Islamic principles of mutual assistance (*ta'awun*) and shared responsibility. It is designed to align with community-oriented values such as compassion, fairness, and concern for others. Beyond financial protection, the accumulation of communal funds through takaful enables communities to invest in local initiatives, support small businesses, and foster entrepreneurship. By promoting collaborative financial solutions, takaful not only mitigates individual risk but also strengthens community ties. This entails sustainable growth and improved livelihoods for all members involved (Wahab et. al, 2024), reflecting the deeper spirit of brotherhood and solidarity that defines takaful's purpose beyond commercial gain.

Vulnerable households, in particular, often experience irregular income and are highly exposed to socio-economic, political, and environmental risks. Even small income reductions or sudden expenses can drastically impact their quality of life. The loss of productive assets whether due to illness, accident, or death can impair both current livelihoods and future earnings. These challenges are exacerbated for those living in areas prone to natural disasters, theft, and other hazards. Takaful, therefore, offers a pathway toward perseverance, especially for individuals with limited means to recover from such setbacks. Patel (2004) reinforces this view, noting that takaful holds the potential to provide communities with a meaningful safety net, fostering a sense of security and hope for the future.

Previous Bibliometric Study in Takaful

Several studies have used bibliometric and systematic literature review (SLR) approaches to map the evolution and scope of takaful research. These efforts have revealed valuable insights into influential authors, emerging themes, and publication trends within the domain. Table 1 provides a comparative overview of major bibliometric studies on takaful, highlighting their

scope, methodologies, and contributions to the field. These studies vary in terms of search strategies, databases used, and analytical focus. The earliest studies, such as Arwendria & Rahmi (2019) and Khan et al. (2020), utilized broad search strings combining “takaful” with Shariah-related terms to explore research patterns and collaboration networks. Their analysis primarily focused on mapping document distributions and author or institutional influence using Scopus and Web of Knowledge, respectively.

Subsequent studies like Nasir et al. (2021) and Marzuki et al. (2022) adopted a more refined approach, emphasizing author productivity, core documents, and thematic clusters. These analyses provided deeper insights into the development of takaful literature, identifying prolific authors, countries, and key research areas. More recent contributions, including Qadri et al. (2022), Nuraini (2023), Hakim & Munir (2023), and Alam et al. (2023), extended the scope further by integrating conceptual and thematic mapping tools. These studies explored emerging research themes, citation impacts, collaboration networks, and performance indicators such as h-index, thematic evolution, and cluster analysis.

Overall, the bibliometric studies listed in Table 1 reveal a growing scholarly interest in takaful, accompanied by increasing refinement in analytical techniques. Collectively, they offer valuable insights into publication trends, intellectual structures, and knowledge networks within the takaful domain. While these studies have significantly enriched the literature, their scope varies in terms of data sources (e.g., Scopus, Web of Science), objectives, and methodological approaches. However, none have systematically mapped takaful research against impact-driven frameworks such as the Sustainable Development Goals (SDGs), Maqasid al-Shariah, or ESG-VBIT alignment, highlighting a critical gap that this study aims to address.

Meanwhile, the global takaful market is expanding rapidly, with projections exceeding USD 50 billion, particularly in Southeast Asia, the GCC, and Africa. In Malaysia alone, takaful fund assets reached RM59.6 billion in 2024, with 6.69 million family takaful certificates issued (The Star, 2025). This strong growth underscores the need for academic research to better reflect industry developments. To address this, the present study conducts an updated bibliometric analysis of takaful literature indexed in the Scopus database from 2000 to 2025. Unlike earlier studies, it seeks to evaluate whether recent innovations and policy frameworks in the takaful sector have been adequately captured in academic discourse. In doing so, it aims to identify future research pathways aligned with real-world developments and stakeholder needs.

Table 1: Previous bibliometric analyses of Takaful studies

| Author | Domain/Search strategy | Data source & Scope | Purpose | Attributed examined |
|--------------------------|--|---------------------|---|---|
| Arwendria & Rahmi (2019) | (Insurance) AND (Syariah OR Syari'ah OR Shari'a) AND Takaful (Finance OR Insurance) AND Islam AND (Sharia OR Shari'ah OR Sharia OR Shari'a) | Scopus (2006-2019) | The keywords from the document abstracts in the Scopus database are used to map the findings of research on Islamic insurance (Takaful) | Document Distribution (year & subject), Network Analysis (authorship, institutions, countries, document citation, author citation, journal citation), Network Map, Co-occurrence Analysis Key Word, Research Hotspot (topic & frontier) |

| Author | Domain/Search strategy | Data source & Scope | Purpose | Attributed examined |
|-----------------------|--|--------------------------------|---|--|
| Khan et al. (2020) | "Takaful", "Islamic insurance", "Insurance and Islamic finance", "Islamic mutual insurance", "Islamic cooperative insurance" | Web of Knowledge (2010 - 2018) | Provides a thorough backdrop of the Islamic finance industry for its academic research, policy-makers, communities, and economies | Leading academic institutions, countries, journals, as well as authors, co-authorship networks, and their position within these streams |
| Nasir et al. (2021) | "Takaful", "Takafal", "Islamic Insurance" and "Takafull" | Scopus (2000-2019) | Provide a thorough analysis of the main influencing factors and conceptual framework of the literature on Takaful | Descriptive Analysis of Documents, Frequency of Publications (journals), Authors (number of publications, h-index, and citations), Affiliations (countries & institutes), find core documents |
| Marzuki et al. (2022) | "Takaful" OR "Islamic insurance" OR "Islamic mutual insurance" OR "Islamic cooperative insurance" | Scopus (1989-2022) | Examined three elements of the literature: the development and dissemination of takaful research, the main topics of takaful research, and important contributors to takaful publications | Number of Published, Source Types, Language of Document, Subject Area, Most Active Source Titles, Distribution of Publication (country), Most Active Institutions, Authorship, Frequency of Keywords, Citation Analysis |
| Qadri et al. (2022) | "Islamic Insurance", "Takaful" and "Shariah Insurance" | Scopus (2002-2022) | Examine the nature of science and facets of social connections in ISF to provide a thorough understanding of the evolution of qualitative research. | Document (types & contents), Authors, Authors collaboration, Number of Publication, Number of Articles by Affiliation, Source Growth, Author's Citations Analysis, Keywords Analysis |
| Nuraini (2023) | focuses on an article titled "Takaful Performance" | Scopus (2009-2023) | Analyze developments related to Takaful Performance | Document Types, Average Citation, Three Fields Plot (publication journal, authors' names, themes, most cited articles), Source Impact (h-index), Source Growth, Top-Author's Production, Most Relevant Words, Trend Topics, The Word Cloud, Thematic (evolution & map), Conceptual Structure Map, Topic Dendogram, and Collaboration Network |
| Hakim & Munir (2023) | "Takaful" OR "Takaful Industry" | Scopus (2013-2022) | Describe the takaful industry's recent advances in research | Cluster Keywords, Research Trends (number of publications), Most Prolific Author, Future Topics, Top Contribute (countries), |

| Author | Domain/Search strategy | Data source & Scope | Purpose | Attributed examined |
|--------------------|---|---------------------|---|--|
| Alam et al. (2023) | "Takaful", "Islamic insurance", OR "Sharia insurance" | Scopus (1989-2022) | Examined a trend analysis for takaful study | Influential Articles, Top Journal Published, Subject Area, Affiliated Institutions |

Methodology

Bibliometric analysis serves as a robust method for uncovering trends, patterns, and research dynamics within a given academic field (Sweileh et al., 2017). This section outlines the methodology employed, focusing on bibliometric analysis, a well-established approach for examining large volumes of scientific literature. The study primarily relies on renowned academic databases, particularly Scopus, which serves as a comprehensive repository of peer-reviewed journals, books, and conference proceedings. Given its extensive coverage, Scopus was chosen as the exclusive source for data collection, ensuring a high-quality and credible dataset. It is important to note that only selected scholarly works are published on the platform, reinforcing its academic rigor.

Figure 1 illustrates the systematic search strategy employed in this bibliometric analysis. A comprehensive keyword selection process was implemented to ensure the inclusion of all relevant literature on *takaful* within the Scopus database. The search was conducted within article titles using the terms "takaful," "Islamic insurance," and "Shariah insurance," covering the period from 2000 to 2025. This 25-year timeframe was selected to capture the progressive development and upward trend of *takaful*-related research over the years.

