ECREG STUDIES
Vol. 18, No. 1, 2025
www.ers.edu.pl
PDF OPEN ACCESS
eISSN 2451-182X

https://sciendo.com/journal/ERS

ECONOMIC AND REGIONAL STUDIES
STUDIA EKONOMICZNE I REGIONALNE

ISSN 2083-3725 Volume 18, No. 2, 2025

THE ROLE OF TAKAFUL INSURANCE IN ENHANCING THE QUANTITATIVE DEVELOPMENT OF THE ISLAMIC FINANCE INDUSTRY

ROLA UBEZPIECZEŃ TAKAFUL W ZWIĘKSZANIU ILOŚCIOWEGO ROZWOJU BRANŻY FINANSÓW ISLAMSKICH

Krache Houssem[1 (A,B,C,D,E,F,G)], **Almi Hassiba**[2 (A,B,C,D,E,F,G)], **Awashreh Raed**[3 (A,B,C,D,E,F,G)]

[1] Department of Financial and Accounting Sciences, LEMAC Laboratory, Setif 1 University – Ferhat ABBAS, Algeria,
[1] Wydział Nauk Finansowych i Rachunkowości, Laboratorium LEMAC, Uniwersytet Setif 1 – Ferhat ABBAS, Algieria
[2] Department of Economic Sciences, DEHALG Laboratory, Badji Mokhtar – Annaba University, Algeria,
[2] Wydział Nauk Ekonomicznych, Laboratorium DEHALG, Uniwersytet Badji Mokhtar Annaba, Algieria
[3] Business Administration, A'Sharqiyah University, Ibra, Oman, Jordan
[3] Wydział Administracji biznesowej, Uniwersytet A'Sharqiyah, Ibra, Oman, Jordania

Authors' contribution/
Wkład autorów:
A. Study design/ Zaplanowanie badań
B. Data collection/ Zebranie danych
C. Statistical analysis/ Analiza statystyczna
D. Data interpretation/ Interpretacja danych/
E. Manuscript preparation/ Przygotowanie tekstu
F. Literature search/ Opracowanie piśmiennictwa
G. Funds collection/ Pozyskanie funduszy

ORIGINAL ARTICLE
JEL code: G22, P43, O16.
Submitted:
February 2025
Accepted:
June 2025

Tables: 6
Figures: 4
References: 58

ORYGINALNY ARTYKUŁ NAUKOWY
Klasyfikacja JEL: G22, P43, O16.
Zgłoszony:
luty 2025
Zaakceptowany:
czerwiec 2025

Tabele: 6
Rysunki: 4
Literatura: 58

Citation: Krache, H., Almi, H., Awashreh, R. (2025). The Role of Takaful Insurance in Enhancing the Quantitative Development of the Islamic Finance Industry/ Rola ubezpieczeń Takaful w zwiększaniu ilościowego rozwoju branży finansów islamskich / *Economic and Regional Studies / Studia Ekonomiczne i Regionalne, 18*(2), 234-253 https://doi.org/10.2478/ers-2025-0019

Abstract

Subject and purpose of work: This study aims to determine the role of the Takaful insurance sector in enhancing the quantitative development of the Islamic finance industry.

Materials and methods: It addresses the theoretical aspects of Takaful insurance and the Islamic finance industry, presenting methods for evaluating the development indicator of this industry in general and quantitative development in particular.

Results: The study then examines how Takaful insurance contributes to this development during 2017-2023.

Conclusions: The findings indicate that improvements in the development metrics for the Takaful insurance sector play a role in raising this indicator and simultaneously contribute to enhancing the main indicator for the quantitative development of the Islamic finance industry.

Keywords: IFDI, Takaful Insurance, Islamic Finance Industry, Quantitative Development

Streszczenie

Przedmiot i cel pracy: Niniejsze badanie ma na celu określenie roli sektora ubezpieczeń Takaful w zwiększaniu ilościowego rozwoju branży finansów islamskich.

Address for correspondence / Adres korespondencyjny: dr Almi HASSIBA, (ORCID: 0009-0001-7560-754X economy.departement.ubma@gmail.com) Department of Economic Sciences, DEHALG Laboratory, Badji Mokhtar -Annaba University, Algeria, Ibn Badis Complex, Sidi Achour, 23000, Annaba, Algeria

Journal included in: SCOPUS; AgEcon Search; AGRO; Arianta; Baidu Scholar; BazEkon; Cabell's Journalytics; CABI; CNKI Scholar; CNPIEC – cnpLINKer; Dimensions; DOAJ; EBSCO; ERIH PLUS; ExLibris; Google Scholar; Index Copernicus International; J-Gate; JournalTOCs; KESLI-NDSL; MIAR; MyScienceWork;Naver Academic; Naviga (Softweco); Po- lish Ministry of Science and Higher Education; QOAM; ReadCube, Research Papers in Economics (RePEc);SCILIT; Scite; Semantic Scholar; Sherpa/RoMEO; TDNet; Ulrich's Periodicals Directory/ulrichsweb; WanFang Data; WorldCat (OCLC); X-MOL.

Materiały i metody: W pracy omówiono teoretyczne aspekty ubezpieczeń Takaful i branży finansów islamskich, przedstawiając metody oceny wskaźnika rozwoju tej branży w ogóle, a w szczególności rozwoju ilościowego.
Wyniki: Następnie badanie analizuje, w jaki sposób ubezpieczenia Takaful przyczyniają się do tego rozwoju w latach 2017-2023.
Wnioski: Wyniki wskazują, że poprawa wskaźników rozwoju sektora ubezpieczeń Takaful odgrywa rolę w podnoszeniu tego wskaźnika i jednocześnie przyczynia się do poprawy głównego wskaźnika rozwoju ilościowego branży finansów islamskich.

Słowa kluczowe: IFDI, ubezpieczenia Takaful, branża finansów islamskich, rozwój ilościowy

Introduction:

The Islamic finance industry has introduced a financial and banking jurisprudence that fundamentally opposes the capitalist logic inherent in the conventional financial industry. It establishes new principles among the parties of financial intermediation based on profit and loss sharing rather than an interest-based lending system.

Since its inception, this industry has experienced significant developments in asset growth, geographical and international expansion, and the regulatory and legislative frameworks governing its activities. Among the countries implementing Islamic financial practices, only Sudan and Iran have established an entirely Islamic financial system as an alternative to the conventional one. Other countries vary in their adoption, acceptance, application, regulation, and support of Islamic finance and how much they benefit from it.

The development of the Islamic finance industry is assessed through various indices. One of them is the quantitative development index–a primary indicator that considers several quantitative metrics for each sector within the industry. The industry comprises five primary sectors: Islamic banks, Takaful (Islamic insurance), other Islamic financial institutions, Sukuk, and Islamic funds.

Our focus within these sectors is on Takaful insurance, which is widely accepted by Muslims and their scholars due to its foundations in cooperation and benevolence, values intrinsic to the society that Islam seeks to build. Notably, the Takaful product was designed as an alternative to the traditional insurance system, steering clear of the principles of exchange-based contracts.
Research Problem: Based on the above, the main research question of this study is:To what extent does the development of specific Takaful insurance metrics (asset growth, market penetration, operational efficiency) correlate with the quantitative growth indicators of the Islamic finance industry from 2017 to 2023?

1. Hypotheses

H1: There is a statistically significant positive relationship between the growth of Takaful assets and the overall quantitative development indicator of the Islamic finance industry.
H2: An increase in the number of Takaful operators is positively associated with an increase in the quantitative development indicator of the Islamic finance industry.
H3: Higher Return on Assets (ROA) in the Takaful sector positively influences the quantitative development indicator of the Islamic finance industry.
Objectives of the study: The objectives of this research are as follows:

- To understand the concept, benefits, and sectors of the Islamic finance industry;
- To explore Takaful insurance, its significance, and its principles;
- To comprehend how the development index of the Islamic finance industry is evaluated, with a specific focus on the quantitative development index;
- To determine the extent of Takaful Insurance’s contribution to enhancing the quantitative growth of the Islamic finance industry.

Significance of the study: This study's significance lies in measuring the development index of the Islamic finance industry. This industry has seen rapid advancement across various domains, including quantitative growth. This growth is assessed based on multiple quantitative development indicators for the main sectors of the industry, including the Takaful sector. The presence of such a sector is crucial as individuals and institutions adopt it as an alternative to prohibited commercial insurance for covering risks.

Study section: This study is organized into three main sections as follows:

- General overview of the islamic finance industry;
- General overview of takaful insurance;
- Development index of the islamic finance industry and the contribution of takaful insurance to the quantitative growth of this industry.

2. Literature review

The role of Takaful insurance in enhancing the quantitative development of the Islamic finance industry is multifaceted, extending significant contributions to economic growth, social welfare, and the overall stability of the financial system. As a cooperative insurance model intrinsically aligned with Islamic principles, Takaful fosters trust and ethical engagement among participants, foundational for the industry's expansion and resilience (Çelik, Akpinar, 2023; Radiamoda, 2025). Its unique structure, often centered around concepts like the *tabarru'* (donation) fund, emphasizes communal support and risk mutualization, distinguishing it from conventional insurance (Syarifuddin, 2017). This review synthesizes insights from a growing body of literature to explore these dimensions.

