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# RISK MITIGATION EFFECTIVENESS IN TAKAFUL AND CONVENTIONAL INSURANCE: A CLAIMS RATIO COMPARISON IN INDONESIA

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**Abstract:** This study analyzes the effectiveness of risk mitigation in Takaful (Islamic insurance) and conventional insurance in Indonesia during the 2020–2024 period, employing a comparative quantitative approach grounded in risk management theory and insurance effectiveness indicators, as measured by the claims ratio. Secondary data were obtained from the Financial Services Authority (Otoritas Jasa Keuangan/OJK), the Indonesian Sharia Insurance Association (Asosiasi Asuransi Syariah Indonesia/AASI), and the Indonesian Life Insurance Association (Asosiasi Asuransi Jiwa Indonesia/AAJI). The data were analyzed using a quantitative descriptive method and comparative ratio analysis, comparing claims ratios between Takaful and conventional insurance to examine the effect of premium growth and claims ratios on risk-mitigation effectiveness. The findings indicate that conventional insurance demonstrates greater premium stability and more effective claims management than Takaful. Meanwhile, Takaful exhibits considerable growth potential but continues to face challenges, including low market penetration, fluctuating claims ratios, and suboptimal efficiency in risk management. These findings suggest that strengthening Islamic financial literacy, enhancing product innovation, improving industry governance, and reinforcing regulatory frameworks are critical factors in improving the effectiveness of risk mitigation and the competitiveness of Indonesia's Takaful industry. Theoretically, this study contributes to the literature on risk management and financial intermediation theory by establishing the claims ratio as an empirical indicator of risk-mitigation effectiveness; practically, it offers an evidence-based reference for regulators, industry associations, and Takaful operators in formulating policies to strengthen the stability and competitiveness of Indonesia's Sharia insurance industry

**Keywords**: Takaful, conventional insurance, risk mitigation, claims ratio, risk management

## INTRODUCTION

Indonesia presents an intriguing paradox within the insurance industry. As the country with the world's largest Muslim population, Indonesia's Sharia insurance (takaful) market share in 2025 remains relatively small, at approximately 4.75% of the total national insurance market, despite continued premium growth and increasingly supportive regulations (AAJI News Room, 2026). This condition raises an important question: does the low market share reflect weak risk-mitigation effectiveness in Sharia insurance, or is it instead driven by low public literacy, weak industry governance, and various other structural barriers? This question carries significant implications for regulators, industry practitioners, and the broader development of Islamic finance studies (Ronaldo & Maulini, 2025).

In general, the insurance industry can be divided into two main systems: conventional insurance, which applies a risk-transfer mechanism from participants to the insurance company, and Sharia insurance, which applies a risk-sharing mechanism through tabarru' funds (Fauzi et al., 2025). In recent years, Indonesia's insurance industry has developed rapidly, driven by growing public awareness of the importance of financial protection against various risks such as natural disasters, accidents, fires, illness, bankruptcy, and death (Azizi et al., 2025). A 2023 survey by the Financial Services Authority (OJK) found that 93% of insurance industry players were optimistic that their companies would grow over the next five years; however, around 33% of respondents believed that the development of Indonesia's insurance industry still lagged behind that of other countries (Insurance Statistics, 2024). Low public literacy regarding insurance and limited domestic reinsurance support remain major challenges to strengthening the growth of the national insurance industry (Kurniartha & Wahyuari, 2026). In addition, low public trust in Sharia insurance further hinders market penetration.

Insurance claims data for the 2020–2024 period reveal a striking difference in patterns between Sharia and conventional insurance. The value of Sharia insurance claims rose from IDR 13,084 billion in 2020 to IDR 20,275 billion in 2021 (OJK, 2024). Thereafter, however, claims fluctuated: they declined to IDR 20,043 billion in 2022, remained relatively stagnant at IDR 19,950 billion in 2023, and then dropped sharply to IDR 6,771 billion in 2024. Conventional insurance claims, in contrast, exhibited a far more stable and steadily increasing trend, rising from IDR 352,247 billion in 2020 to IDR 453,845 billion in 2024. To date, however, the effectiveness of Sharia insurance as a risk-mitigation instrument remains a matter of debate. OJK data indicate that the market shares of Sharia insurance remains relatively small compared to conventional insurance, while the claims ratio, premium growth, and asset development display dynamics that merit further study (OJK, 2024).

Theoretically, the existence of the insurance industry is closely related to risk management theory, which explains that insurance companies function to reduce financial uncertainty through a systematic process of identifying, measuring, controlling, and financing risk (Adelia et al., 2024). Through this process, individuals and institutions can minimize potential economic losses. In the context of the insurance industry, the effectiveness of risk mitigation is reflected in a company's ability to maintain premium stability, manage claims payments, and preserve solvency (Rofikah & Septiarini, 2020). The stronger a company's risk management capability, the more effective the protection it provides to participants. Effective risk management also contributes to greater public trust, as the company is perceived as capable of sustainably meeting its claims obligations (Laapen et al., 2025).

Although Indonesia's Islamic insurance industry has shown significant growth in recent years, its market share remains considerably smaller than that of conventional insurance (Rasya et al., 2026). Several studies indicate that low Islamic financial literacy, limited product innovation, and suboptimal marketing strategies are the main factors hampering the development of the Islamic insurance industry in Indonesia (Muhammad Kahfi et al., 2025). Furthermore, premium and claims growth in Islamic insurance tend to be more volatile than in conventional insurance, which remains relatively stable. This indicates that the Islamic insurance industry still faces challenges in maintaining effective risk mitigation, financial intermediation capacity, and operational stability (Muhammad Kahfi et al., 2025).