A total of 425 records were initially identified and screened for eligibility. After removing 31 duplicates, irrelevant documents, and non-research items such as review papers, editorials, data papers, and errata, 394 records were retained for bibliometric analysis. The data extraction was performed on May 17, 2025, and subsequent data cleaning and harmonization were conducted using BiblioMagika and OpenRefine to ensure consistency and accuracy prior to analysis.

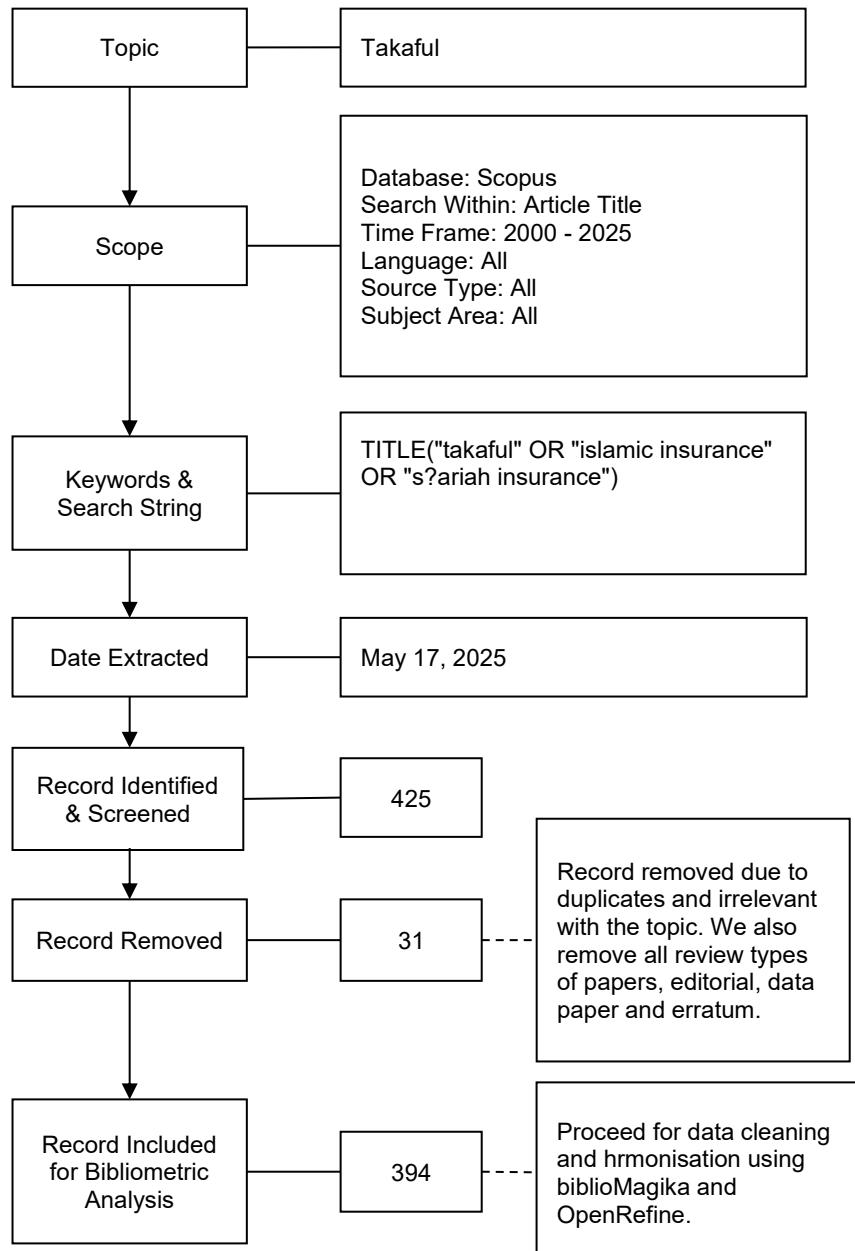


Figure 1: Flow diagram of the search strategy

Source: Zakaria et al. (2021), Moher et al. (2009)

Data extraction from Scopus was conducted systematically, with articles categorized based on relevance to the research topic. Essential details were recorded and analyzed using Microsoft Excel, ensuring the accuracy and reliability of the dataset. To maintain methodological precision, article searches were restricted to titles only, rather than relying on keyword-based queries or abstracts. A meticulous screening was applied to prevent data duplication, ensuring that only relevant and high-quality sources were retained for analysis.

The next phase of the study involved advanced science mapping techniques, utilizing Microsoft Excel and VOSviewer for comprehensive bibliometric analysis. These tools facilitated the visualization of research patterns, helping to identify key contributors, emerging trends, and knowledge gaps within the takaful industry. By examining a broad range of publications, this bibliometric evaluation provides valuable insights into takaful's performance, development,

and global research impact. Ultimately, these findings serve as a critical resource for researchers, academics, practitioners, and policymakers, supporting the ongoing advancement of takaful.

Results

Data Cleaning and Harmonization

Academic bibliographic data often contain inconsistencies that can compromise the reliability of research findings. Variations in author names, spelling errors, extra spaces, incomplete data, and inconsistent citation styles contribute to data irregularities, making data cleaning and harmonization critical components of any rigorous bibliometric analysis. Ensuring that research data remains accurate, consistent, and complete is essential to producing valid and reproducible outcomes. In this study, data processing began with the extraction of the Scopus dataset in .csv format, followed by the selection of key bibliographic fields for cleaning, including keywords, author names, affiliations, titles, and other relevant metadata. To enhance data quality, clustering functions were employed to identify and resolve inconsistencies across fields. The cleaning and standardization process relied on two specialized tools: OpenRefine and BiblioMagika.

OpenRefine (Ahmi, 2023b) played a central role in normalizing and standardizing data, ensuring uniformity across entries such as author names, institutional affiliations, and keyword spellings. In parallel, BiblioMagika (Ahmi, 2023a) was utilized to generate advanced bibliometric indicators, such as Total Publications (TP), Number of Contributing Authors (NCA), Number of Cited Publications (NCP), Total Citations (TC), and Citations per Paper (C/P). Other important metrics included Citations per Cited Paper (C/CP), Citations per Author (C/A), Authors per Paper (A/P), Citations per Year (C/Y), Citable Year, h-index, g-index, and m-index. These indicators offered a comprehensive evaluation of scholarly productivity, citation impact, and collaboration patterns within the takaful research domain.

BiblioMagika also facilitated the identification of missing or incomplete data, allowing for manual corrections during the harmonization stage. Additionally, a detailed keyword audit was conducted to ensure consistency, reconnect multivalued cells, and adjust delimiters for proper formatting. Upon completion of the cleaning process, the harmonized dataset was exported in its original structure for subsequent analysis.

By leveraging the complementary strengths of OpenRefine and BiblioMagika, the present analysis significantly improved the clarity, precision, and integrity of the dataset. This systematic and transparent approach established a robust foundation for analyzing the evolution, impact, and emerging trends in takaful research, thereby reinforcing the reliability and academic value of the bibliometric study.

This study employed comprehensive bibliometric analyses to delve into seven key dimensions, revealing intricate insights into the landscape of Takaful research. These dimensions encompassed the profile of documents, publication trends, authors' productivity, leading institutions, influential contributing countries, co-authorship patterns (both at the author and country levels), and the co-occurrence analysis of keywords. The findings presented here are grounded in rigorous data analysis and are expressed primarily as frequencies and percentages. Furthermore, the use of advanced scientific mapping, facilitated by the VOSviewer software program, has allowed for a deeper understanding of the takaful research domain.

Documents Profiles

As encapsulated in Table 2, the analysis spans takaful research conducted between 2000 and 2025, encompassing a rich body of 394 publications authored by 1,111 scholars. These figures highlight a highly engaged and collaborative research community, reflecting the multidisciplinary nature of takaful studies. Notably, 290 of these publications have been cited by peers, accumulating a total of 2,972 citations, demonstrating the academic impact and relevance of takaful-related scholarship.

The depth of influence within this research field becomes evident when analyzing average citations per cited paper, which stands at an impressive 10.25, signifying a core set of highly influential works. Additionally, citation trends reveal that takaful research maintains steady with an average of 118.88 citations per publication per year, reinforcing ongoing scholarly interest in the subject. Furthermore, the average citation per author is 2.68, underscoring the collective effort of researchers in expanding knowledge and advancing discussions surrounding Islamic finance and takaful.