At its core, Takaful operates on principles of cooperation (*ta'awun*), shared responsibility, and solidarity, distinguishing it fundamentally from conventional insurance models (Akhter, 2010; Hassan, 2019; Insyirah Azmien, 2016). Akhter (2010), in examining Takaful models and global practices, underscores its Sharīʼah compliance as a primary appeal, fostering investor interest and the proliferation of Takaful companies. This ethical framework allows customers to engage with financial products that resonate with their values, contributing to market penetration (Salami, 2024). The evolution of Takaful models, from their origins in Islamic tradition to their modern application since 1979, showcases a dynamic adaptation to contemporary financial landscapes while striving to maintain Shariah authenticity (Ali, 2016; Hassan, 2019). The jurisprudential conditioning of Takaful contracts, ensuring alignment with Islamic legal rulings, is crucial for its legitimacy and acceptance, as seen in practices within specific markets like Jordan (Al-Jarrah et al., 2024).

Takaful's influence extends beyond individual financial security to broader macroeconomic improvements. Empirical evidence, particularly from Malaysia, indicates a direct correlation between the growth of the Takaful industry and positive macroeconomic indicators (Ahmad, Hasan, 2020). This is further supported by studies in other regions, such as Saudi Arabia, where the Takaful sector, with substantial premium volumes (e.g., 42.03 billion Saudi riyals by 2021), has demonstrated a positive correlation with economic growth ("Takaful Insurance and Its Impact on Enhancing Economic Growth in the Kingdom of Saudi Arabia," 2025). The cooperative principles inherent in Takaful enhance financial stability and contribute to overall economic productivity (Shahîd, 2018). Moreover, Takaful companies contribute to economic growth by channeling funds into Shariah-compliant investments and supporting real sector development (Rawat, Mehdi, 2017).

Beyond direct economic metrics, the Takaful industry is recognized for supporting sustainable socio-economic development. In Indonesia, for instance, Takaful has been linked to enhancements in the health and education sectors, critical components of the Human Development Index (HDI), thereby contributing to the achievement of Sustainable Development Goals (SDGs) (Widyanata et al., 2024).

Empirical evidence from various Muslim-majority countries highlights Takaful's tangible contributions to the Islamic finance industry's quantitative growth, primarily through boosting premium volumes and expanding market presence. As detailed previously (see Table 1), penetration rates in markets like Oman and the UAE, and significant premium growth in Pakistan and Kenya, illustrate this upward trajectory

(Alshammari et al., 2018; Nkirote, 2017; Taib et al., 2018). The increasing demand for Takaful products is evident globally, attracting interest in Muslim and non-Muslim countries, signifying its potential for broader financial inclusion (Ali, 2016). Even in emerging Takaful markets like Russia, the growing Muslim population and the compatibility of Takaful with existing insurance systems present significant growth opportunities (Zhilkina, Orusbiev, 2021).

Mature markets such as Malaysia and the Gulf Cooperation Council (GCC) are often cited for Takaful's rapid expansion (Lee et al., 2019; Alshammari et al., 2018). The ability of the Takaful industry to adapt to socio-economic changes is crucial for attracting more participants and investments, further fueling its growth (Çelik & Akpinar, 2023).

The financial health and operational efficiency of Takaful operators are critical. As shown in Table 2, performance varies, with some studies indicating strong premium-to-surplus ratios in markets like Malaysia (Abdou et al., 2014), while others report challenges with profitability (Hanif, Iqbal, 2014; Batorshyna et al., 2021). Factors influencing the profits of Takaful companies in key markets like Indonesia and Malaysia include internal operational aspects and external economic conditions, such as the impact of global events like the COVID-19 pandemic (Rofika & Meylianingrum, 2024). Effective risk management remains a cornerstone for competitiveness (Akhter, 2010).

Several interconnected factors determine the trajectory of Takaful's quantitative growth:

- Standardization, regulatory frameworks, and governance: The need for standardization in Takaful products and a harmonized legal framework is crucial for scaling the industry and facilitating broader acceptance within the global financial system (El-Qalqili, 2017). Robust legislation, such as Malaysia's Islamic Financial Services Act (IFSA) 2013, aims to enhance regulatory oversight, consumer protection, and public confidence (Jamil & Jamal, 2016; "Takaful-Growth Nexus," 2023). Strong Shariah governance, in particular, has been shown to positively impact the financial performance of Takaful institutions, often more significantly than conventional governance mechanisms (BenSaid, 2023; Puad et al., 2020). Developing dedicated stewardship guidelines for Takaful operators can further enhance governance practices (Muhamat, 2021).
- Research, innovation, and technological advancement: Current literature highlights the need for more extensive research in Takaful, particularly concerning technological innovations and their Shariah compliance aspects, which are vital for future industry advancements (Qadri et al., 2022). The integration of digital financial technologies (fintech) like blockchain, AI, and big data analytics offers significant opportunities to improve operational efficiency, enhance product offerings, and broaden market reach (Muradova, 2024; Elomari, 2023; Abdeen et al., 2019). Specifically, adopting digital platforms for underwriting, claims processing, and customer interaction, alongside leveraging InsurTech solutions, is increasingly pivotal for Takaful operators seeking to improve accessibility, reduce operational costs, and reach underserved market segments. Innovations in Sharia-compliant financial products, including technology-driven Takaful, are key to increasing financial inclusion (Nufus et al., 2024). The strategic incorporation of these technologies is thus becoming a critical determinant in the quantitative development and competitive positioning of Takaful institutions within the evolving Islamic finance sector.
- Consumer-related factors: awareness, perceptions, and demand: Consumer awareness and understanding are critical for Takaful adoption (Miskan et al., 2024; Ernawati, Asri, 2020). Financial factors such as leverage, growth, and tax considerations influence Takaful demand (Ibrahim et al., 2015). Effective marketing and consumer education initiatives are essential to overcome misconceptions and build trust (Salleh, 2016; Hassan, Abbas, 2019).
- Human resources and professional expertise: The availability of skilled professionals with expertise in Takaful operations and Shariah principles is crucial for the industry's development.

Despite its growth and potential, the Takaful industry faces considerable challenges. These include navigating regulatory diversity across different jurisdictions, the continuous need for innovation in products and services to meet evolving consumer demands, and the imperative to ensure operational efficiencies that translate into sustainable profitability (SHIBU, Kahf, 2022; Batorshyna et al., 2021). Key among these challenges are achieving deeper market penetration, particularly in regions with established conventional insurance markets, and overcoming low levels of consumer awareness and understanding regarding Takaful principles and product offerings (Miskan et al., 2024; Ernawati, Asri, 2020). Furthermore, Takaful operators often face intense competition with conventional insurance providers, which typically have larger market shares, more extensive distribution networks, and greater brand recognition. Addressing these multifaceted issues, alongside enhancing financial literacy related to Islamic financial products, will be essential for maximizing Takaful's potential and solidifying its role within the global financial landscape.

However, the opportunities are vast. Takaful's alignment with ethical and cooperative principles, especially in contributing to financial inclusion through initiatives like Micro-Takaful (Radiamoda, 2025; Ma-f'ula & Mi'raj, 2022).

In conclusion, the literature underscores Takaful insurance's significant and expanding role in advancing the quantitative development of the Islamic finance industry. Its ethical framework, economic contributions, and growing market presence, supported by evolving regulatory environments and technological integration, position it as a key pillar of Islamic finance. While market penetration, consumer awareness, competition, standardization, innovation, and profitability challenges persist, the ongoing commitment to Shariah principles and socio-economic welfare suggests a promising future for Takaful's continued impact.

I. Overview of the islamic finance industry:

This part addresses the Islamic finance industry's concept and benefits, as well as the sectors that constitute it.

I.1. Concept of the islamic finance industry:

The Islamic finance industry encompasses a range of activities involving the design, development, and implementation of innovative financial instruments and processes and the formulation of creative solutions for financing issues, all guided by the principles of Islamic Sharia.

The Islamic finance industry is also defined as a developmental, diversifying, and innovative process for financial instruments in financial markets, including monetary markets. It offers opportunities to mitigate risks through an Islamic framework that mandates adherence to the principle of profit and loss sharing while abandoning the condition of interest-based transactions to stimulate legitimate financial dealings. This aims to meet new financing needs that contribute to social and economic welfare in society. (Nuswantoro, 2024).