Based on these gaps, this study aims to analyze and compare the effectiveness of risk mitigation between Sharia and conventional insurance in Indonesia during the 2020–2024 period through a comparative analysis of claims ratios, grounded in risk management theory and financial intermediation theory (Scholtens, 2003). Theoretically, this study contributes by testing whether the stability of the claims ratio—one of the central constructs in risk management theory can serve as an empirical indicator for measuring risk-mitigation effectiveness across two insurance models with different operational characteristics. From a practical perspective, the findings are expected to inform evidence-based policymaking by the Financial Services Authority (OJK), AASI, and industry stakeholders to enhance the competitiveness and stability of Indonesia's Sharia insurance industry.

The novelty of this research lies in three main aspects. First, it operationalizes risk-mitigation effectiveness through a comparative analysis of claims ratios using official regulatory data, rather than relying on perception surveys or conceptual studies as in previous research. Second, it specifically examines the post-pandemic period of 2020–2024, capturing both the dynamics of post-COVID-19 recovery and the anomalous decline in the Sharia insurance claims ratio in 2024 a phenomenon not yet widely discussed in the literature. Third, it introduces a volatility measure based on the five-year range of claims-ratio fluctuations as a stability benchmark, offering a more comprehensive picture than an analysis of claims ratios for a single period alone.

Although previous studies have examined Islamic insurance from conceptual, perceptual, and financial-literacy perspectives, several research gaps remain. First, very few studies measure risk-mitigation effectiveness using objective financial indicators derived from regulatory data. Second, almost no research specifically examines the post-pandemic period of 2020–2024, particularly the sharp decline in the Islamic insurance claims ratio in 2024, which still lacks an adequate empirical explanation. Third, comparative research combining trend analysis with the claims ratio as an indicator of stability across the two insurance systems remains very limited. This study therefore addresses three research questions: (1) how did premiums and claims develop in Islamic and conventional insurance during 2020–2024; (2) what differences exist in the level and stability of the claims ratio as an indicator of risk-mitigation effectiveness in the two systems; and (3) what factors explain the differences in these patterns, particularly the anomaly in the Islamic insurance claims ratio in 2024?

## METHOD

This study employs a quantitative approach with a descriptive-comparative research design. The unit of analysis is the national Islamic and conventional insurance industries in Indonesia in aggregate, rather than individual insurance companies. This unit of analysis was selected in light of the nature of the data used, namely industry statistics published by the Financial Services Authority (OJK).

The data used are secondary data drawn from the insurance industry's annual reports for the 2020 -2024 period, sourced from OJK Insurance Statistics, the Indonesian Sharia Financial Development Report, the Indonesian Sharia Insurance Association (AASI), and the Indonesian Life Insurance Association (AAJI). Data were selected using purposive sampling, based on the following criteria: (1) officially published by an authorized institution; (2) consistently available throughout the study period (2020 -2024); and (3) verifiable through at least two official sources, whether regulators or industry associations.

## RESULT AND DISCUSSION

Risk is a form of uncertainty faced by individuals or companies that may have a negative or detrimental impact (Naura et al., 2024). Risk mitigation aims to minimize the impact or probability of a given risk so that it becomes more acceptable to the organization, with mitigation strategies tailored to the specific type of risk faced (Mukhlis et al., 2024, p. 55). Insurance is one of the principal means by which individuals secure financial protection: having insurance means preparing oneself and one's family to face events such as accidents, critical illness, disability, or death, including the possibility of losing the family's primary breadwinner (Nopriansyah, 2024, p. 4). Husain Hamid Hisan describes insurance as an expression of ta'awun (mutual assistance) organized through a systematic arrangement among many people, in which each participant is prepared to help address an unforeseen event (Muslich, 2022, p. 552). Contemporary Islamic legal scholars, such as Wahbah Az-Zuhaili, define Sharia insurance as a form of mutual-assistance insurance an agreement among several parties to pay a sum of money as compensation when one party suffers a loss, whether due to death, accident, illness, theft, fire, or other forms of damage (Anwar, 2007, p. 19).

Sharia insurance is also known as takaful, an Arabic term that etymologically means ‘to guarantee’ or ‘to protect one another’ (Amrin, 2006, p. 5). In the modern era, insurance companies have proliferated and become increasingly diverse (Bashori, 2022, p. 95). In providing takaful protection, insurance companies are obliged to periodically and continuously explain to, and counsel, customers regarding their rights and obligations as participants (Saharuddin, 2016, p. 141). Sharia insurance is a form of mu'amalah transaction needed in the modern era, and its underlying legal basis is not contrary to Sharia. Its operational system is structured to avoid the elements of gharar (uncertainty), maisir (gambling), and riba (usury) that are prohibited under Islamic law, so that compensation claims need not raise concern, since the compensation guarantee provided by the company is clearly defined (Saharuddin, 2016, p. 10). This is consistent with the fact that Islamic economic law fundamentally emphasizes the principles of justice, mutual assistance, equitable distribution of profit and loss, and the avoidance of exploitation (Irkhami, 2023, p. 6). The fundamental differences between Sharia insurance and conventional insurance are summarized in Table 1.