These insights emphasize the continued significance of takaful within global academic discourse, reinforcing its relevance in addressing financial risk management, economic stability, and ethical investment principles. Strengthening research collaborations and expanding thematic investigations could further enhance its scholarly impact and practical applications.

Table 2: Main information

| Main information | Data |
|--------------------------------|-------------|
| Publication years | 2000 - 2025 |
| Total publications | 394 |
| Citable year | 26 |
| Number of contributing authors | 1111 |
| Number of cited papers | 290 |
| Total citations | 2,972 |
| Citation per paper | 7.54 |
| Citation per cited paper | 10.25 |
| Citation per year | 118.88 |
| Citation per author | 2.68 |
| Author per paper | 2.82 |
| Citation sum within h-core | 2,390 |
| H-index | 26 |
| G-index | 39 |
| M-index | 1.000 |

Takaful research also exhibits a collaborative ethos, with an average of 2.82 individuals contributing to each publication. This emphasizes the interdisciplinary approach and cooperative endeavors frequently observed in this field. Moreover, the cumulative impact of takaful research is quantified through the citation sum within the h-Core, totaling 2,390. The h-index, a key measure of scholarly impact, reaches 26, signifying the presence of 26 highly cited papers within the takaful dataset. Furthermore, the g-index, which spotlights the top-cited papers, stands at 39, underlining the prominence of a subset of publications that have significantly contributed to Takaful research. The m-index, at 1.0, offers a composite metric

considering both the h-index and the g-index, providing a nuanced perspective on the distribution of citations within the dataset.

Document Types

Takaful research is published in a variety of formats, including articles, book chapters, conference papers, reviews, books, and errata as depicted in Table 3. Among these, articles make up the majority, accounting for 74.76% of total publications. This dominance highlights the importance of peer-reviewed journals as the main platform for advancing scholarly discussions in takaful studies. Following closely behind, book chapters and conference papers contribute meaningfully to the expanding body of research, offering diverse perspectives and insights from both academic and industry professionals. Meanwhile, reviews, books, and errata, though present, represent a smaller share of published works. This trend reflects a strong academic focus on original research, with primary contributions shaping the evolution and impact of takaful within Islamic finance and risk management. This distribution of publication formats emphasizes the scholarly engagement and growing interest in takaful research, highlighting both its interdisciplinary nature and its significance in financial and economic discourse.

Table 3: Document type

| Document Type | Total Publications | Percentage |
|------------------|--------------------|---------------|
| Article | 300 | 76.14% |
| Book Chapter | 49 | 12.44% |
| Conference Paper | 38 | 9.64% |
| Book | 7 | 1.78% |
| Total | 394 | 100.00 |

Source Types

The distribution of takaful publications among source classifications reveals the predominant role of journals, representing 76.40% of the total (see Table 4). These journals are critical platforms for disseminating takaful research to the academic community and beyond. Books also contribute substantially to Takaful literature, with 12.44% of publications originating from this source type. While important, conference proceedings and book series publications account for smaller proportions of the total publications, highlighting the diverse channels through which Takaful research is disseminated.

Table 4: Source type

| Source Type | Total Publications | Percentage |
|-----------------------|--------------------|---------------|
| Journal | 301 | 76.40% |
| Book | 49 | 12.44% |
| Conference Proceeding | 27 | 6.85% |
| Book Series | 17 | 4.31% |
| Total | 394 | 100.00 |

Languages

Table 5 illustrates that English serves as the dominant language in takaful research, accounting for 96.95% of total publications. However, scholars have also contributed studies in Arabic, Malay, Turkish, Russian, Spanish, Ukrainian, and Urdu, reflecting the linguistic diversity within this field. This multilingual approach highlights the global reach of takaful scholarship. It fosters engagement across diverse academic communities and expands access to valuable

research insights. By embracing multiple languages, takaful studies continue to foster inclusive discourse, supporting cross-cultural collaboration and knowledge-sharing across regions.

Table 5: Languages

| Language | Total publications | Percentage |
|-----------|--------------------|------------|
| English | 382 | 96.95% |
| Arabic | 7 | 1.78% |
| Malay | 4 | 1.02% |
| Turkish | 2 | 0.51% |
| Russian | 1 | 0.25% |
| Spanish | 1 | 0.25% |
| Ukrainian | 1 | 0.25% |
| Urdu | 1 | 0.25% |
| Total | 399 | 100.00 |

Subject Areas

Takaful research has made significant contributions across a broad spectrum of academic disciplines, reflecting its multilevel impact beyond traditional financial sectors. This is presented in Table 6. While Business, Management, and Accounting remain the dominant category, stands for 50% of takaful-related publications, research in this area also extends into Economics, Finance, and Social Sciences, emphasizing its relevance in economic systems and policy development.

Beyond these core areas, takaful research has gained interdisciplinary traction, influencing fields such as Computer Science, Engineering, Decision Sciences and Mathematics. By bridging multiple disciplines, takaful scholarship continues to enhance financial resilience, promote inclusive economic growth, and support sustainable development initiatives. The diversity of research themes not only reinforces the importance of takaful in addressing complex global issues but also presents opportunities for future studies to deepen understanding and expand its practical applications.

Table 6: Subject areas

| Subject area | Total publications | Percentage |
|-------------------------------------|--------------------|------------|
| Business, Management and Accounting | 197 | 50.00% |
| Economics, Econometrics and Finance | 178 | 45.18% |
| Social Sciences | 95 | 24.11% |
| Arts and Humanities | 40 | 10.15% |
| Computer Science | 33 | 8.38% |
| Engineering | 31 | 7.87% |
| Decision Sciences | 16 | 4.06% |
| Mathematics | 16 | 4.06% |

Publication Trends

Table 7 and the corresponding Figure 2 present a compelling view of the total publication and citation by year in the field of takaful. The initial research inquiry explores the scientific distribution and production within the field of takaful studies. Using the Scopus database, this investigation identified a total of 394 scientific articles published between 2000 and mid-2025. From its inception, takaful research exhibited a relatively modest yet steady growth path, with

annual publications remaining low and fluctuating slightly between 2000 and 2010. A significant surge in research productivity was observed in 2012, with 29 publications, marking the onset of a more active phase of scholarly engagement. Although a slight dip occurred in 2013, the number of publications resumed a gradual upward trend, peaking in 2018 with 34 papers. This was followed by a consistent decline in output from 2019 to 2022. The drop in publication volume during this period may be attributed to various factors, notably the global COVID-19 pandemic, which disrupted academic research across disciplines. Economic challenges and shifting research priorities during the pandemic years significantly impacted fields within the social sciences, including takaful, as well as other domains such as computer science and engineering (Milad et al., 2022).

These disruptions were likely compounded by reduced funding and institutional support for research initiatives. Encouragingly, publication numbers began to recover in 2023, reaching an all-time high of 51 publications in 2024, the highest annual output since 2000. As of mid-2025, 13 papers have been published, with projections indicating continued publication activity in the remaining months. These findings help clarify how takaful research has developed over time and highlight key patterns in publication and productivity.

The evolving trend reflects takaful research's increasing appeal across multiple academic disciplines, as seen in the growing number of contributing authors in recent years. Turning to research impact, Table 7 shows fluctuations in the h-index, g-index, and m-index, indicating variability in the frequency and influence of highly cited publications. Although 2025 data appears lower, it likely reflects an incomplete year. On the other hand, the line graph tracking total citations reveals a gradual decline since 2019, suggesting that while more research is being published, its overall citation impact has lessened. This trend is supported by lower average citations per publication (C/P) and per cited paper (C/CP) in 2024 and 2025, possibly due to citation delays, diverse research topics, or shifts in academic focus. While publication volume and collaboration remain strong, the field faces challenges in maintaining its scholarly influence. Renewed engagement, particularly focusing on quality, relevance, and global visibility is crucial to ensure that takaful continues to evolve as a key financial solution within Islamic finance and global risk management strategies.