I.2. Advantages of the islamic finance industry:

The Islamic finance industry offers several advantages, the most notable of which include

- Provision of alternatives to conventional financial products: The Islamic finance industry strives to provide alternatives to conventional products, which requires the ability to innovate in an environment lacking incentives for creativity. A scarcity of creative individuals further compounds this challenge, the need for Islamic financial institutions to embrace a culture of innovation, and their commitment to research and development. It also necessitates that innovators are well-versed in Sharia concepts that can foster authentic creativity.
- Scientific research: Research and development in the Islamic finance industry contribute to completing the knowledge system of the Islamic economy, allowing it to keep pace with advancements in financial sciences and to adopt a neutral stance toward these developments. It is essential not to prohibit certain financial transactions unless Sharia explicitly forbids them hastily. If a prohibition is determined, an

alternative is provided, alleviating the hardship that Muslim consumers who engage with conventional financial products face.
- Sustainability of the islamic financial system: Ensuring the continuity of the Islamic financial system is vital. Each component benefits from creating new products that meet client needs within the framework of halal compliance. Islamic financial engineering supports Islamic banks by helping them balance their resources and uses and profitably manage their liquidity. (Riaz et al., 2022)

I.3. Sectors of the islamic finance industry:

The Islamic finance industry comprises five primary sectors:
- Islamic banks: This includes full-fledged Islamic banks, subsidiaries, and Islamic "windows" within conventional banks. Islamic banks are defined as "financial and banking institutions that do not engage in interest-based transactions, either receiving or giving, and comply with the rules and principles of Sharia in all their activities and dealings". Islamic banks provide banking and investment services based on a financial intermediation model rooted in profit and loss sharing, known as "al-ghunm bil-ghurm" (no profit without risk). Participation is the fundamental principle underpinning the relationship between Islamic banks and their clients, distinguishing them from conventional banks by moving the client from indebtedness to partnership.
- Islamic insurance or takaful: (See Part II).
- Non-banking islamic financial institutions: This includes leasing and Mudarabah companies, Islamic financing companies, Islamic housing cooperatives, Islamic microfinance institutions, private equity/venture capital firms, and institutions managing Hajj funds, endowments, and zakat.
- Islamic sukuk (bonds): These are the Shari'a-compliant alternative financing to conventional bonds (Godlewski, Turk, & Weill, 2014, p. 1). According to the AAOIFI, sukuk are certificates of equal value representing undivided shares in ownership of tangible assets, property rights, and services. Another definition is provided by the International Islamic Financial Market (IIFM), which defines sukuk as a 'commercial paper that provides an investor with ownership in an underlying asset.' Sukuk are not debt certificates with a financial claim to cash flow; they may not be issued on a pool of receivables. Instead, they are similar to a trust or ownership certificate with proportional or undivided interest in a project or an asset, carrying the right to a proportionate share of cash flows. The underlying asset or project is a distinctive feature of sukuk compared with a pure debt obligation for the issuer created by conventional bonds, with monetized assets being Shari'ah-compliant in their nature and use (Hussain, Shahmoradi, & Turk, 2015, p. 19).
- Islamic investment funds: These funds aggregate savings from investors and deploy and invest them according to Islamic methods and principles. The fund is managed by Sharia principles and invests exclusively in Islamic financial instruments such as stocks, sukuk, and other compliant financial products. Examples include funds investing in stocks of Islamic companies listed on the stock exchange and sukuk funds.

II. Overview of takaful insurance:

This part covers the definition, importance, and principles of Takaful insurance.

II.1. Definition of takaful insurance:

Takaful insurance is "a cooperative arrangement among a group of individuals, known as the 'participants' pool,' who may face certain risks. The aim is to mitigate the impact of these risks on any participant by compensating them for damages resulting from such risks. This is achieved through each member's commitment to contribute a specified amount as a donation, known as a 'premium' or ‘contribution,’ as outlined in the insurance policy or ‘participation contract.’ Islamic insurance companies manage the insurance operations and invest the funds on behalf of the participants, receiving either a specified share of the investment returns as a mudarib or a fixed fee as a wakil, or both”.

Takaful insurance is also defined as a collective contractual organization that fosters cooperation among participants facing specific risks. Each participant pays a contribution that creates a fund, known as the participants’ account, from which compensation is paid to those affected by the risk. The Takaful insurance company manages and invests the funds in this account for a set remuneration (Insurance Authority United Arab Emirates, 2014, p. 8).

II.2. Importance of takaful insurance:

The significance of Takaful insurance, both at the individual and collective levels, is illustrated in the following points: (Salami, 2024).

- Providing security for policyholders: Takaful insurance offers peace of mind to policyholders, allowing them to engage in their activities without fear of potential risks. The burden does not fall solely on the individual in the event of an insured risk. Still, it is shared collectively by all policyholders, who act as a mutual support network through donations.
- Promoting solidarity and cooperation: The Takaful system fosters solidarity and cooperation, as enshrined in Islamic teachings:

{وَتَعَاوَنُوا عَلَى الْبِرِّ وَالتَّقْوَى وَلَا تَعَاوَنُوا عَلَى الْإِثْمِ وَالْعُدْوَانِ وَاتَّقُوا اللَّهَ إِنَّ اللَّهَ شَدِيدُ الْعِقَابِ} (سورة المائدة، الآية:2).

- Achieving lawful profit: Takaful provides a legitimate means of profit and earnings for policyholders, the Takaful company (which operates on a fixed-fee agency model), and its employees.
- Supporting Islamic Jurisprudence on Transactions: Takaful companies exemplify the applicability of Islamic Sharia in all times and places. While insurance is relatively new, Islamic law’s principles can accommodate and address it in a way that promotes fairness and equity. Takaful is a lawful alternative to conventional insurance, encouraging further research and contributing to the practical application of Islamic commercial jurisprudence.
- Contributing to national economic growth and prosperity: Takaful companies play a significant role in economic development by:
  - Investing the funds of contributors and policyholders in Sharia-compliant ways;
  - Mitigating the effects of risks to ensure asset preservation and continuity of economic activities;
  - Creating job opportunities, thus helping to reduce unemployment;
  - Providing financial support for dignified living in cases of illness and disability;
  - Retaining insurance funds within the country and investing them to benefit contributors and the wider community.
- Capital accumulation for policyholders: Takaful is a life insurance alternative that offers policyholders a means of saving. The Takaful company saves the policyholder’s periodic contributions. It returns them at the end of the contract if the insured event does not occur, enabling policyholders to invest in income-generating activities.
- Protecting the national economy from exploitation by conventional insurance companies: Conventional insurance companies often prioritize profit for a select group, exploiting policyholders’ need for insurance with excessive premiums and restrictive terms. Takaful avoids these practices, preventing funds from being monopolized by foreign insurance companies, which benefits the national economy.
- Completing the islamic economic system: Takaful companies form an essential part of the Islamic economy, operating alongside Islamic banks and financial markets to complete its structure.

The following figure summarizes the importance of Takaful insurance:

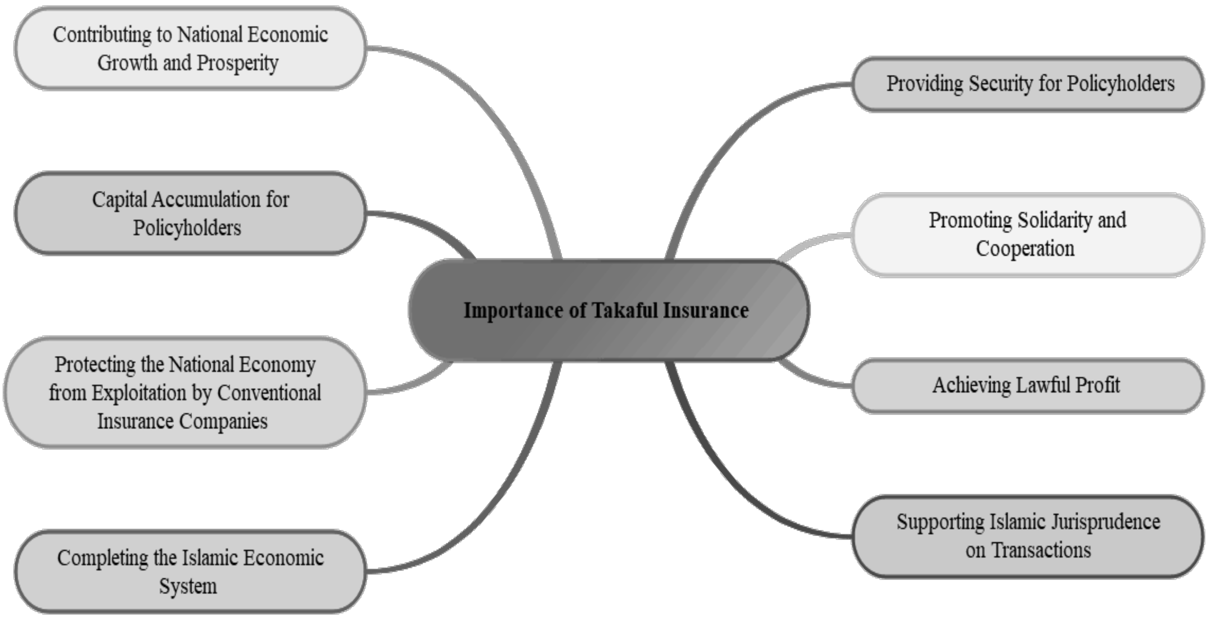


Figure 1. Importance of takaful insurance
Source: Prepared by the researchers based on the preceding discussion.

II-3- Rules of takaful insurance:

The Takaful insurance system is governed by principles that outline its operation, as presented below (Widigdo, 2024).