Table 1. Fundamental Differences between Sharia Insurance and Conventional Insurance

| Aspect | Sharia Insurance | Conventional Insurance |
|---|---|---|
| Basic Principles | Based on the principles of mutual assistance and risk-sharing among participants (Amrin, 2006, p. 11). | Based on the principle of risk transfer from the insured to the company. |
| Contract | Uses Sharia-compliant contracts such as tabarru', wakalah, and mudharabah (Amir, 2021, p. 381). | Uses a conventional insurance agreement between the company and the customer. |
| Fund Management | Participant funds are separated into tabarru' funds and company funds, managed in accordance with Sharia principles. | The company manages premium funds without separating participant funds from company funds. |
| Supervision | Supervised by the Sharia Supervisory Board (DPS) to ensure Sharia compliance. | Not subject to Sharia-based supervision. |
| Orientation | Oriented toward protection, justice, and social sustainability. | Oriented more toward profit and business efficiency. |

Much of the existing research on Islamic insurance focuses on conceptual aspects, public perceptions, and levels of literacy regarding Islamic principles in risk mitigation for example, participants' understanding of contracts, the principle of mutual assistance (ta'awun), or public perceptions of the differences between Islamic and conventional insurance. Comparative research grounded in actual secondary data, such as premium and claims data for Islamic versus conventional insurance, however, remains very limited. A data-driven comparative approach can provide a more concrete picture of the effectiveness and contribution of Islamic insurance to risk mitigation relative to conventional insurance. This study therefore seeks to address this gap by presenting a comparative analysis based on quantitative data from official regulatory reports (OJK).

**1. Premium Trends in Sharia and Conventional Insurance, 2020–2024**

The premiums reported are gross premiums, defined as the total premiums paid by policyholders to insurance companies. The data cover commercial insurance activity, comprising life insurance, general insurance, and reinsurance. Premium data for the five-year period 2020–2024 are presented in Table 2 (Indonesian Sharia Financial Development Report, 2024).

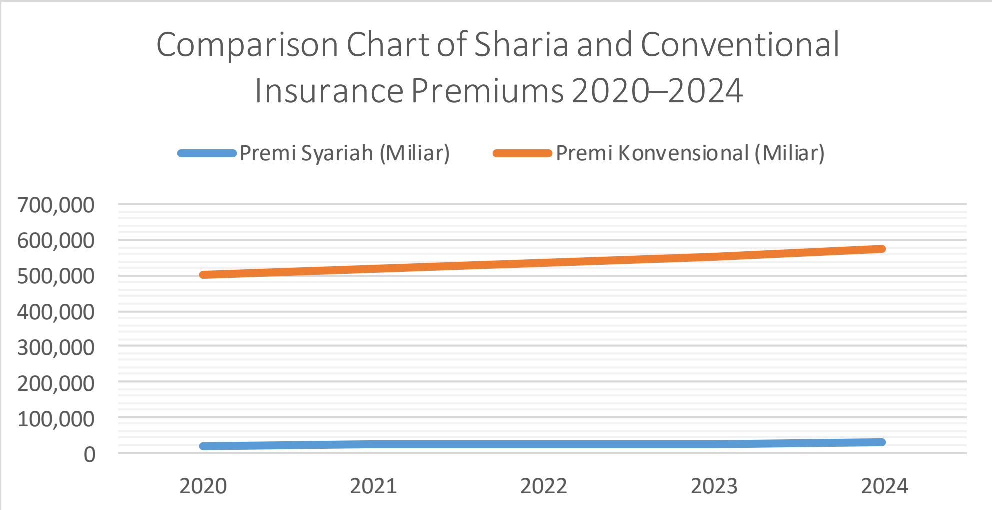
Table 2. Sharia and Conventional Insurance Premiums, 2020–2024

| Year | Sharia Premium (IDR Billion) | Conventional Premium (IDR Billion) |
|---|---|---|
| 2020 | 17,518 | 499,228 |
| 2021 | 23,865 | 520,022 |
| 2022 | 25,244 | 532,851 |
| 2023 | 25,207 | 551,446 |
| 2024 | 28,891 | 577,237 |

**Note:** The data show an increasing trend in both Sharia and conventional insurance premiums in Indonesia during 2020–2024. Although Sharia premiums continued to rise, they remained substantially lower than conventional premiums.

**Source:** Indonesian insurance industry data published by OJK (processed from OJK Insurance Statistics, 2020–2024).

Figure 1. Sharia Insurance and Conventional Insurance Premiums for 2020-2024




Source: processed by the author from OJK

These data indicate that both Sharia and conventional insurance recorded positive premium growth over the 2020–2024 period. In nominal terms, however, conventional insurance premiums continue to dominate the national insurance industry, rising from approximately IDR 499.2 trillion in 2020 to IDR 577.2 trillion in 2024. This relatively steady growth reflects conventional insurance's strong market base and high level of public trust.

Sharia insurance premiums also grew significantly, from IDR 17.5 trillion in 2020 to IDR 28.9 trillion in 2024. Although still considerably below conventional insurance premiums, this growth reflects rising public interest in Sharia-compliant insurance products. It also suggests that the Sharia insurance industry retains substantial growth potential, particularly if supported by improved Sharia financial literacy, product innovation, and strengthened public trust in the Sharia financial system.

**2. Claims Trends in Sharia and Conventional Insurance, 2020–2024**

An insurance claim is a formal request submitted by a participant or policyholder to an insurance company for benefits or compensation under the policy terms when the insured risk materializes. Trends in claim values serve as a key indicator for evaluating insurance industry performance. Data on Sharia and conventional insurance claims for the study period are presented in Table 3.