Table 7: Publication by Year

| Year | TP | NCA | NCP | TC | C/P | C/CP | <i>h</i> | <i>g</i> | <i>m</i> |
|------|----|-----|-----|-----|-------|-------|----------|----------|----------|
| 2000 | 1 | 1 | 1 | 2 | 2.00 | 2.00 | 1 | 1 | 0.038 |
| 2004 | 1 | 1 | 1 | 46 | 46.00 | 46.00 | 1 | 1 | 0.045 |
| 2006 | 1 | 2 | 1 | 37 | 37.00 | 37.00 | 1 | 1 | 0.050 |
| 2007 | 3 | 5 | 3 | 86 | 28.67 | 28.67 | 3 | 3 | 0.158 |
| 2009 | 5 | 10 | 4 | 45 | 9.00 | 11.25 | 3 | 5 | 0.176 |
| 2010 | 6 | 12 | 4 | 88 | 14.67 | 22.00 | 3 | 6 | 0.188 |
| 2011 | 8 | 18 | 7 | 142 | 17.75 | 20.29 | 6 | 8 | 0.400 |
| 2012 | 29 | 74 | 20 | 206 | 7.10 | 10.30 | 8 | 14 | 0.571 |
| 2013 | 14 | 27 | 12 | 122 | 8.71 | 10.17 | 6 | 11 | 0.462 |
| 2014 | 14 | 36 | 9 | 129 | 9.21 | 14.33 | 6 | 11 | 0.500 |
| 2015 | 16 | 43 | 14 | 130 | 8.13 | 9.29 | 6 | 10 | 0.545 |
| 2016 | 24 | 68 | 21 | 340 | 14.17 | 16.19 | 7 | 18 | 0.700 |
| 2017 | 33 | 104 | 30 | 249 | 7.55 | 8.30 | 9 | 14 | 1.000 |
| 2018 | 34 | 84 | 29 | 272 | 8.00 | 9.38 | 8 | 15 | 1.000 |
| 2019 | 33 | 95 | 28 | 385 | 11.67 | 13.75 | 10 | 19 | 1.429 |

| | | | | | | | | | |
|-------|-----|------|-----|------|-------|-------|----|----|-------|
| 2020 | 30 | 81 | 25 | 309 | 10.30 | 12.36 | 11 | 16 | 1.833 |
| 2021 | 27 | 82 | 22 | 160 | 5.93 | 7.27 | 7 | 11 | 1.400 |
| 2022 | 23 | 80 | 20 | 68 | 2.96 | 3.40 | 5 | 7 | 1.250 |
| 2023 | 28 | 83 | 18 | 93 | 3.32 | 5.17 | 5 | 8 | 1.667 |
| 2024 | 51 | 164 | 19 | 57 | 1.12 | 3.00 | 4 | 6 | 2.000 |
| 2025 | 13 | 41 | 2 | 6 | 0.46 | 3.00 | 1 | 2 | 1.000 |
| Total | 394 | 1111 | 290 | 2972 | 7.54 | 10.25 | 26 | 39 | 1.000 |

Note: TP=total number of publications; NCA=Number of contributing authors; NCP=Number of cited publications; TC=total citations; C/P=average citations per publication; C/CP=average citations per cited paper; h-h-index; g=g-index; m-m-index.

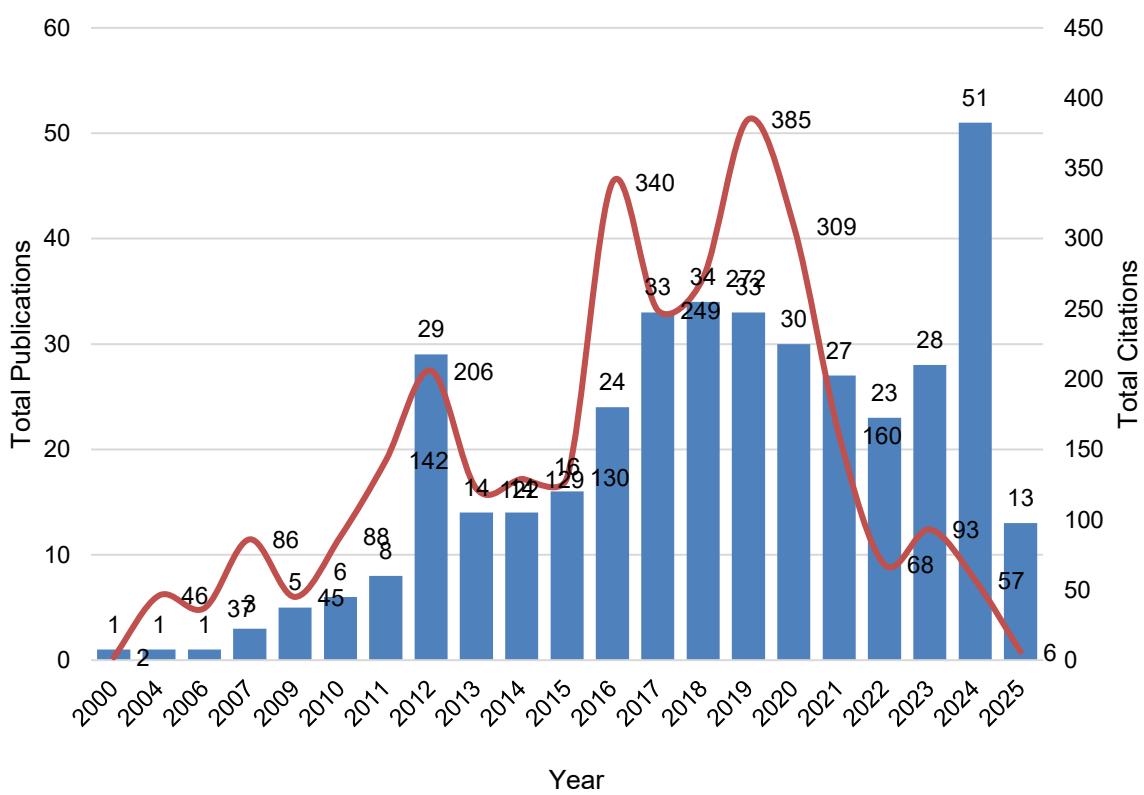


Figure 2: Total publications and citations by year

Publication by Authors

The second research inquiry pertains to the most significant contributions by authors, institutions, and countries. This section provides an in-depth analysis of scholarly productivity and influence, focusing primarily on leading authors who have published extensively in the domain. The assessment highlights individuals who have contributed more than five publications such as journals and conference proceedings. The analysis draws on data from multiple bibliographic sources and incorporates a range of key performance indicators, namely: total number of publications (TP), number of cited publications (NCP), total citations (TC), average citations per publication (C/P), average citations per cited publication (C/CP), as well as author-level impact metrics such as the h-index, g-index, and m-index. These indicators offer a comprehensive view of both productivity and scholarly impact.

Table 8 shows the most prolific author is Syed Ahmed Salman (International Islamic University Malaysia, IIUM) with 20 publications and an h-index of 6, reflecting consistent scholarly

output and moderate citation impact (TC = 75, C/P = 3.75). In terms of citation influence, Maizaitulaidawati Md Husin (Universiti Teknologi Malaysia, UTM) and Hanudin Amin (Universiti Malaysia Sabah, UMS) stand out. Despite producing only 10 and 6 papers respectively, they have garnered 294 and 165 citations, translating into the highest average citations per publication (C/P = 29.40 and 27.50), indicating strong academic influence and quality.

Asmak Ab Rahman (Universiti Malaya, UM) also shows high impact with 229 citations from 12 publications (C/P = 19.08), achieving a g-index of 12, the highest in the dataset, reflecting a concentration of highly cited papers. Puspa Liza Ghazali (Universiti Sultan Zainal Abidin, UniSZA) and Mustafa Mamat (UniSZA) are both notable for their productivity and balanced impact, combining high publication counts with solid citation metrics (h = 7 each). The list also shows global contributions, with scholars such as Sheila Nu Nu Htay (Canada), Waheed Akhter (Pakistan), Wael Hemrit (Saudi Arabia), and Nourhen Sallemi and Ghazi Zouari (Tunisia) actively participating in the takaful discourse. Particularly, the Tunisian scholars show a strong m-index of 0.800, suggesting accelerated scholarly impact over a shorter career span in this field.

Collectively, the data highlights that while Malaysia continues to dominate the field in terms of both output and institutional diversity, takaful research is increasingly attracting international scholars. This indicates the global relevance and growing academic recognition of the subject. Understanding these metrics offers sharper insight into academic trends, illuminating the depth and global reach of research in the takaful and Islamic finance sector.