- Mutual guarantee (Reciprocal): This entails covering losses from a mutual fund established through contributions or donations from Takaful policyholders. Responsibility is thus shared among policyholders, who collectively bear losses. In this way, policyholders simultaneously act as the insurers (guarantors) and the insured.
- Ownership of the takaful fund: The Takaful fund is owned by the policyholders themselves, who, in this capacity, are entitled to its returns. Surplus funds remaining at the end of the period (insurance surplus) are returned to them and distributed according to the resolutions of the company's board and Sharia supervisory authority.
- Management of takaful fund operations by the company: The Takaful fund's operations are managed by the company as an independent entity, based on a known agency fee determined at the start of each fiscal year, documented in contracts, and paid from policyholders' contributions.
- Investment of the takaful fund: The available funds in the account are invested based on a Mudarabah (profit-sharing) contract. Profits are distributed between the company and the policyholders in predetermined shares fixed at the beginning of each fiscal year and outlined in contracts.
- Principle of justice: Fairness must be ensured between shareholders and policyholders and among the policyholders themselves.
- Investment compliance with sharia: The Takaful insurance company's investments must align with Islamic legal principles, strictly avoiding interest-based (riba) and impermissible activities.
- Sharia supervision: The Takaful company must ensure the existence of a Sharia supervisory board tasked with monitoring the company's operations for Sharia compliance. No external party may interfere with the board's rulings and decisions, and the insurer must adhere to these directives.
- Donation contract: The funds in the Takaful fund are considered voluntary contributions made by policyholders in the spirit of cooperation. The policyholder commits to a designated contribution amount, binding as an obligation. This obligation represents the premium, which has an immediate effect upon subscription, made explicit through written documentation. Any indemnity provided to a harmed policyholder is also considered a charitable commitment from the Takaful fund, a legal

entity, contingent upon the occurrence of the insured risk. This reciprocal obligation to donate, with policyholders contributing premiums and the fund committing to indemnify for insured risks, does not make the transaction compensatory, as donations under Sharia law may be subject to specific conditions and purposes and may be contingent upon certain conditions according to some jurists.

Having established the conceptual frameworks of the Islamic finance industry and the operational principles of Takaful insurance, the subsequent section delves into the methodologies for measuring industry development. It empirically examines the Takaful sector's contribution to its quantitative growth.

III. The development indicator for the islamic finance industry and the contribution of the takaful insurance sector to its quantitative growth

This part of the study examines the development indicator of the Islamic finance industry in general, with particular emphasis on its quantitative development indicator. Simultaneously, it assesses how much the Takaful insurance sector contributes to this quantitative growth.

III.1. Introduction to the development indicator for the islamic finance industry:

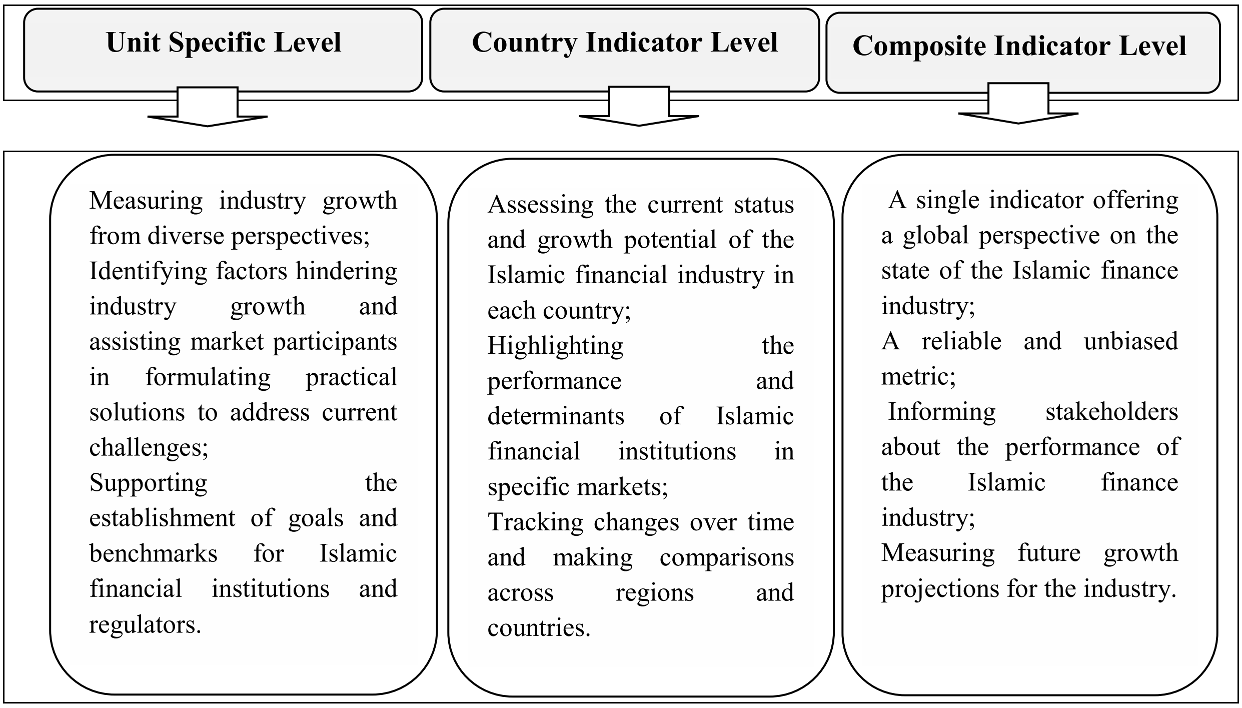
III.1.1. Overview of the islamic finance development indicator (IFDI): The Islamic Finance Development Indicator (IFDI) is a weighted composite index that measures the comprehensive development of the Islamic finance industry by providing an overall evaluation of the performance of all its components, in alignment with the principles of Sharia. The Islamic Corporation publishes the IFDI for the Development of the Private Sector (ICD)* in collaboration with Thomson Reuters and, since 2019, in partnership with Refinitiv.

This global composite indicator is segmented at the country or unit level (institution/financial instrument) and is issued annually. It is accompanied by a detailed report presenting individual indicators for each country or unit and primary figures. Each component within the composite index is measured and aggregated, with equal weighting assigned to all variables. Furthermore, data normalization is required before aggregation due to differing measurement units among variables.

For the country-level composite indicator, normalization of indicators allows for meaningful comparisons over time, both for a specific country and between countries. Various economic indicators (such as population size) are also considered when assessing each country's robustness in the Islamic finance industry.

III.1.2. Levels and objectives of the islamic finance development indicator (IFDI): The Islamic Finance Development Indicator comprises three levels, each with specific objectives, as illustrated in the following diagram:

Figure 2. Levels and objectives of the islamic finance industry development indicator



Source: Prepared by the researchers, based on (IFG IFDI Team, ICD-THOMSON REUTERS, 2018, p. 4).

III.1.3. Components of the islamic finance development indicator (IFDI): The Islamic Finance Development Indicator encompasses five primary components (indicators) (IFG IFDI Team, ICD-THOMSON REUTERS, 2018, p. 6):

- Quantitative development indicator (QD): This indicator measures the performance of five core sectors within the Islamic finance industry: Islamic banks, Takaful companies, other Islamic financial institutions, Sukuk, and Islamic funds.
- Governance indicator: This indicator evaluates the quality of Sharia governance to ensure that Islamic institutions and financial instruments comply with Sharia standards. It also assesses the quality of governance processes and risk management to safeguard stakeholders. It includes: regulation (laws), Sharia governance, and corporate governance.
- Corporate social responsibility (CSR) indicator: This indicator measures the social contribution of the Islamic finance industry in alignment with Islamic principles. It includes CSR funds disbursed and disclosed CSR activities.
- Knowledge indicator: This indicator assesses the availability and quality of education to ensure that industry professionals are well-versed in Islamic jurisprudence and financial principles. It also measures research outputs to provide the industry's knowledge-based foundations and growth. It includes education and research.
- Awareness indicator: This indicator evaluates consumer understanding of the principles underpinning the Islamic finance industry. It includes forums, conferences, and published news (information dissemination).

The following table presents the components of the Islamic Finance Development Indicator:

Table 1. Components of the islamic finance development indicator

Core Indicators	Quantitative Development Indicator	Governance Indicator	Corporate Social Responsibility (CSR) Indicator	Knowledge Indicator	Awareness Indicator
Sub-Indicators	- Islamic banks - Takaful companies - Other Islamic financial institutions (OIFIs) - Sukuk - Islamic funds	- Regulation - Sharia governance - Corporate governance	- CSR activities - CSR funds	- Education - Research	- Seminars -Conferences - News

Source: Compiled by the researchers based on the above sources.

Table 2 illustrates that while the overall IFDI and several key indicators like Governance, Knowledge, and Awareness showed growth trends up to 2021, a subsequent decline or stagnation was observed in 2022-2023, coinciding with methodological changes in the indicator's assessment. The Quantitative Development Indicator remained relatively stable before showing a slight dip in the later years of the observed period.

Notably, in 2022, several modifications were made to the Islamic Finance Development Indicator (ICD-REFINITIV, 2022, p. 11):

- The addition of a new matrix for environmental, social, and governance (ESG) variables and Islamic FinTech;
- Reorganization of previous measures to create new sub-indicators;
- Adjustments in the weights of the five leading indicators, with increased emphasis on the Quantitative Development Indicator (40% instead of 20%) and the Governance Indicator (25% instead of 20%), redistributing the remaining weights among the other indicators.

III.1.4. Statistics on the main indicators of islamic finance industry development:

According to available data (see Table n°2 and Figure n°3 below), the Global Development Indicator for the Islamic finance industry rose from 9.9 in 2017 to 11 in 2019, 2020, and 2021, with strong performance across all the leading indicators. The Quantitative Development Indicator saw an increase in its average value, from 5.7 in 2017 to 6 in 2021. Similarly, the Governance Indicator rose from 14 in 2017 to 15 in 2021. The Knowledge Indicator and Awareness Indicator experienced growth between 2017 and 2021, reaching values of 12 and 16 in 2021, compared to 7.7 and 13.9 in 2017, respectively. However, the Corporate Social Responsibility (CSR) Indicator declined in 2020-2021, stabilizing at an average value of 7 compared to 8 in 2017-2019.