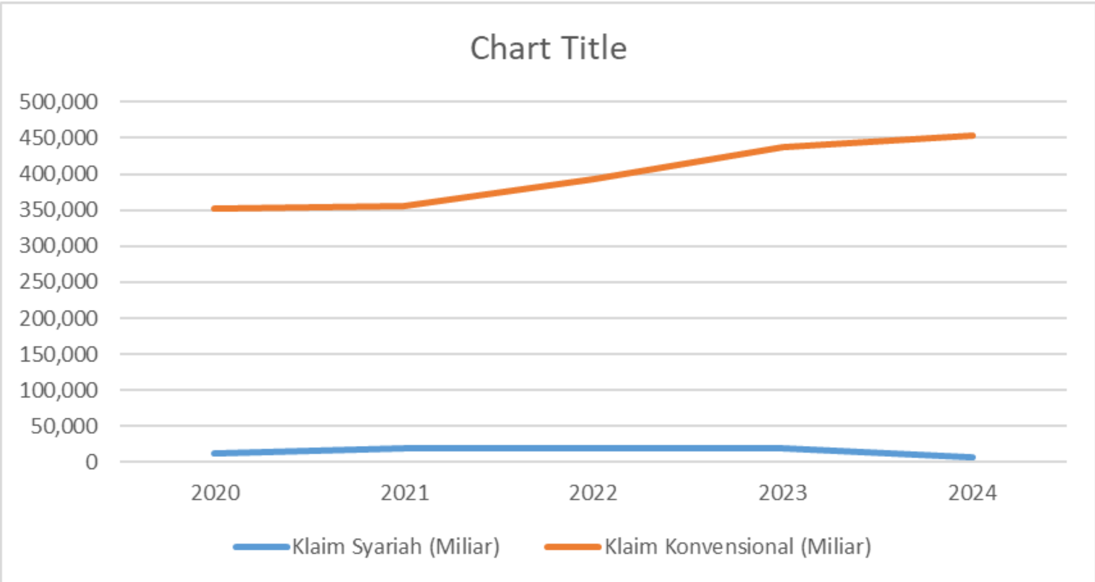
Table 3. Sharia and Conventional Insurance Claims, 2020–2024

| Year | Sharia Claims (IDR Billion) | Conventional Claims (IDR Billion) |
|---|---|---|
| 2020 | 13,084 | 352,247 |
| 2021 | 20,275 | 356,132 |
| 2022 | 20,043 | 392,780 |
| 2023 | 19,950 | 437,390 |
| 2024 | 6,771 | 453,845 |

**Note:** The data show an overall increasing trend in conventional insurance claims during 2020–2024, while Sharia insurance claims rose through 2021 before fluctuating and declining sharply in 2024. Sharia claims remained substantially smaller in value than conventional insurance claims throughout the period.

**Source:** Indonesian insurance industry data published by OJK (processed from OJK Insurance Statistics, 2020–2024).

Figure 2. Sharia Insurance and Conventional Insurance Claims in 2020-2024




Source: processed by the author from OJK

These data reveal distinct claims-growth patterns between the two insurance systems. Sharia insurance claims rose sharply, from IDR 13.08 trillion in 2020 to IDR 20.28 trillion in 2021, before fluctuating: a slight decrease to IDR 20.04 trillion in 2022, relative stability at IDR 19.95 trillion in 2023, and a marked decrease to IDR 6.77 trillion in 2024.

Conventional insurance claims, by contrast, followed a much more stable trend, rising gradually from IDR 352.25 trillion in 2020 to IDR 453.85 trillion in 2024. This steady increase suggests that claims-payment activity and risk exposure in conventional insurance have continued to grow alongside increases in participant numbers, coverage values, and business activity.

These contrasting patterns reflect the underlying characteristics of each system. The stability of claims in conventional insurance points to a large market scale and a high level of penetration. The fluctuation of claims in Sharia insurance, on the other hand, reflects the dynamics of tabarru' fund management, which is oriented toward the principles of fairness and mutual assistance. The sharp decline in claim values in 2024 may be interpreted as the result of improved claims control and risk management by Sharia insurance companies; however, it could equally reflect slowing industry growth or a decline in the number of participants filing claims.

Thus, although Sharia insurance claims remain considerably lower in value than those of conventional insurance, their development trend nonetheless points to promising potential. With greater Sharia financial literacy, stronger regulation, and more competitive product innovation, the Sharia insurance industry could make a greater contribution to building an inclusive, equitable, and sustainable national financial system.

**3. Claims Ratio Analysis as an Indicator of Risk-Mitigation Effectiveness**

The claims ratio measures an insurance company's ability to manage claim payments relative to the premiums collected. A more stable claims ratio indicates a stronger ability to balance premium income against claim-payment obligations, thereby reflecting greater risk-mitigation effectiveness.

Table 4. Claims, Premiums, and Claims Ratio of Sharia and Conventional Insurance, 2020–2024

| Year | Total Claims (IDR Billion) | | Total Premiums (IDR Billion) | | Claims Ratio | |
|---|---|---|---|---|---|---|
| | Conventional | Sharia | Conventional | Sharia | Conventional | Sharia |
| 2020 | 352,247 | 13,084 | 499,228 | 17,518 | 70.55% | 74.68% |

| | | | | | | |
|---|---|---|---|---|---|---|
| 2021 | 356,132 | 20,275 | 520,022 | 23,865 | 68.48% | 84.95% |
| 2022 | 392,780 | 20,043 | 532,851 | 25,244 | 73.71% | 79.39% |
| 2023 | 437,390 | 19,950 | 551,446 | 25,207 | 79.31% | 79.14% |
| 2024 | 453,845 | 6,771 | 577,237 | 28,891 | 78.62% | 23.43% |

**Claims Ratio Formula:** Claims Ratio = (Total Claims ÷ Total Premiums) × 100%

A rising claims ratio signals increased exposure to underwriting risk, which can potentially reduce the underwriting surplus particularly for Islamic insurance companies. The 2020–2024 data indicate that risk-mitigation effectiveness differs between Islamic and conventional insurance. From the perspective of risk management theory, risk-mitigation effectiveness is reflected in a company's ability to maintain balance between premiums received and claims payable; the claims ratio therefore serves as an important indicator of a company's capacity to manage risk sustainably.