Table 8: Most productive authors

| Author's Name | Affiliation | | Country | TP | NCP | TC | C/P | C/C P | h | g | m |
|-----------------------------|---|---|----------|----|-----|-----|-------|-------|---|---|------|
| Salman, Syed Ahmed | International Islamic University Malaysia | | Malaysia | 20 | 12 | 75 | 3.75 | 6.25 | 6 | 8 | 0.46 |
| | | | | | | | | | | | 2 |
| Ghazali, Puspa Liza | Universiti Sultan Zainal Abidin | | Malaysia | 15 | 12 | 129 | 8.60 | 10.7 | 7 | 1 | 0.46 |
| | | | | | | | | | | | 5 |
| Rahman, Asmak Ab | Universiti Malaya | | Malaysia | 12 | 11 | 229 | 19.08 | 20.8 | 5 | 1 | 0.33 |
| | | | | | | | | | | | 2 |
| Md Husin, Maizaitulaidawati | Universiti Teknologi Malaysia | | Malaysia | 10 | 9 | 294 | 29.40 | 32.6 | 6 | 1 | 0.46 |
| | | | | | | | | | | | 7 |
| | | | | | | | | | | | 0 |
| | | | | | | | | | | | 2 |
| Mamat, Mustafa | Universiti Sultan Zainal Abidin | | Malaysia | 10 | 10 | 126 | 12.60 | 12.6 | 7 | 1 | 0.46 |
| | | | | | | | | | | | 0 |
| | | | | | | | | | | | 7 |
| Hassan, Rusni | International Islamic University Malaysia | | Malaysia | 9 | 5 | 17 | 1.89 | 3.40 | 3 | 4 | 0.30 |
| | | | | | | | | | | | 0 |
| Htay, Sheila Nu Nu | Humber College Lakeshore Campus | – | Canada | 8 | 6 | 52 | 6.50 | 8.67 | 5 | 7 | 0.38 |
| | | | | | | | | | | | 5 |
| Yakob, Rubayah | Universiti Kebangsaan Malaysia | | Malaysia | 7 | 4 | 18 | 2.57 | 4.50 | 3 | 4 | 0.25 |
| | | | | | | | | | | | 0 |
| Salleh, Marhanum Che Mohd | International Islamic University Malaysia | | Malaysia | 7 | 5 | 41 | 5.86 | 8.20 | 3 | 6 | 0.21 |
| | | | | | | | | | | | 4 |
| Lee, Hui Shan | Universiti Tunku Abdul Rahman | | Malaysia | 6 | 3 | 30 | 5.00 | 10.0 | 2 | 5 | 0.28 |
| | | | | | | | | | | | 0 |
| | | | | | | | | | | | 6 |
| Muhamat, Amirul Afif | Universiti Teknologi MARA | | Malaysia | 6 | 5 | 30 | 5.00 | 6.00 | 4 | 5 | 0.44 |
| | | | | | | | | | | | 4 |

| Author's Name | Affiliation | Country | TP | NCP | TC | C/P | C/C P | <i>h</i> | <i>g</i> | <i>m</i> |
|-----------------------------|---|----------------------|----|-----|-----|-------|-------|----------|----------|----------|
| Wan Ahmad, Wan Muhamad Amir | Universiti Sains Malaysia | Malaysia | 6 | 5 | 63 | 10.50 | 12.60 | 4 | 6 | 0.267 |
| Amin, Hanudin | Universiti Sabah | Malaysia | 6 | 5 | 165 | 27.50 | 33.00 | 5 | 6 | 0.333 |
| Echchabi, Abdelghani | Higher Colleges of Technology | United Arab Emirates | 5 | 5 | 75 | 15.00 | 15.00 | 4 | 5 | 0.286 |
| Salleh, Fauzilah | Universiti Sultan Zainal Abidin | Malaysia | 5 | 3 | 10 | 2.00 | 3.33 | 2 | 3 | 0.200 |
| Hemrit, Wael | Imam Muhammad Ibn Saud Islamic University | Saudi Arabia | 5 | 5 | 54 | 10.80 | 10.80 | 3 | 5 | 0.375 |
| Isa, Mohamad Yazid | Universiti Utara Malaysia | Malaysia | 5 | 3 | 8 | 1.60 | 2.67 | 2 | 2 | 0.222 |
| Wan Daud, Wan Norhayate | Universiti Sultan Zainal Abidin | Malaysia | 5 | 5 | 39 | 7.80 | 7.80 | 4 | 5 | 0.308 |
| Akhter, Waheed | COMSATS University Islamabad | Pakistan | 5 | 5 | 77 | 15.40 | 15.40 | 4 | 5 | 0.286 |
| Sallemi, Nourhen | University of Sfax | Tunisia | 5 | 5 | 31 | 6.20 | 6.20 | 4 | 5 | 0.800 |
| Zouari, Ghazi | University of Sfax | Tunisia | 5 | 5 | 31 | 6.20 | 6.20 | 4 | 5 | 0.800 |

Note: TP=total number of publications; NCP=Number of cited publications; TC=total citations; C/P=average citations per publication; C/CP=average citations per cited paper; *h*-index; *g*-index; *m*-m-index.

Publication by Institutions

This section evaluates institutional contributions to the development of takaful scholarship. Institutions with a minimum of five publications indexed in Scopus from 2000 to 2025 are included in the analysis. The evaluation uses key bibliometric indicators, including total publications (TP), number of contributing authors (NCA), number of cited publications (NCP), total citations (TC), average citations per paper (C/P), average citations per cited paper (C/CP), as well as *h*-index, *g*-index, and *m*-index. Table 9 reveals International Islamic IIU emerges as the most productive institution, with 57 publications, 40 of which are cited, supported by 304 total citations and a solid *h*-index of 10. This reflects IIUM's consistent scholarly engagement in takaful-related research. Following IIUM, UniSZA and UM each recorded 26 publications, though with differing impact profiles. While UniSZA shows strong author contribution (NCA=98), UM leads in citation impact with 315 citations and the highest C/P (12.12) among the top three, indicating a stronger influence per publication. UM also shares the highest *g*-index (17) with IIUM, further affirming the strength of its highly cited papers.

Universiti Putra Malaysia (UPM) and UTM, despite lower publication counts (14 and 12 respectively), report exceptionally high citation averages (C/P=13.00 and 25.58), suggesting high-impact contributions. Iqra University (Pakistan), although with only 5 papers, stands out for its remarkable citation performance (C/P=28.00), highlighting international excellence outside Malaysia. Institutions such as Universiti Utara Malaysia (UUM) and Universiti Sains Islam Malaysia (USIM) maintain balanced contributions in both productivity and influence, with UUM demonstrating a high *m*-index (0.636), suggesting rapid citation accumulation over time. Malaysia clearly dominates the institutional landscape, accounting for the majority of productive universities. However, the inclusion of institutions from Pakistan, Tunisia, and India illustrates the growing international footprint of takaful research and signals opportunities for

greater cross-border academic collaboration. A comprehensive overview of these institutions' contributions is presented in Table 9.