In 2022-2023, a decrease in the Global Development Indicator for the Islamic finance industry was observed, with the value dropping to 9 compared to 11 during 2019-2021. This decline is attributed to a reduction in the values of most key indicators, with the averages of the Quantitative Development, Knowledge, and Awareness Indicators falling to 5, 7, and 12 in 2022-2023, respectively, compared to 6, 12, and 16 in 2021. It should be noted that the reasons for this decrease in 2022-2023 compared to previous years cannot be precisely determined due to methodological changes in the assessment of these indicators in 2022, as previously mentioned.

Table 2. Average values of the global indicator and the main indicators of IFDI

Years	Overall Development Indicator	Main Indicators				
		Quantitative Development Indicator	Governance Indicator	Corporate Social Responsibility (CSR) Indicator	Knowledge Indicator	Awareness Indicator
2017	9.9	5.7	14	7.9	7.7	13.9
2018	10.5	6	13	8	9	16
2019	11	6	14	8	10	16
2020	11	6	14	7	11	17
2021	11	6	15	7	12	16
2022	9	5	16	7	7	12
2023	9	5	17	9	7	12

Source: Compiled by the researchers based on: (ICD-THOMSON REUTERS, 2017, p. 15); (ICD-THOMSON REUTERS, 2018, p. 10); (ICD-REFINITIV, 2019, p. 15); (ICD-REFINITIV, 2020, p. 12); (ICD-REFINITIV, 2021, p. 13) (ICD-REFINITIV, 2022, p. 12); and (ICD-LSEG, 2023, p. 13).

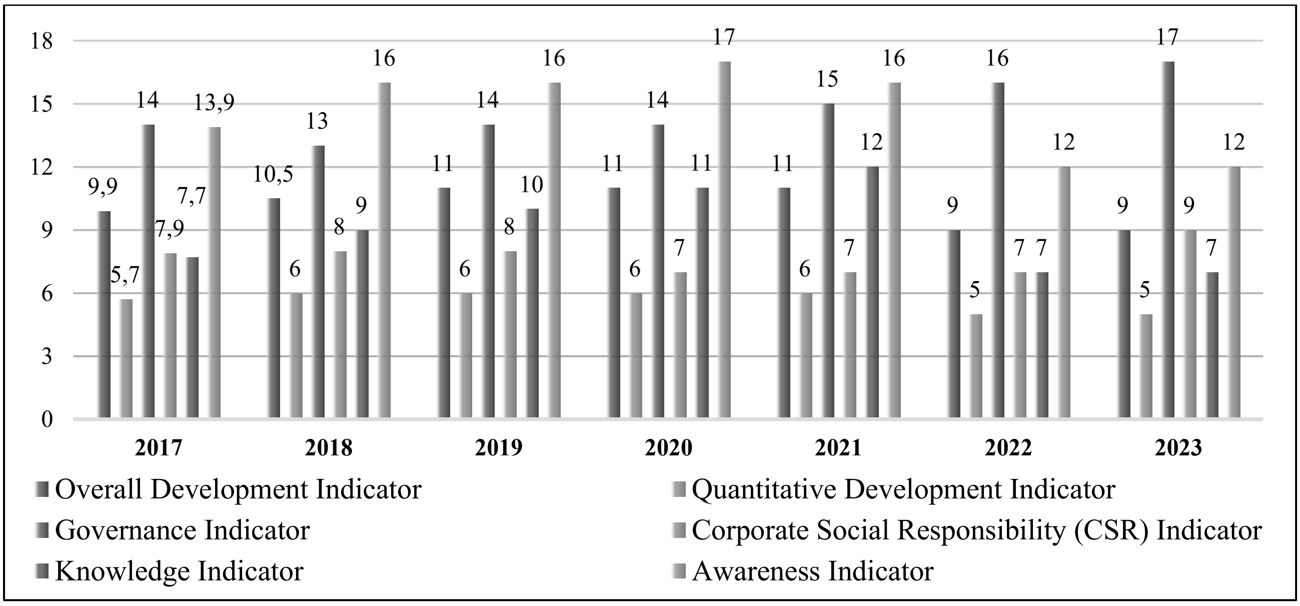


Figure 3. Average values of the global indicator and the main indicators of IFDI (2017-2023)

Source: Prepared by the researchers based on data from the previous table.

Figure 3 visually reinforces these trends, charting the trajectory of the Global Development Indicator alongside its principal components. The divergence in 2022-2023 across multiple indicators, especially the overall IFDI and the Quantitative Development, Knowledge, and Awareness indicators, is particularly evident.

It is worth noting that in 2023, country-specific values of the Islamic Finance Development Indicator ranged from 0 to 103, with the highest score achieved by the best-performing country. The average value of this indicator across all countries (136 countries) was approximately 9. Among individual countries, Malaysia leads the global ranking in the Islamic Finance Development Indicator, scoring 103 in 2023. Malaysia achieved the first place in 4 out of 5 leading indicators: Quantitative Development (84), Governance (95), CSR (124), and Awareness Indicator (152), while it ranked second in the Knowledge Indicator (112). Saudi Arabia ranks second globally with a development score of 70, supported by strong performance in the Quantitative Development Indicator (56), CSR Indicator (122), and Knowledge Indicator (54). Indonesia ranks third with an overall indicator value of 58, mainly due to an exceptionally high Knowledge Indicator score of 200. The remaining top ten are occupied by other GCC countries (Bahrain, Kuwait, UAE, Oman, Qatar) as well as Pakistan and Jordan, with indicator values ranging from 54 (Bahrain and Kuwait) to 38 for Qatar (ICD-LSEG, 2023, pp. 13-23).

III.2. Quantitative development of the islamic finance industry:

III.2.1. Assessment of the quantitative development of the islamic finance industry: Quantitative development is one of the primary indicators of progress within the Islamic finance industry. To assess this quantitative growth, it is essential to examine all sectors within the industry and review their quantitative dimensions. There are five sectors in the Islamic finance industry, and the quantitative development of each is evaluated through three quantitative dimensions (IFG IFDI Team, ICD-THOMSON REUTERS, 2018, p. 7):

- Growth, expansion, and depth: These indicators measure growth, expansion, and depth at the institution/instrument level and the national average, such as total assets, the total number of Islamic financial institutions, and windows. Specific growth and expansion indicators are developed for funds and Sukuk.
- Market performance: These indicators offer metrics at the institution/instrument level and national average regarding the performance of Islamic financial institutions and instruments, such as bid-ask spreads for Sukuk.
- Financial soundness: Where applicable, these indicators provide institution/instrument-specific and national average metrics regarding financial soundness, such as asset quality, profitability, and operational efficiency of Islamic institutions.

III.2.2. Empirical analysis of takaful's contribution to quantitative growth:

In 2023, the Quantitative development indicator for the islamic finance industry reached approximately 5. Malaysia, Saudi Arabia, and Iran ranked highest globally in this indicator, with around 84, 56, and 48 values, respectively. The values of the sub-indicators for quantitative development and the rankings of the top five countries globally for these indicators are shown in the following table:

Table 3. Statistics on quantitative development indicators for the islamic finance industry in 2023

Indicators		Indicator Value	Top Five Countries Globally				
Quantitative Development		**5**	Malaysia	Saudi Arabia	Iran	Kuwait	Türkiye
			84	56	48	36	34
Sub-Indicators	Islamic Banks	9	Iraq	Iran	Sudan	Bahrain	Saudi Arabia
	Takaful	5	Iran	Saudi Arabia	Pakistan	Bangladesh	Malaysia
	Other Islamic Financial Institutions (OIFIs)	5	Saudi Arabia	Kuwait	Iran	Malaysia	Türkiye
	Sukuk	4	Malaysia	Saudi Arabia	Indonesia	Türkiye	Jordan
	Islamic Funds	2	Malaysia	Iran	Türkiye	Saudi Arabia	Pakistan

Source: Compiled by the researcher based on (ICD-LSEG, 2023, p. 15).

The table above shows that the Islamic Banks sub-indicator recorded the highest value among the other sub-indicators, approximately 9. This is attributed to the large number of Islamic banks or banking windows in various countries and the solid performance of many of these banks, measured by return on assets (ROA).

The remaining quantitative development sub-indicators registered lower values due to the limited number of Takaful companies and other financial institutions compared to Islamic banks, the concentration of Sukuk issuance in specific markets, and the limited presence of Islamic funds in only a few countries.

Malaysia leads the country's ranking, primarily due to its active capital markets, which are represented by sukuk and Islamic funds. Saudi Arabia ranks second, holding a top-three position in the Takaful sub-indicator, Sukuk, and other OIFIs sub-indicators. Iran ranks third due to its recent evolution in the Islamic Banks, Takaful sector, and Islamic funds.