In conventional insurance, the claims ratio remained relatively stable throughout the study period, ranging from 68.48% to 79.31%. It stood at 70.55% in 2020 before declining to 68.48% in 2021, reflecting the industry's ability to manage claims expenses effectively relative to premiums received. Over 2022–2024, the ratio rose to 73.71%, 79.31%, and 78.62%, respectively, but remained within a healthy range well below 100%, indicating that the industry could continue to meet its claims obligations while maintaining profitability and solvency. This stability suggests that the risk-mitigation system in conventional insurance has remained relatively consistent in preserving operational balance.

Sharia insurance, by contrast, exhibits a more volatile claims-ratio pattern. The ratio rose from 74.68% in 2020 to 84.95% in 2021, indicating that a large share of collected premiums was used to cover participant claims a sign of increased risk burden and reduced underwriting surplus. It subsequently declined to 79.39% in 2022 and 79.14% in 2023, suggesting improvements in risk management and claims handling. In 2024, however, the ratio fell sharply to 23.43%, driven by a rise in premiums to IDR 28,891 billion alongside a steep drop in total claims to IDR 6,771 billion. From a financial standpoint, this points to a strengthened solvency position, since the claims burden was relatively small compared with premiums received. Nevertheless, a persistently low claims ratio over an extended period may also indicate an inadequate distribution of protection benefits to participants or a decline in the number of claims filed.

Overall, these results indicate that conventional insurance exhibits a higher level of risk-mitigation stability than Sharia insurance, as reflected in its consistent annual claims ratio. The fluctuations observed in Sharia insurance's claims ratio, conversely, indicate that the industry continues to face challenges in balancing premium revenue, claims payments, and operational stability. These findings are consistent with risk management theory, which holds that risk-mitigation effectiveness is largely determined by a company's ability to manage claims payments while maintaining sustainable financial stability (Otero González et al., 2020).

Applying the volatility benchmark developed in this study's analytical framework, the fluctuation ranges of the conventional insurance claims ratio over 2020–2024 was only around 11 percentage points (68.48%–79.31%). Islamic insurance, by contrast, showed a fluctuation range of around 61 percentage points (23.43%–84.95%) nearly five times wider. This quantitative evidence reinforces the conclusion that conventional insurance exhibits a greater degree of risk-mitigation stability than Islamic insurance, so that the claim of comparative stability is not merely descriptive but is grounded in an empirically measurable volatility indicator.

The sharp decline in the Sharia insurance claims ratio in 2024 should not, however, be interpreted directly as evidence of improved risk management effectiveness. A decline from approximately 79% to 23% within a single year represents a drastic shift that departs from the gradual improvement observed in earlier years. Such a phenomenon could stem from changes in reporting mechanisms or data classification, delays in claims processing, or a temporary decline in claims activity. Because this study relies on aggregate secondary data, the precise cause of this anomaly cannot be determined, and it is therefore more appropriately treated as an empirical anomaly warranting further investigation using company-level or quarterly data. Accordingly, this study does not conclude that the effectiveness of Sharia insurance risk mitigation increased substantially in 2024. Rather, the evidence indicates that, empirically, conventional insurance continues to offer more consistent risk-mitigation stability in Indonesia. Normatively, however, the takaful model retains distinct advantages through its principles of risk-sharing and ta'awun, provided its volatility challenges can be addressed.

**Factors Underlying the Limited Development of Sharia Insurance Relative to Conventional Insurance**

Although Indonesia is a Muslim-majority country, the market share of Islamic insurance continues to lag far behind that of conventional insurance (Siregar et al., 2022). This phenomenon has prompted numerous studies between 2021 and 2025 to investigate the root causes of the takaful industry's slow growth in Indonesia (Maulana & Muchlasin, 2025). Many of these studies identify low Islamic financial literacy as the most dominant factor. Maulana and Muchlasin (2025), for instance, found that most people do not understand the basic principles of takaful, such as tabarru' (a core principle of Islamic fund management), the management of halal funds, and surplus distribution leading many to prefer conventional products, which they perceive as more familiar and easier to understand. Similarly, Aziz et al. (2025) argue that non-structural factors particularly literacy, awareness, and public behavior are the primary drivers of weak takaful penetration.

Low levels of education and promotion further compound this situation, preventing many people from understanding the benefits of Islamic insurance as a form of Sharia-compliant risk protection. This finding is consistent with Chetioui et al. (2024), who argue that barriers to takaful adoption stem not only from structural factors such as regulation and product availability, but also from socio-economic and psychological factors, including perceived complexity and weak social motivation to use Sharia-compliant products. In addition to literacy, limited product innovation is also a major contributing factor. Bhatti and Shoaib (2025) explain that consumers still favor conventional insurance because of its familiarity, the reputation of established companies, and the perception that conventional services particularly claims processing are faster and more efficient. This is reinforced by Chong et al. (2024), who show that many Sharia insurance companies operate at a small scale with high acquisition costs and limited investment capacity, making it difficult for them to offer competitive premiums. As a result, the takaful industry often struggles to match the operational efficiency and agility of conventional companies. In the Indonesian market specifically, uneven innovation in Sharia-compliant products particularly in the digital sector limits the industry's ability to reach younger consumers, a key segment of future financial-service users.