Table 9: Most productive institutions with minimum of five publications

| Institution Name | Country | TP | NCA | NCP | TC | C/P | C/CP | <i>h</i> | <i>g</i> | <i>m</i> |
|---|----------|----|-----|-----|-----|-------|-------|----------|----------|----------|
| International Islamic University Malaysia | Malaysia | 57 | 115 | 40 | 304 | 5.33 | 7.60 | 10 | 17 | 0.385 |
| Universiti Sultan Zainal Abidin | Malaysia | 26 | 98 | 19 | 149 | 5.73 | 7.84 | 8 | 12 | 0.615 |
| Universiti Malaya | Malaysia | 26 | 57 | 22 | 315 | 12.12 | 14.32 | 7 | 17 | 0.467 |
| Universiti Teknologi MARA | Malaysia | 23 | 53 | 20 | 107 | 4.65 | 5.35 | 7 | 10 | 0.412 |
| Universiti Kebangsaan Malaysia | Malaysia | 21 | 53 | 15 | 111 | 5.29 | 7.40 | 7 | 10 | 0.412 |
| Universiti Utara Malaysia | Malaysia | 20 | 49 | 14 | 210 | 10.50 | 15.00 | 7 | 14 | 0.636 |
| INCEIF University | Malaysia | 19 | 30 | 11 | 59 | 3.11 | 5.36 | 4 | 7 | 0.250 |
| Universiti Sains Islam Malaysia | Malaysia | 18 | 37 | 15 | 89 | 4.94 | 5.93 | 6 | 9 | 0.545 |
| Universiti Putra Malaysia | Malaysia | 14 | 22 | 13 | 182 | 13.00 | 14.00 | 6 | 13 | 0.353 |
| Universiti Teknologi Malaysia | Malaysia | 12 | 22 | 10 | 307 | 25.58 | 30.70 | 7 | 12 | 0.583 |
| Universiti Malaysia Terengganu | Malaysia | 11 | 36 | 10 | 82 | 7.45 | 8.20 | 5 | 9 | 0.333 |
| Lincoln University College | India | 10 | 10 | 6 | 25 | 2.50 | 4.17 | 3 | 5 | 0.375 |
| Universiti Malaysia Sabah | Malaysia | 8 | 11 | 7 | 170 | 21.25 | 24.29 | 5 | 8 | 0.333 |
| University of Sfax | Tunisia | 7 | 13 | 7 | 37 | 5.29 | 5.29 | 4 | 6 | 0.800 |
| Universiti Malaysia Kelantan | Malaysia | 6 | 12 | 2 | 13 | 2.17 | 6.50 | 1 | 3 | 0.143 |
| Universiti Tunku Abdul Rahman | Malaysia | 6 | 14 | 3 | 30 | 5.00 | 10.00 | 2 | 5 | 0.286 |
| Universiti Sains Malaysia | Malaysia | 6 | 7 | 3 | 16 | 2.67 | 5.33 | 2 | 4 | 0.143 |
| Iqra University | Pakistan | 5 | 10 | 5 | 140 | 28.00 | 28.00 | 3 | 5 | 0.429 |
| Universiti Kuala Lumpur | Malaysia | 5 | 8 | 4 | 37 | 7.40 | 9.25 | 4 | 5 | 0.571 |
| Bahria University | Pakistan | 5 | 7 | 4 | 8 | 1.60 | 2.00 | 1 | 2 | 0.200 |

Note: TP=total number of publications; NCA=Number of contributing authors; NCP=Number of cited publications; TC=total citations; C/P=average citations per publication; C/CP=average citations per cited paper; *h*-*h*-index; *g*-*g*-index; *m*-*m*-index.

Publication by Countries

Table 10 displays the leading countries with a minimum of three publications that have made significant contributions to takaful research. Among Asian nations, Malaysia clearly emerges as the most prolific contributor, accounting for 248 total publications (TP). With an *h*-index of 22 and a total of 1,940 citations (TC), Malaysia demonstrates not only volume but also sustained scholarly impact and quality. Pakistan ranks second in Asia with 29 publications, while Indonesia, with 25 publications, reflects its growing influence in the takaful research landscape. Notably, Oman, despite having only three publications, records an impressive C/P of 11.67 and C/CP of 17.50, indicating the strong reach and quality of its limited output.

Outside Asia, countries such as Saudi Arabia (23 TP), the United Kingdom (20 TP), and the United States (10 TP) have also made

significant scholarly contributions. Their respective h-indices of 8, 9, and 8 suggest meaningful academic influence and consistent engagement with the topic. In particular, the United States stands out with a C/P of 20.10, the highest among countries with ≥ 10 publications, emphasizing the depth of its impact. Furthermore, countries like Nigeria and Singapore, though lower in publication count, have achieved notable C/P ratios, suggesting that their research outputs are both targeted and impactful.

Overall, the data in Table 10 shows the global reach of takaful research, spanning 21 countries across Asia, Europe, North America, and the Middle East. The diverse contributions reflect increasing scholarly engagement and present opportunities for enhanced international collaboration in advancing the takaful agenda, particularly in the context of Islamic financial inclusion, risk protection, and sustainable development.

Table 10: Countries contributed to the publications

| Country | TP | NC | | TC | C/P | C/C | | | m |
|----------------------|-----|-----|-----|------|--------------|-------|----|----|------|
| | | A | NCP | | | P | h | g | |
| Malaysia | 248 | 704 | 184 | 1940 | 7.82 16.5 | 10.54 | 22 | 44 | 0.84 |
| Pakistan | 29 | 62 | 24 | 481 | 9 | 20.04 | 12 | 21 | 0.63 |
| Indonesia | 25 | 49 | 18 | 134 | 5.36 | 7.44 | 5 | 11 | 0.55 |
| Saudi Arabia | 23 | 31 | 20 | 193 | 8.39 16.3 | 9.65 | 8 | 13 | 0.50 |
| United Kingdom | 20 | 43 | 18 | 327 | 5 | 18.17 | 9 | 18 | 0.56 |
| United Arab Emirates | 13 | 18 | 11 | 76 | 5.85 | 6.91 | 5 | 8 | 0.35 |
| Turkey | 11 | 14 | 6 | 65 | 5.91 20.1 | 10.83 | 3 | 8 | 0.27 |
| United States | 10 | 10 | 8 | 201 | 0 | 25.13 | 8 | 10 | 0.40 |
| Tunisia | 9 | 15 | 9 | 64 | 7.11 14.5 | 7.11 | 5 | 8 | 0.41 |
| Australia | 8 | 8 | 7 | 116 | 0 | 16.57 | 5 | 8 | 0.26 |
| Morocco | 7 | 20 | 4 | 10 | 1.43 | 2.50 | 2 | 3 | 0.15 |
| Iran | 6 | 13 | 3 | 15 | 2.50 15.4 | 5.00 | 2 | 3 | 0.40 |
| Nigeria | 5 | 9 | 3 | 77 | 0 | 25.67 | 2 | 5 | 0.20 |
| Qatar | 4 | 5 | 3 | 10 | 2.50 10.2 | 3.33 | 2 | 3 | 0.25 |
| Singapore | 4 | 4 | 3 | 41 | 5 | 13.67 | 2 | 4 | 0.10 |

| Country | TP | NC A | NCP | TC | C/P | C/C | | | 0.21 |
|--------------------|----|---------|-----|----|------|-------|----------|----------|------|
| | | | | | | P | <i>h</i> | <i>g</i> | |
| Bahrain | 4 | 4 | 3 | 66 | 0 | 22.00 | 3 | 4 | 4 |
| Russian Federation | 4 | 10 | 3 | 14 | 3.50 | 4.67 | 2 | 3 | 0.10 |
| Spain | 3 | 3 | 3 | 33 | 0 | 11.00 | 2 | 3 | 0.25 |
| Canada | 3 | 5 | 2 | 15 | 5.00 | 7.50 | 2 | 3 | 0 |
| Oman | 3 | 5 | 2 | 35 | 7 | 11.6 | 2 | 3 | 0.18 |
| Kuwait | 3 | 3 | 3 | 14 | 4.67 | 4.67 | 2 | 3 | 0.66 |
| | | | | | | | | | 7 |

Note: TP=total number of publications; NCA=Number of contributing authors; NCP=Number of cited publications; TC=total citations; C/P=average citations per publication; C/CP=average citations per cited paper; *h*-*h*-index; *g*=*g*-index; *m*-*m*-index.

Co-authorship Analysis

Bibliometric techniques offer a precise means to comprehensively track nearly every facet within scientific collaboration networks. Utilizing co-authorship networks as a lens, these networks of partnerships illuminate research teams and factors influencing the extent and quality of collaborative outcomes (Ullah et al., 2022). In this section, the study focuses on two distinct aspects: co-authorship among authors and nations and employing VOSviewer software to generate scientific maps. Figure 3's data illustrates that co-authorship by the author was generated using the VOSviewer software. Out of 727 authors, all met the established threshold, but a network was formed with only 58 authors establishing connections. Outstandingly, 210 links were developed with a total link strength of 262. This visualization reveals the presence of nine distinct clusters, each connected to others. Notably, these clusters are represented by different colors, including red, green, dark blue, yellow, purple, light blue, orange, brown, and pink representing nine research cooperation groups. A particular author dominates each cluster, and the circle's size indicates that cluster's dominance.