III.3. Assessment of the development indicator for the takaful insurance sector and its contribution to the quantitative growth of the islamic finance industry:

III.3.1. Assessment of the development indicator for the takaful insurance sector:

The development indicator for the Takaful insurance sector is evaluated based on the following elements (IFG IFDI Team, ICD-THOMSON REUTERS, 2018, p. 18):

- Market development: This evaluates the level of development in the Takaful sector through the following metrics:
  - Takaful and re-takaful assets metric: This metric represents the total assets designated by each Takaful and Re-Takaful company within a given country, covering both the policyholders' fund and the shareholders' fund. These assets are aggregated to obtain each country's overall Takaful and Re-Takaful assets.
  - Number of takaful and re-takaful companies metric: This metric determines the number and growth of Takaful and Re-Takaful companies within each country.
  - Number of listed takaful and re-takaful companies metric: This metric indicates the number of Takaful and Re-Takaful companies listed on the stock exchange in each country.
- Financial evaluations: This element assesses the financial health of the Takaful sector in a given country, based on ratio analysis. All components within the financial evaluation are presented as percentages. Among the metrics used in the financial evaluation of Takaful insurance is the Return on Assets (ROA) Metric, which measures the efficiency of a Takaful company in generating profits from its assets, regardless of the company's size. This ratio is calculated by dividing the net income by the total assets of the Takaful company. A high ROA indicates strong financial and operational performance.Bas du formulaire

Table 4. Metrics for evaluating the development indicator of the takaful insurance sector

Metrics	Level	Unit of Measurement	Duration
Total Takaful and Re-Takaful Assets	Institution and Country Level	Numeric (Value)	Annual
Number of Takaful and Re-Takaful Companies (including windows)	Country Level	Numeric	Annual
Number of Listed Takaful and Re-Takaful Companies	Country Level	Numeric	Annual
Return on Assets	Institution Level and Weighted Average at Country Level	Numeric (Ratio)	Annual

Source: Compiled by the researcher based on (IFG IFDI Team, ICD-THOMSON REUTERS, 2018, pp. 18-19).

III.3.1. Contribution of the takaful insurance sector to the quantitative development of the islamic finance industry: Based on the preceding analysis, it can be concluded that the Takaful insurance sector contributes to the quantitative growth of the Islamic finance industry. Improvements in the sub-indicator metrics for this sector (see Table n°4 above) will lead to an increase in the Takaful sector's development indicator (sub-indicator), which in turn enhances the overall quantitative development indicator for the Islamic finance industry (leading indicator). In other words, an increase in the total assets of Takaful and Re-Takaful, the number of Takaful and Re-Takaful companies, the number of Takaful companies listed on the stock exchange, or a rise in the return on assets (ROA) of these companies will elevate the Takaful sector's sub-indicator, thus raising the leading quantitative development indicator for the Islamic finance industry. This indicates a positive relationship between Takaful insurance and the quantitative development of the Islamic finance industry.

In general, and based on available data, we will focus on statistics related to Takaful's total assets and the Number of Takaful Companies (including windows) as metrics of Takaful's development indicator, demonstrating the sector's contribution to the quantitative growth of the Islamic finance industry.

As shown in Table n°5 and the corresponding figure below, the values of total assets in the Islamic finance industry and Takaful assets increased from 2017 to 2023. In 2023, the total assets of the Islamic finance industry reached 4925 billion USD, compared to 2786 billion USD in 2017, achieving an average annual growth rate of 10.09% during the study period. Meanwhile, the Takaful sector alone reached approximately 86 billion USD in assets in 2023, up from 42 billion USD in 2017, with an average annual growth rate of 12.91% between 2017 and 2023.

Table n°5 also shows a slight increase in the ratio of contribution of Takaful assets to the total assets of the Islamic finance industry in most study years. This ratio followed an upward trend from 2017 to 2021, with Takaful assets representing 1.94% of the total assets of the Islamic finance industry in 2021, compared to 1.51% in 2017. In the years 2022-2023, the contribution of Takaful assets to the assets of the Islamic finance industry decreased compared to previous years, reaching 1.92% and 1.75% in the years 2022 and 2023, respectively. In general, the average contribution of Takaful insurance assets to the assets of the Islamic finance industry amounted to 1.7% during 2017-2023.

Table 5. Evolution of total takaful assets and total assets of the islamic finance industry (2017-2023)

Years	2017	2018	2019	2020	2021	2022	2023	Average
Total Assets of the Islamic Finance Industry (USD Billion)	2 786	2 901	3 359	3 852	3 919	4 420	4 925	/
Growth Rate (%)	/	4,13	15,79	14,68	1,74	12,78	11,43	10,09
Takaful Assets (USD Billion)	42	45	54	63	76	85	86	/
Growth Rate (%)	/	7,14	20,00	16,67	20,63	11,84	1,18	12,91
Contribution of Takaful Assets to Total Islamic Finance Industry Assets (%)	1,51	1,55	1,61	1,64	1,94	1,92	1,75	1,70

Source: Compiled by the researchers based on: (ICD – LSG, 2024, pp. 4-10).

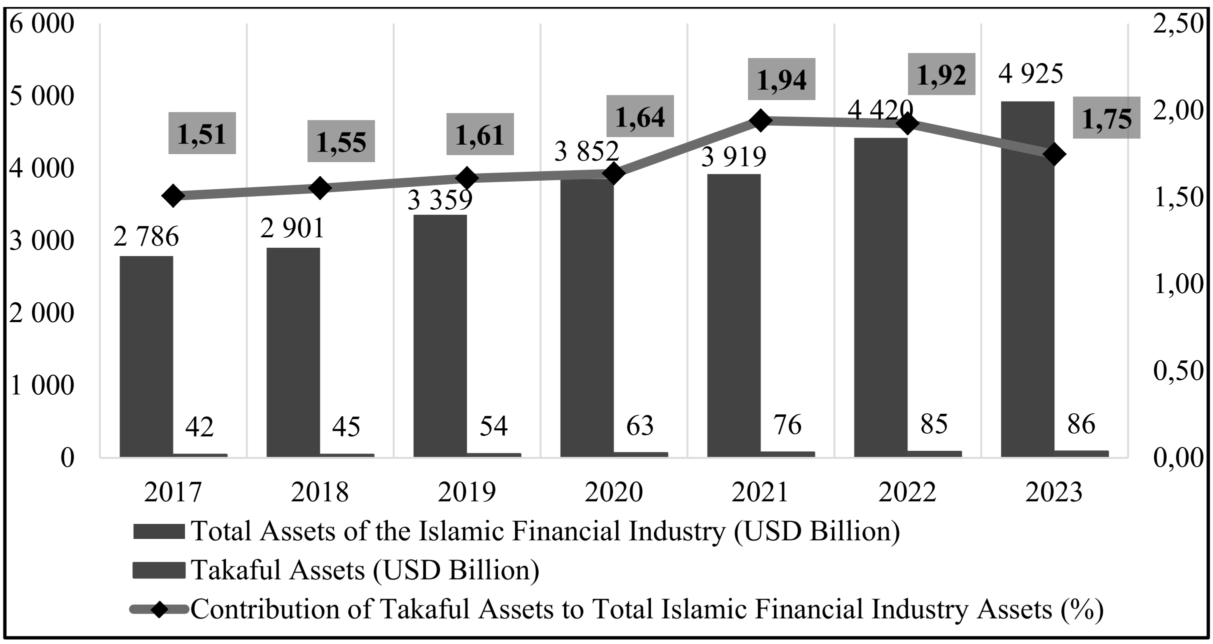


Figure 4. Contribution of takaful insurance to the islamic finance industry (2017-2023)

Source: Prepared by the researchers based on data from the previous table.

Table n°6 (see below) shows that the number of Takaful companies increased during the study period, reaching about 364 in 2023, compared to 324 in 2017. These companies' average annual growth rate reached about seven companies annually during 2017-2023.

Table 6. Evolution of total takaful operators (2017-2023)

Years	2017	2018	2019	2020	2021	2022	2023	Average
Total Takaful Operators	324	335	336	323	335	344	364	/
Growth (Number)	/	11	1	-13	12	9	20	6,67

Source: Compiled by the researchers based on: (ICD-THOMSON REUTERS, 2018, p. 15); (ICD-REFINITIV, 2019, p. 30); (ICD-REFINITIV, 2020, p. 30); (ICD-REFINITIV, 2021, p. 33) (ICD-REFINITIV, 2022, p. 36); and (ICD-LSEG, 2023, p. 42).

Based on the results reached above, it is clear that the increase in both the total Takaful assets and the number of Takaful companies in 2017-2023 has a role in the quantitative development of this sector, and at the same time, has a role in enhancing the quantitative development of the Islamic finance industry. Moreover, the total asset of Takaful sector and the number of companies in this sector are expected to rise in the coming years, especially as some countries, including Algeria, have recently started offering Takaful products, which further supports the quantitative development of this sector and the quantitative development of the Islamic finance industry as a whole, thus enhancing the overall development Indicator of this industry.

Conclusion:

The islamic finance industry is founded on the principles of profit-and-loss sharing and the elimination of interest-based transactions, aiming to fulfill society's financing needs through Sharia-compliant financial activities. A notable advantage of this industry is its provision of alternatives to conventional financial products, contributing to the comprehensive knowledge system of the Islamic economy and ensuring the continuity of the Islamic financial system as a whole. The industry comprises five core sectors: Islamic banks, Takaful insurance, other Islamic financial institutions, Sukuk, and Islamic funds.