Governance quality and human resource capacity present additional obstacles. Huraira and Naushad (2025) note that the challenges facing the takaful industry are not purely financial but also structural and institutional in nature; weak regulatory support makes it difficult for Sharia-compliant companies to innovate and compete on equal footing with conventional companies. Fatah et al. (2025) reinforce this point by highlighting the shortage of qualified professional human resources and robust risk management practices within the takaful industry. Insufficient training and inadequate synergy among academics, regulators, and industry players have caused Sharia-compliant governance to lag behind international standards. Ditama et al. (2024) similarly argue that the industry's limited market share stems not only from public behavior but also from weak regulation and industry inefficiency, creating an imbalance in policy support between the conventional and Sharia-compliant sectors. In the same vein, Widyanata et al. (2024) emphasize that growing the takaful industry in Indonesia requires stronger governance, improved education, and a more integrated Islamic financial ecosystem. Without coordinated cross-sector support, the takaful industry is likely to continue lagging behind conventional insurance.

Synthesizing these studies from 2021-2025, the limited market share of Islamic insurance in Indonesia can be attributed to a combination of non-structural and structural factors. Non-structural factors include low public literacy and awareness, negative perceptions of product complexity, and weak religious motivation in financial decision-making, while structural factors include weak regulation, limited product innovation, constrained investment capacity, and a shortage of professional human resources. Wahyudi et al. (2025) emphasize that although takaful holds great potential as an ethical risk-sharing mechanism grounded in Islamic principles, its effectiveness will be realized only if these inhibiting factors are addressed synergistically through collaboration among government, regulators, industry, and educational institutions. The low penetration of Islamic insurance relative to conventional insurance is therefore the result of a complex interaction between public understanding, product competitiveness, industry governance, and policy support. Strengthening Islamic financial literacy, advancing digital innovation in takaful products, and reinforcing institutions and regulations are essential prerequisites for Islamic insurance to grow alongside conventional insurance as an effective and equitable risk-mitigation instrument.

**The Effectiveness of Sharia Insurance as a Risk-Mitigation Instrument Relative to Conventional Insurance**

Widyanata et al. (2024) explain that Sharia insurance plays an important role in supporting the resilience of the social and community economy through a Sharia-based risk-protection mechanism. Their study emphasizes that takaful functions not only as a financial protection instrument but also contributes to social development by strengthening the health, education, and welfare sectors. However, its effectiveness in Indonesia remains suboptimal, as the quality of industry governance, literacy, and ecosystem support has not yet matched that of the conventional insurance sector. The study concludes that improving the quality of Sharia financial education and strengthening governance are key factors in enhancing takaful's effectiveness as a risk-mitigation instrument in Indonesia.

A report by the Society of Actuaries (2024) highlights the fundamental differences between takaful and conventional insurance in their risk-mitigation mechanisms. The takaful system is based on risk-sharing through a tabarru' fund, whereby risk is distributed among participants rather than transferred to the company as in the conventional model. The report notes that risk-sharing mechanisms have the potential to reduce moral hazard and strengthen participants' sense of fairness and solidarity. However, it also finds that takaful implementation in several countries continues to face challenges such as complex financial reporting, limited surplus transparency, and operational inefficiencies that can constrain risk-mitigation effectiveness relative to more mature conventional risk-transfer models (Sikander, 2024).

Al-Haija and Houcine (2023) examined risk management efficiency between takaful and conventional insurance companies in the GCC region using a Data Envelopment Analysis (DEA) approach. Their results showed that conventional insurance companies achieved superior operational efficiency scores in claims management and capital utilization, whereas takaful companies demonstrated advantages in underwriting conservatism and prudence in managing participant funds. These findings suggest that, theoretically, the takaful model excels in long-term risk protection and stability, although in practice its effectiveness remains constrained by business scale, technical capacity, and operational efficiency that have yet to match those of conventional companies. Radiamoda (2025), by contrast, argues that Islamic insurance is a stronger risk-mitigation instrument than the conventional system because it is grounded in the principles of justice, mutual assistance, and social sustainability. Through the concept of risk-sharing, the takaful system not only mitigates financial risk but also strengthens social solidarity among participants; furthermore, Sharia compliance, fund transparency, and ethical investment practices make Sharia insurance more stable and oriented toward collective welfare rather than individual or corporate profit, as in the conventional model.

Sintarini (2024) finds that the effectiveness of Sharia insurance in risk mitigation lies not only in its financial protection function but also in social and ethical dimensions that are less prominent in conventional systems. Through the principle of risk-sharing, the implementation of Islamic corporate governance, and digitalization support, Sharia insurance can offer more transparent, efficient, and inclusive risk-mitigation services particularly for lower-middle-income households and micro, small, and medium enterprises (MSMEs). According to Sari and Maysyaroh (2022), efficiency is a key indicator of takaful's capacity to manage risk sustainably; the claims-ratio stability examined in this study can thus be interpreted as one manifestation of risk-mitigation effectiveness in Sharia insurance. Market data show that Sharia insurance's market share in Indonesia remains far smaller than that of conventional insurance, averaging below 7% of total national premiums (OJK, 2024). A small market share, however, does not necessarily indicate low risk-mitigation effectiveness, since effectiveness is determined not only by economies of scale but also by the risk management mechanisms and contract structures employed.

Conceptually, the takaful system rests on the principle of mutual assistance (ta'awun) and shared responsibility among participants, whereby risk is distributed collectively rather than transferred to the insurance company. This risk-sharing mechanism provides an ethical and structural foundation for the effectiveness of Islamic insurance in risk mitigation, as it promotes fairness and more sustainable financial stability than the risk-transfer model underlying conventional insurance (The Concept and Development of Takaful Insurance in the Framework of Islamic Economic Law, 2024).