Figure 3 highlights that the largest and most dominant circle among all authors belongs to the purple cluster, represented by Puspa Liza Ghazali. Conversely, authors who do not participate in collaborative research form unconnected clusters. Additionally, it's worth noting that geographically closer journals tend to have stronger network connections, and the strength of co-citation relationships is represented by the lines connecting them. Figure 4 illustrates co-authorship by countries, indicating the author's collaboration based on their respective national affiliations. The analysis entails a minimum document count of one, encompassing data from all 49 nations, meeting the set criteria. A connection was established with 34 countries, resulting in a network of co-authorship links. The amount of co-authorship links with other countries selected is 64 connections, with a total strength of links amounting to 108. It's important to note that some countries in the network are not connected and are therefore not included in this visualization.

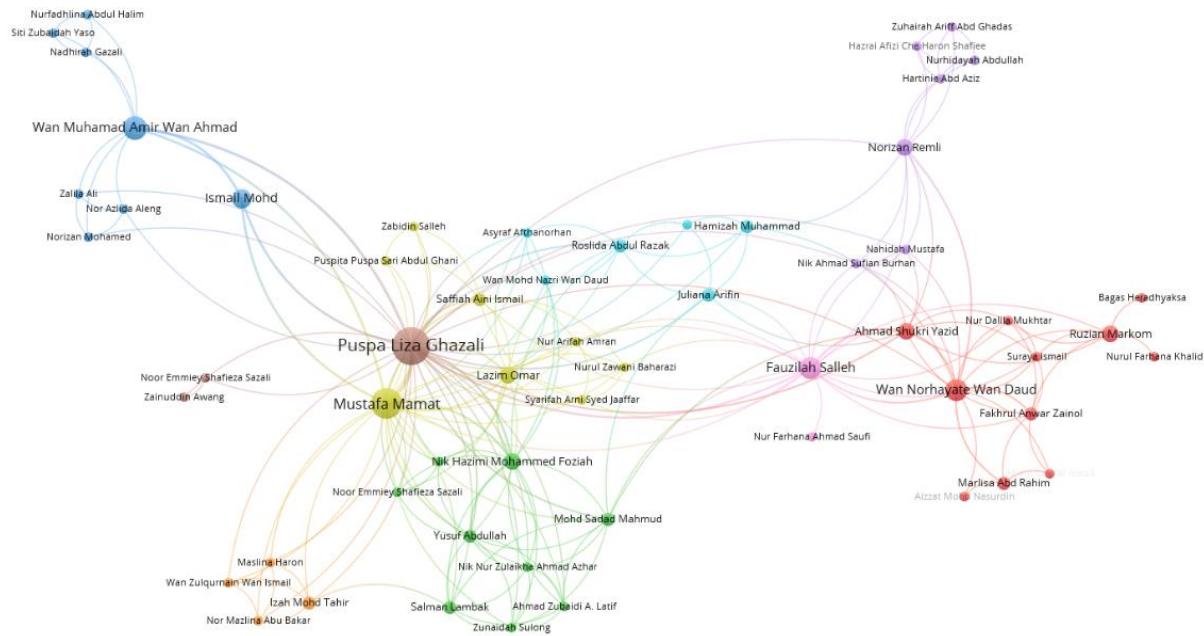


Figure 3: Network visualization of the author's keywords

Dynamic map link:

https://app.vosviewer.com/?json=https%3A%2F%2Fdrive.google.com%2Fuc%3Fid%3D1pN3igsKoU-ua-98GV1X6FwmcvFq2zt_a

Figure 4 presents an overlay visualization map generated using VOSviewer software, illustrating the temporal evolution of author keywords in Takaful research. This visualization employs a color gradient from dark blue (indicating older keywords) to red (representing more recent ones) to reflect the average publication year associated with each term.

The map reveals a clear transition in keyword usage over time. Earlier research prominently featured foundational terms such as “Takaful” and “Islamic insurance”, which remain dominant with 174 and 67 occurrences, respectively. These terms represent the core of the literature and demonstrate the conceptual stability of the field. Their high frequency confirms that they are consistently used as anchor terms in the majority of takaful-related publications. In contrast, newer keywords such as “takaful insurance,” “Saudi Arabia,” and “awareness” appear in shades of orange to red, suggesting a shift toward more specific and geographically or behaviorally focused research in recent years. These trends indicate an increasing interest in market-specific studies and consumer-centric approaches, particularly those examining awareness, trust, religiosity, and behavioral intentions areas often explored through frameworks like the Theory of Planned Behaviour.

This overlay visualization not only showcases thematic progression but also aligns with broader developmental priorities. The persistent presence of keywords associated with financial inclusion, such as “awareness” and “micro-takaful”, along with terms like “waqf” and “corporate social responsibility (CSR)”, highlights the sector’s alignment with SDGs. In particular, research exploring takaful’s role in poverty alleviation and social protection illustrates the industry’s potential to contribute to Maqasid al-Shariah objectives and ethical finance. Overall, the color-coded overlay provides a dynamic view of how takaful research has evolved over time, moving from foundational studies to more specialized, impact-driven inquiries. This shift highlights the importance of continued academic engagement in exploring innovative models and inclusive practices within the takaful ecosystem.

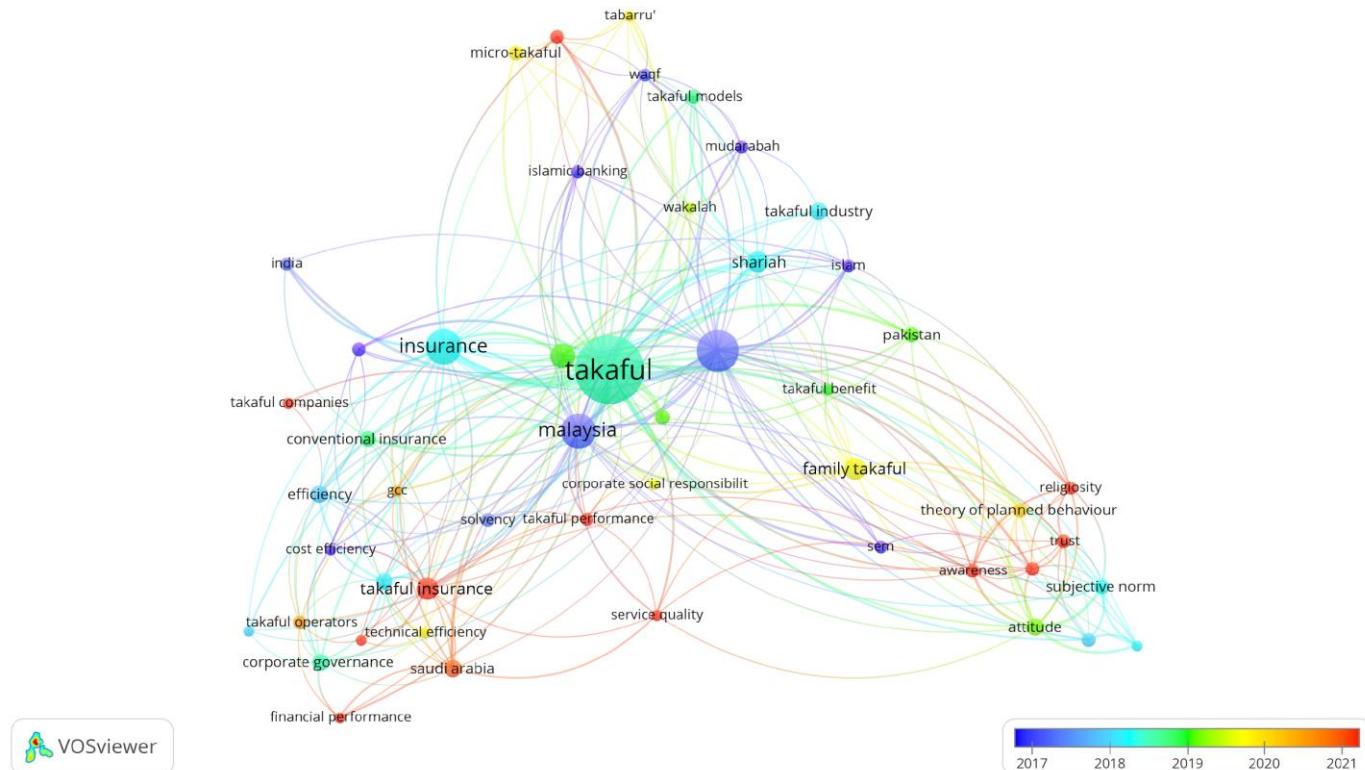


Figure 4: Overlay visualization of the author's keywords

Discussion

This study presents a comprehensive bibliometric analysis of the takaful research landscape, examining scholarly productivity, keyword evolution, and institutional contributions based on Scopus-indexed literature from 2000 to 2025. Bibliometric analysis plays a pivotal role in assessing the performance and evolution of academic disciplines by highlighting influential contributors, identifying research gaps, and tracking intellectual trends over time. The analysis of 394 documents reveals that takaful-related research gained momentum in 2012, with a significant peak of 29 publications. From 2017 to 2020, publication output remained stable between 30 and 34 articles annually. This trend emphasizes the sector's increasing academic and practical relevance. Key contributors to this domain include Syed Ahmed Salman, with 20 publications, and Puspa Liza Ghazali, with 15. IIUM emerged as the most prolific institution, with 57 publications. At the national level, Malaysia leads with 248 publications, confirming its status as a regional takaful hub.