Takaful insurance (cooperative, mutual, Islamic insurance) is a system in which a group of individuals collaborates to bear potential losses through contributions, with the Takaful company organizing this cooperation and managing funds according to Sharia principles. This system offers a legitimate alternative to conventional insurance. The significance of Takaful insurance lies in providing security to participants, promoting solidarity and cooperation, achieving permissible profit, supporting the application of Islamic jurisprudence in transactions, contributing to national economic growth, building capital for policyholders, protecting the national economy from exploitation by commercial insurance companies, and completing the Islamic economic framework.

The islamic finance Development Indicator (IFDI) measures the development of the Islamic finance industry. It is published by the Islamic Corporation for the Development of the Private Sector and Thomson Reuters, with Refinitiv joining in 2019. Numerically, the indicator rose from 9.9 in 2017 to 11 in 2021. However, a decline was recorded in 2022 and 2023, with the indicator dropping to 9; the precise reasons for this shift warrant further investigation, particularly considering the methodological changes in the indicator's assessment.

The IFDI comprises five leading indicators: quantitative development, governance, corporate social responsibility, knowledge, and awareness, each with multiple sub-indicators. In 2022, adjustments were made to the IFDI calculation, primarily by introducing the Islamic FinTech variable and assigning greater weights to the quantitative development and governance indicators in the overall score.

The quantitative development indicator measures the quantitative dimensions (growth, expansion, depth, market performance, and financial soundness) of the five core sectors that make up the Islamic finance industry. The Quantitative Development sub-indicator for the Takaful sector is assessed using metrics such as Total Takaful and Re-Takaful Assets, the Number of Takaful and Re-Takaful Companies (including windows), the Number of Listed Takaful and Re-Takaful Companies, and the Return on Assets ratio.

The findings of this study confirm that the Takaful sector contributes positively to the quantitative growth of the Islamic finance industry. Increases in the development metrics for the Takaful sector, specifically focusing on total assets and the number of operators, enhance its Quantitative Development Indicator. This, in turn, elevates the overall Quantitative Development Indicator for the Islamic finance industry. The data from 2017 to 2023 demonstrate an upward trend in these Takaful metrics, which has supported the quantitative development of the Takaful sector and, consequently, the broader Islamic finance industry, thereby positively influencing the overall IFDI.

While this study effectively addresses quantitative metrics, future research could be enriched by incorporating qualitative insights. Gathering perspectives from industry experts, Takaful operators, regulators, and policyholders through interviews or case studies would offer a more holistic understanding of Takaful's role, operational nuances, and perceived impact within the broader Islamic finance ecosystem. Such qualitative data could provide valuable context to the quantitative findings and illuminate factors not easily captured by numerical data alone.

Furthermore, the findings of this study carry several potential policy implications and recommendations. To capitalize on Takaful's contribution to the quantitative development of Islamic finance, regulators, particularly in emerging markets, should consider the following:

- Strengthening regulatory frameworks: Develop clear, comprehensive, and supportive regulatory frameworks tailored for Takaful operations. This includes ensuring Sharia compliance, robust corporate governance, and adequate consumer protection, which can foster trust and encourage market growth. Harmonization of regulations across jurisdictions, where feasible, could also facilitate cross-border Takaful operations.
- Promoting consumer awareness and education: Implement initiatives to enhance public understanding of Takaful principles, products, and benefits compared to conventional insurance. This could involve collaboration between regulatory bodies, educational institutions, and Takaful operators.
- Facilitating market development: Encourage innovation in Takaful product offerings to meet diverse consumer needs and support human capital development with expertise in Takaful and Sharia principles. Incentives for research and development in TakaTech (Takaful technology) could also enhance efficiency and outreach.
- Supporting standardization: While respecting diverse interpretations, promote greater standardization in Takaful contracts and reporting practices to improve transparency and comparability, thereby enhancing investor and consumer confidence.

Considering these aspects can help create a more conducive environment for the Takaful sector to thrive, thereby amplifying its contribution to the stability and growth of the Islamic finance industry globally. As countries like Algeria begin to offer Takaful products, the continued expansion of this sector is anticipated, further bolstering the quantitative development of the Islamic finance industry.

Bibliography:

1. Abdeen, M., Jan, S., Khan, S., Syed, T. (2019). Employing Takaful Islamic banking through state-of-the--art blockchain: A case study. *International Journal of Advanced Computer Science and Applications*, *10*(12). https://doi.org/10.14569/ijacsa.2019.0101283
2. Abdou, H. A., Ali, K., Lister, R. J. (2014). A comparative study of Takaful and conventional insurance: Empirical evidence from the Malaysian market. *International Journal of Business and Society*, *15*(3), 435-456.
3. Ahmad, I., Masood, T., Khan, M. S. (2020). Problems and prospects of Islamic banking: A case study of Takaful. *Theoretical and Applied Economics*, *17*(5), 55-70.
4. Akhter, W. (2010). Risk management in Takaful. *Global Journal of Management and Business Research*, *10*(7), 17-23.

5. Akhter, W. (2010). Takaful models and global practices. *Review of Islamic Economics*, *13*(2), 27-53.
6. Al-Jarrah, M. F. M., Hattab, K., Albadreen, A. (2024). Jurisprudential conditioning of the Takaful insurance contract: A case study of Islamic insurance in Jordan. *Al Al-Bayt University Journal of Islamic Studies*, *20*(1), 97-133. https://doi.org/10.59759/jjis.v20i1.373
7. Ali, M. M. (2016). Takaful models: Their evolution and future direction. *International Review of Economics*, *7*(4), 457-473. https://doi.org/10.52282/icr.v7i4.229
8. Alshammari, A., Alhabshi, S. M. S. J., Saiti, B. (2018). A comparative study of the historical and current development of the GCC insurance and Takaful industry. *Journal of Islamic Marketing*, *9*(4), 832–847. https://doi.org/10.1108/JIMA-07-2017-0079
9. Azmien, N. I. (2016). *Concepts of Takaful and its application in Takaful Ikhlas*. Universiti Utara Malaysia.
10. Batorshyna, A., Tokar, V., Kolinets, L., Sybyrka, L., Almarashdi, O. (2021). The interplay between the global Islamic finance and the economic growth of Muslim countries. *Financial and Credit Activity: Problems of Theory and Practice*, *3*(38), 231-239. https://doi.org/10.18371/fcaptp.v3i38.237452
11. BenSaid, Y. R. (2023). Shariah governance and Takaful financial performance: The case of listed Takaful insurances. *Journal of Islamic Accounting and Business Research*, *16*(1), 170-187. https://doi.org/10.1108/jiabr-09-2022-0236
12. Çelik, İ. N., Akpınar, Ö. (2023). The significance and use of Takaful insurance in the Islamic finance system. *International Journal of Islamic Finance (IJIF)*. https://doi.org/10.52898/ijif.2023.8
13. Elomari, R. (2023). The role of fintech in promoting the Takaful model of Islamic insurance. *American Journal of Financial Technology and Innovation*, *1*(1), 15-23. https://doi.org/10.54536/ajfti.v1i1.2098
14. Ernawati, E., Asri, M. (2020). Knowledge and awareness of Islamic finance in Europe and the United States. *Iqtishadia: Journal of Islamic Economics & Business*, *13*(1), 23. https://doi.org/10.21043/iqtishadia.v13i1.7207
15. Godlewski, C., Turk, R., Weill, L. (2014). *Do the type of sukuk and choice of Shari'a scholar matter?* (IMF Working Paper No. 14/147). International Monetary Fund. https://www.elibrary.imf.org/view/journals/001/2014/147/article-A001-en.xml
16. Hanif, M., Iqbal, A. (2014). An evaluation of Takaful insurance: Case of Pakistan. *Middle-East Journal of Scientific Research*, *21*(3), 488-496.
17. Hassan, H., Abbas, S. K. (2019). Factors influencing the investors' intention to adopt Takaful (Islamic insurance) products. *Journal of Islamic Marketing*, *11*(1), 1-13. https://doi.org/10.1108/jima-03-2018-0064
18. Hassan, H. A. (2019). Takaful models: Origin, progression, and future. *Journal of Islamic Marketing*, *11*(6), 1801-1819. https://doi.org/10.1108/jima-04-2018-0078
19. Hodori, A. A., Masih, M. (2017). Acceptance of Takaful amongst South African Muslims: An empirical validation using structural equation modelling (SEM) and the moderating effect of religiosity (MPRA Paper No. 80372). University Library of Munich, Germany.
20. Hodori, A. A., & Masih, M. (2017). Determinants of profitability of Takaful operators: New evidence from Malaysia based on a dynamic GMM approach. *Emerging Markets Finance and Trade*, *53*(9), 2105–2119. https://doi.org/10.1080/1540496X.2016.1239450 (DOI inferred)
21. Hussain, M., Shahmoradi, A., & Turk, R. (2015). *An overview of Islamic finance* (IMF Working Paper No. 15/120). International Monetary Fund. https://www.elibrary.imf.org/view/journals/001/2015/120/article-A001-en.xml
22. Ibrahim, M. D., Salleh, F., Awang, Z. (2015). The effects of financial factors on Takaful demand in Malaysia. *Journal of Entrepreneurship and Business*, *3*(1), 17-29. https://doi.org/10.17687/jeb.0301.02
23. ICD-LSEG. (2023). *Islamic finance development report 2023: Navigating uncertainty*. Islamic Corporation for the Development of the Private Sector & London Stock Exchange Group. https://icd-ps.org/uploads/files/ICD_LSEG_IFDI_REPORT_20231715587354_1336.pdf