## CONCLUSION

The findings indicate that conventional insurance exhibits a more consistent level of risk-mitigation stability than Sharia insurance, as reflected in its relatively stable claims ratio throughout 2020–2024, which demonstrates the industry's ability to balance premiums against claims payments. Sharia insurance, by contrast, experienced greater fluctuation in its claims ratio, although 2024 data point to improvements in claims control and financial stability. This suggests that the effectiveness of risk mitigation in Sharia insurance remains shaped by dynamics in fund management, underwriting, and operational balance.

In terms of systemic effectiveness, Islamic insurance holds a conceptual advantage through its tabarru'-based risk-sharing mechanism and the principle of ta'awun, which emphasize social solidarity, justice, and transparency. This effectiveness, however, remains suboptimal due to constraints such as low Islamic financial literacy, limited product innovation, weak regulatory support, and a shortage of professional human resources. Strengthening financial literacy, advancing digital innovation, integrating the Islamic financial ecosystem, and fostering synergy among regulators, industry, and academia are therefore critical to enhancing the competitiveness and effectiveness of Islamic insurance in Indonesia.

Theoretically, this study reinforces risk management theory and financial intermediation theory by demonstrating that the stability of the claims ratio can serve as an indicator of both risk-mitigation effectiveness and the efficiency of an insurance company's financial management. It further confirms that an insurance company's success is determined not only by the volume of premiums or claims, but also by its capacity to maintain operational stability, manage risk funds, and streamline claims payments. The findings of this study may thus serve as a basis for developing risk-based supervisory policies and as an academic reference for future research on the stability and effectiveness of Indonesia's Islamic and conventional insurance industries.

## REFERENCES

AAJI News Room. (2026). *AAJI daily news – 21 Mei 2026*. https://aaji.or.id/Berita/aaji-daily-news-21-mei-2026

Adelia, M., Arsyadona, A., Tafana, A., Marwah, S., & Andika, B. (2024). Weighing the effectiveness of insurance as a financial protection instrument: Are the risks and benefits balanced? *Academic Journal of Economics and Management*, *1*(4), 394–405.

Al-Haija, E. A., & Houcine, A. (2023). Risk management efficiency of Takaful and conventional insurance sectors in UAE and KSA. *Journal of Islamic Accounting and Business Research*, *15*(8), 1222–1244. https://doi.org/10.1108/JIABR-XX

Amir, A. (2021). *Islamic economics and finance*. WIDA Publishing.

Amrin, A. (2006). *Sharia insurance, its existence and advantages among conventional insurance*. PT Elex Media Komputindo.

Anwar, K. (2007). *Sharia insurance, halal & beneficial*. Three Musketeers.

Aziz, N. I. M., Nadarajhan, G., Nugraheni, P., & Ahmad, M. Q. (2025). The role of financial literacy and awareness on the Takaful acceptance among non-Muslim students in a private university in Malaysia. *Malaysian Journal of Islamic Studies (MJIS)*, *9*(2), 36–45. https://doi.org/10.37231/mjis.2025.9.2.298

Azizi, M. R., Hariono, S., & Dalail, W. (2025). Conventional vs. Sharia insurance: An empirical study on financial performance and risk management. *Share: Journal of Islamic Economics and Finance*, *14*(1), 24–48.

Bashori, A. (2022). *Hukum zakat dan wakaf: Dialektika fikih, undang-undang, dan maqashid syariah*. Prenada Media.

Bhatti, T., & Shoaib, O. (2025). A comparative analysis of the selection of conventional and Takaful models: An insurance industry study. *Corporate Ownership and Control*, *22*(2), 108. https://doi.org/10.22495/cocv22i2art10

Chetioui, Y., Bouchikhi, Y. E., Lebdaoui, H., Ennassiri, M., Jannah, H., Yunsi, G., Zhar, I., & Ghamas, A. (2024). Modeling the socio-economic factors affecting Islamic insurance adoption: A structural equation modeling analysis. *International Journal of Economics and Financial Issues*, *14*(3), 106–114. https://doi.org/10.32479/ijefi.16047

Ditama, R. A., Fauzi, M., Muid, A., & Mahdi, A. (2024). Islamic insurance (Takāful): A review of recent research and future directions. *Review of Islamic Economics and Finance*, *7*(2), 155–170. https://doi.org/10.17509/rief.v7i2.72342

Fatah, D. A., Zahra, I. A., Waluyo, B., Abidaturrahman, K., Mutia, W., & Argyyndra, A. B. (2025). Developing Islamic economic and finance literacy among insurance brokers. *Thawalib Journal of Community Service and Research*, *4*(2), 97–108. https://doi.org/10.54150/thame.v4i2.748

Fauzi, I. M., Azis, I. A., Nurfatwa, F., Fauzi, M. G. N., & Fauziah, R. (2025). Comparative analysis of Sharia insurance institutions and conventional insurance: A literature review. *Al Yasini: Journal of Islam, Social, Law and Education, 10*(5), 366.

Huraira, R. A., & Naushad, M. M. M. (2025). What are the challenges encountered in initiating green Takaful products as a potential climate finance tool in Sri Lanka? *European Journal of Islamic Finance*, *12*(2), 1–14. https://doi.org/10.13135/2421-2172/10706

Indonesian Sharia Finance Development Report. (2024). *Otoritas Jasa Keuangan*. https://www.ojk.go.id/id/kanal/syariah/data-dan-statistik/laporan-perkembangan-keuangan-syariah-indonesia/Pages/Laporan-Perkembangan-Keuangan-Syariah-Indonesia-2024.aspx

Irkhami, N. (2023). *Takaful insurance in Indonesia: Examining the Shariah compliance aspect*. PT RajaGrafindo Persada – Rajawali Pers.