Terms such as “agriculture takaful” and “Value-Based Intermediation Takaful (VBIT)” remain relatively underexplored in academic research, despite their growing significance in practice. Observations indicate that while these topics have been discussed in open-access platforms like Google Scholar, they are scarcely represented in the Scopus database. This gap suggests limited scholarly engagement and possibly reflects the early developmental stage of agricultural takaful as well as the VBIT concept in many Islamic countries including Malaysia.

A closer look shows that only five articles discuss about VBI in Islamic banking, and even fewer mention its use in takaful. This shows a clear gap between current policies and academic

studies. Malaysia's VBIT Framework is one example that needs more attention from researchers. Notably, VBIT is not widely mentioned in current academic literature, this reveals a noticeable gap in academic attention. Its foundational principles, mutual assistance, ethical conduct, and socio-economic inclusion are, however, closely aligned with the objectives of Maqasid al-Shariah and SDGs."

Likewise, with rising climate-related vulnerabilities, international institutions like the UNDP and IsDB have begun advocating for Islamic insurance or takaful to support resilience and climate adaptation. These global development efforts present a valuable yet largely untapped avenue for scholarly contribution. In light of these findings, future research must explore underdeveloped but critical intersections between takaful and global challenges such as food security, environmental risk, and financial inclusion. Emerging sectors especially agriculture takaful, climate-linked Takaful, and digital innovations represent promising areas where academic inquiry can meaningfully inform policy, product design, and financial literacy initiatives.

The Nexus of SDGs, ESG, Maqasid al-Shariah, and VBIT within Takaful

Although references to "poverty eradication" and "financial inclusion" frequently appear in the takaful literature, these concepts are rarely examined through an integrated strategic lens. This study proposes a thematic convergence that aligns the objectives of takaful risk-sharing, wealth protection, and community resilience with broader developmental and ethical frameworks. These include the SDGs, Environmental, Social, and Governance (ESG) principles, Maqasid al-Shariah, and the VBIT framework.

Specifically, takaful supports multiple SDGs, including SDG 1: No Poverty, SDG 2: Zero Hunger (via agriculture takaful), SDG 10: Reduced Inequalities, and SDG 13: Climate Action. It also embodies core tenets of Maqasid al-Shariah, such as the preservation of wealth (*hifz al-mal*), life (*hifz al-nafs*), and human dignity (*hifz al-nasl*). VBIT, as promoted by Bank Negara Malaysia (Central Bank of Malaysia), emphasizes outcome-based financial solutions that deliver positive societal and environmental outcomes principles deeply embedded in ethical takaful models.

The nexus between these frameworks highlights a substantial opportunity for empirical research. Future studies should assess how takaful contributes to financial inclusion, climate resilience, and socio-economic upliftment among underserved communities. Moreover, embedding ESG metrics into takaful evaluations could enhance accountability and sustainability reporting, aligning takaful practices with global financial standards. By strategically integrating these elements, scholars and policymakers can better position takaful as a transformative instrument in ethical finance and inclusive development.

In summary, while the takaful research landscape shows robust growth and diversification, aligning academic inquiry with pressing real-world challenges and regulatory directions will ensure that Takaful evolves not only as a commercial solution but also as a tool for ethical, inclusive, and sustainable financial protection.

Practical Implications

This bibliometric analysis offers several practical takeaways for researchers, industry stakeholders, and policymakers. For academics, it provides a clear mapping of the intellectual structure of takaful research while identifying underexplored areas. Although topics such as

behaviour and institutional performance dominate the literature, there is limited coverage of emerging areas like digital takaful, ESG-integrated products, and sector-specific models such as agricultural and climate-related takaful.

A keyword-filtered literature search using terms such as "takaful," "Islamic insurance," and "agricultural takaful" or "crop takaful" revealed only one Scopus-indexed article on agricultural takaful. The study, conducted in Indonesia, proposed a hybrid model combining *tabarru'* (risk-sharing) and investment mechanisms to help Muslim farmers manage agricultural risks within a Shariah-compliant framework (Yusuf et al., 2022). This model demonstrates the potential for takaful to contribute to food security, yet similar research remains sparse in other key regions like Malaysia, which is strategically focused on food resilience.

For policymakers and regulators, the study highlights the urgency of diversifying takaful offerings beyond life and family coverage. Malaysia's growing need for sector-specific protection, especially in agriculture, provides a compelling case for the implementation of agriculture takaful schemes or more specifically crop takaful in protecting staple food such as rice. Additionally, there is a pressing need for policy-driven academic inquiry into digitalization, AI-driven risk profiling, micro-takaful, and green finance solutions. Stronger academia-industry collaboration is essential to produce high-impact, applied research that bridges the gap between theory and practice, supports product innovation, and contributes to both scholarly output and sectoral advancement.

In conclusion, the insights derived from this study not only chart the intellectual landscape of takaful research but also provide a roadmap for scholarly contribution, industry advancement, and policy innovation ensuring that the Takaful sector continues to evolve in alignment with ethical finance principles and the Maqasid al-Shariah.

Limitation and Future Direction

While this study offers a comprehensive overview of takaful research trends over the past 25 years, several limitations warrant consideration and suggest avenues for further exploration. This analysis was limited to the Scopus database. While Scopus is widely recognized for its breadth, coverage, and reliability in bibliometric studies, it does not encompass all scholarly publications. Notable contributions may reside in other databases such as Web of Science, ScienceDirect, Emerald Insight, SpringerLink, Google Scholar, and Dimensions. Although the use of a single database ensured consistency and methodological clarity, future bibliometric research should consider adopting a multi-database approach to obtain a more holistic and representative view of global research outputs on Takaful.

This study primarily focused on macro-level trends such as overall productivity, keyword co-occurrence, and institutional contributions without drilling down into more specialized or emerging niches within the takaful ecosystem. Future researchers are encouraged to investigate underexplored subfields such as agriculture Takaful, micro-Takaful, climate-linked Takaful, and digital Takaful solutions, especially as these areas align with global priorities like financial inclusion, ESG integration, and disaster risk reduction.

Moreover, emerging frameworks like VBIT still has limited academic coverage, thus, offer valuable directions for future research. As regulators such as Bank Negara Malaysia and international institutions like UNDP and IsDB promote takaful to tackle socio-economic

challenges and climate risks, academic studies should keep pace to support informed policy development.

Conclusion

This study presents a comprehensive bibliometric analysis of takaful research indexed in Scopus from 2000 to 2025, revealing the intellectual structure, thematic trends, and key contributors within the field. Although Scopus serves as a robust database, the limited volume of takaful literature it indexes contrasts sharply with the broader discourse available in alternative repositories such as Google Scholar, indicating the need for expanded bibliometric scopes in future studies. As a global leader in Islamic finance, Malaysia offers strong potential for future research on how Takaful can be integrated into areas like agriculture, climate finance, and social protection. Exploring these links will help grow the Takaful literature and support Malaysia's goals for inclusive and sustainable development.

In light of these findings, future research should expand keyword strategies, adopt multi-database approaches, and consider qualitative inquiry to complement quantitative insights. Understanding and advancing takaful as a Shariah-compliant instrument for financial inclusion is vital for promoting economic justice, eradicating poverty, and achieving long-term resilience. This study lays a foundational roadmap for these future efforts, emphasizing the importance of aligning academic inquiry with real-world developments to enhance the impact and innovation of takaful systems globally.

Acknowledgement

This research was funded by the Ministry of Higher Education (MOHEI) of Malaysia under the Fundamental Research Grant Scheme FRGS/1/2022/SS06/USIM/03/1.

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