24. ICD-LSEG. (2024). *Islamic finance development report 2024: From niche to norm*. Islamic Corporation for the Development of the Private Sector & London Stock Exchange Group. https://www.zawya.com/en/economy/islamic-reports/islamic-finance-development-report-2024-from-niche-to-norm-pwqeoqow
25. ICD-Refinitiv. (2019). *Islamic finance development report 2019: Shifting dynamics*. Islamic Corporation for the Development of the Private Sector & Refinitiv. https://icd-ps.org/uploads/files/IFDI%20 2019%20DEF%20digital1574605094_7214.pdf
26. ICD-Refinitiv. (2020). *Islamic finance development report 2020: Progressing through adversity*. Islamic Corporation for the Development of the Private Sector & Refinitiv. https://icd-ps.org/uploads/files/ICD-Refinitiv%20IFDI%20Report%2020201607502893_2100.pdf
27. ICD-Refinitiv. (2021). *Islamic finance development report 2021: Advancing economies*. Islamic Corporation for the Development of the Private Sector & Refinitiv. https://static.zawya.com/pdf/Islamic%20 Finance%20Development%20Reports/2021%20IFDI%20Report.pdf
28. ICD-Refinitiv. (2022). *Islamic finance development report 2022: Embracing change*. Islamic Corporation for the Development of the Private Sector & Refinitiv. https://icd-ps.org/uploads/files/ICD%20Refinitiv%20ifdi-report-20221669878247_1582.pdf
29. ICD-Thomson Reuters. (2017). *The Islamic finance development report 2017: Towards sustainability*. Islamic Corporation for the Development of the Private Sector & Thomson Reuters. https://casablancafinancecity.com/wp-content/uploads/2019/02/IFDI-Report-2017.pdf
30. ICD-Thomson Reuters. (2018). *The Islamic finance development report 2018: Building momentum*. Islamic Corporation for the Development of the Private Sector & Thomson Reuters. https://ceif.iba.edu.pk/pdf/Reuters-Islamic-finance-development-report2018.pdf
31. IFG IFDI Team, ICD-Thomson Reuters. (2018). *Islamic finance development indicator rulebook*. Thomson Reuters. https://www.zawya.com/islamic-finance-development-indicator/files/IFDI-Rulebook.pdf?v2
32. Insurance Authority United Arab Emirates. (2014). *Board of Directors' Decision Number (26) of 2014 pertinent to financial regulations for Takaful Insurance Companies*.
33. Integration of Takaful insurance in the Tunisian market: Consumer attitude and future perspectives. (2024). *International Journal of Risk and Contingency Management*, *13*(1), 1-22.
34. Jamil, S. N., Jamal, J. (2016). Importance of the Islamic Financial Services Act 2013 in the Takaful industry after the repeal of the Takaful Act 1984. *Diponegoro Law Review*, *1*(1), 17-27. https://doi.org/10.14710/dilrev.1.1.2016.17-27
35. Lee, H. H., Cheng, F. F., Har, W. M., Nassir, A. M., Razak, N. H. A. (2019). Efficiency, firm-specific, and corporate governance factors of the Takaful insurance. *International Journal of Islamic and Middle Eastern Finance and Management*, *12*(3), 368-387. https://doi.org/10.1108/imefm-06-2018-0187
36. Maf'ula, F., Mi'raj, D. S. (2022). Islamic insurance in Indonesia: Opportunities and challenges in developing the industry. *Journal of Islamic Economic Laws*, *5*(1), 116-138. https://doi.org/10.23917/jisel.v5i1.16764
37. Miskan, N. H., Muhamad, N., Esa, M. M., Zabidi, F. S. M., Hussin, N. L., Nasuha, S. A. (2024). Awareness of Takaful ownership among the Kuala Klawang community: Challenge or opportunity? *International Management and Business Review*, *16*(4(I)), 12-17. https://doi.org/10.22610/imbr.v16i4(i).4251
38. Muhamat, A. A. (2021). A review paper on governance for Takaful operators (Islamic insurance companies). *Journal of Economics and Administrative Sciences*, *8*(1), 35-58. https://doi.org/10.26414/a094
39. Muradova, D. A. (2024). The impact of digital financial technologies on Islamic insurance and other financial institutions: Opportunities and challenges. *International Journal of Applied Islamic Finance and Digitalization*, *1*(2), 97-104. https://doi.org/10.61796/ijaifd.v1i2.90
40. Nkirote, S. (2017). Effect of Islamic insurance on the growth of the insurance industry in Kenya. *Strategic Journal of Business & Change Management*, *4*(2), 1185-1200.
41. Nufus, A., Natasya, N., Munfasiroh, M., Sari, R. N. (2024). Strategi inovasi produk keuangan syariah untuk meningkatkan inklusi finansial. *Santri: Journal of Pesantren and Fiqh Sosial*, *2*(6), 104-116. https://doi.org/10.61132/santri.v2i6.1016

42. Nuswantoro, P. (2024). Encouraging economic growth through Islamic financial principles in Indonesia. *West Science Islamic Studies*, *2*(02), 91-97. https://doi.org/10.58812/wsiss.v2i02.806
43. Puad, N. A. M., Abdullah, N. I., Shafii, Z. (2020). Perceptions of Shariah scholars on Shariah audit in Malaysian Takaful industry. *International Journal of Islamic Economics and Finance Research*, *2*(1 July), 13–25. https://doi.org/10.53840/ijiefer23
44. Radiamoda, A. M. (2025). There is a need for micro or Takaful in Islamic insurance partnerships in the Philippines. *Journal of Economics, Business and Islamic Philanthropy*, *10*(1), 41. https://doi.org/10.24042/ijebi.v10i1.26527
45. Rawat, A. S., Mehdi, S. K. (2017). The impact of Islamic banks and Takaful companies on economic growth: A case of Pakistan. *Journal of Finance and Economic Research*, *2*(2), 130-143. https://doi.org/10.20547/jfer1702203
46. Riaz, M., Kazmi, S. M. A., Mirza, A., Mehmood, A. (2022). Real sector growth is owed to Islamic finance. *Review of Applied Management and Social Sciences*, *5*(4), 573-585. https://doi.org/10.47067/ramss.v5i4.279
47. Rofika, H., Meylianingrum, K. (2024). Factors that influence the profits of Takaful companies in Indonesia and Malaysia. *Journal of Islamic Economics, Finance and Banking*, *5*(1), 99-116. https://doi.org/10.47700/jiefes.v5i1.7436
48. Salami, M. A., Tanrivermis, H., Tanrivermis, Y. (2024). Evaluation of the management soundness of the Takaful industry in selected countries. *Journal of Islamic Marketing*, *15*(4), 945-962. https://doi.org/10.1108/jima-04-2023-0137
49. Salleh, M. C. M. (2016). The significant contribution of Islamic relationship marketing practice in the Malaysian Takaful industry towards determining customer gratitude, trust, and commitment. *Asian Academy of Management Journal*, *21*(Supp. 1), 171-207. https://doi.org/10.21315/aamj2016.21.supp.1.8
50. SHIBU, A. A., Kahf, M. (2022). Development of Takaful industry in Türkiye: Challenges and prospects. *Journal of Islamic Economics (JIE)*, *2*(2), 48-66. https://doi.org/10.55237/jie.1061660
51. Shahîd, I. (2018). Macroeconomic essence of Takaful: Exploring the significance and impact of Takaful in macroeconomic context. *Journal of Emerging Economies and Islamic Research*, *6*(1), 26. https://doi.org/10.24191/jeeir.v6i1.8771
52. Syarifuddin, S. (2017). Kedudukan dana tabarru' dalam asuransi syariah. *Tahkim: Jurnal Hukum dan Syariah*, *1*(1). https://doi.org/10.30984/tjebi.v1i1.390
53. Taib, C. A., Ashraf, M. S., Razimi, M. S. A. (2018). Technical, pure technical, and scale efficiency: A non--parametric approach of Pakistan's insurance and Takaful industry. *The Journal of Muamalat and Islamic Finance Research*, *15*(1), 1-13.
54. Takaful insurance and its impact on enhancing economic growth in the Kingdom of Saudi Arabia during the period (2010-2021). (2025). *Perspectives on Justice and Economic Issues*, *Eworkflow Ltd.* https://doi.org/10.70389/pjec.100005
55. Takaful-growth nexus before and after the implementation of IFSA 2013: Empirical evidence from Malaysia. (2023). *International Journal of Islamic Banking and Finance Research*, *11*(1), 40-50. https://doi.org/10.46281/ijibfr.v11i1.2029
56. Widigdo, A. M. N. (2024). Islamic insurance: How far has it been researched? *Fara'id and Wealth Management*, *3*(2). https://doi.org/10.58968/fwm.v3i2.393
57. Widyanata, F., Pertiwi, R., Syathiri, A. (2024). Takaful insurance industries in supporting sustainable socio-economic development in Indonesia. *Journal of Global Awareness*, *5*(2), 1-15. https://doi.org/10.24073/jga/5/02/06
58. ICD-LSG, A. N., Orusbiev, M. R. (2021). Development of Takaful in the Russian insurance system. *Finance and Credit*, *27*(12), 2698-2718. https://doi.org/10.24891/fc.27.12.2698