Jia Kiuk Chong, Hui Shan Lee, & Ping Xin Liew. (2024). Is Takaful (Islamic insurance) more efficient than conventional insurance? A comparative analysis of the insurance industry in Malaysia. *International Journal of Business and Society*, *25*(2), 509–529. https://doi.org/10.33736/ijbs.7611.2024

Kurniartha, A., & Wahyuari, W. (2026). Providing insurance literacy to students: InsurTech – Revolution of development, mechanisms and career opportunities in the digital era. *IJEEM – Indonesian Journal of Environmental Education and Management*, *11*(1), 14–25.

Laapen, C. P. B., Lie, G., & Putra, M. R. S. (2025). The role of the Financial Services Authority in supervising and restructuring insurance companies. *Journal of Management Accounting, Tax and Production*, *3*(1), 57–66. https://doi.org/10.57235/mantap.v3i1.4631

Latifa, M., Agisna, R. N., Nurafifah, L. A., Joni, & Fauziah, R. (2025). Comparative analysis of Sharia and conventional insurance and the obstacles to its development in Indonesia. *Journal of Economics, Management, and Business (JEMB)*, *3*(2), 345–357. https://doi.org/10.62017/jemb.v3i2.5964

Maulana, A. E., & Muchlasin, M. (2025). Navigating barriers: Consumer behavior and Takaful penetration in Indonesia (pp. 175–193). https://doi.org/10.2991/978-94-6463-666-6_11

Muhammad Kahfi, Sahria Sahria, & Jamaluddin Majid. (2025). Landscape of opportunities and challenges of Islamic finance in Indonesia. *Nuansa Journal: Publication of Islamic Management and Economics*, *3*(1), 146–158. https://doi.org/10.61132/nuansa.v3i1.1560

Mukhlis, E. N. A., Judijanto, L., Sukma, F. H., Sari, H. P. R., Munizu, M., & Sinulingga, G. (2024). *Enterprise risk management: Theory and implementation of risk management*. PT Sonpedia Publishing Indonesia.

Muslich, A. W. (2022). *Muamalat fiqh*. Amzah.

Naura, D., Syahpawi, S., & Syukri, M. (2024). Risk mitigation in Islamic banking in Indonesia. *Islamic Business and Finance*, *5*(1), 1–15.

Nopriansyah, W. (2024). *Sharia insurance, the last unexpected blessing*. Andi Publisher.

Otoritas Jasa Keuangan [OJK]. (2024). *Report on the development of Indonesian Islamic finance* (p. 78).

Otero González, L., Durán Santomil, P., & Tamayo Herrera, A. (2020). The effect of enterprise risk management on the risk and the performance of Spanish listed companies. *European Research on Management and Business Economics*, *26*(3), 111–120. https://doi.org/10.1016/j.iedeen.2020.08.002

Radiamoda, A. M. (2025). The need for micro-Takaful in Islamic insurance partnerships in the Philippines. *ICONOMICS,* 41–50. https://doi.org/10.24042/ijebi.v10i1.26527

Rasya, A., Masyhuri, B., Ambaina, N., Wahyu, A., & Agusty, D. (2026). Dynamics of Sharia insurance growth in Indonesia: Analysis of the Financial Services Authority's policy in encouraging transformation and strengthening industry stability. *Journal of Multidisciplinary Scientific Research*, *3*(1). https://ojs.ruangpublikasi.com/index.php/jpim/article/view/2038

Rofikah, W., & Septiarini, D. (2020). Implementation of underwriting risk management at PT Asuransi Jasindo Syariah. *Journal of Theoretical and Applied Islamic Economics*, *7*, 901. https://doi.org/10.20473/vol7iss20205pp901-910

Ronaldo, R., & Maulini, Y. (2025). Strategic transformation of Sharia insurance in increasing contribution to the national Sharia economy. *Juremi: Journal of Economic Research*, *5*(1), 121–138.

Saharuddin, D. (2016). *Compensation payments in Sharia insurance*. Prenada Media.

Sari, M., & Maysyaroh, S. (2022). How much Takaful efficiency has been researched? A bibliometric approach from the Dimensions database. *Islamic Marketing Review*, *1*(1). https://doi.org/10.58968/imr.v1i1.208

Scholtens, B. (2003). *The theory of financial intermediation: An essay on what it does (not) explain* [Working paper].

Sikander, S. (2024). *Takaful: An alternative approach to insurance* [Working paper].

Sintarini, F. (2024). Sharia microinsurance product offerings through the digital Sharia insurance platform application in Indonesia. *[Journal name not specified]*, *7*(1).

Siregar, R. Y., Melati, R., Serpina, N., & Primurdia, E. G. (2022). Landscape asuransi syariah: Global dan domestik. *Economic Bulletin*, (22), 22.

The concept and development of Takaful insurance in the framework of Islamic economic law. (2024). *Semantic Scholar*. https://www.semanticscholar.org/paper/The-Concept-and-Development-of-

Takaful-Insurance-in-Jamaluddin/a3d68d2a39a3827dbdd3a6622200abdd36cd33d5

Wahyudi, H., Lestari, W. R., Said, U. B., Leny, S. M., & Awaluddin, I. (2025). Dynamics of growth and stability in the Islamic financial services industry on ECA, GCC, MENA, SSA, and EAP. *International Journal of Economics and Financial Issues*, *15*(3), 448–456. https://doi.org/10.32479/ijefi.19200

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