

Midocean University
Faculty of Management
Department: Business Administration

Research Title

**"Exploring the challenges Facing Takaful Insurance Companies
in the Saudi Arabia Market and the proposed solutions: A mixed
method study**

Prepared by /

Khalid Elfatih Abdelbagi Mohamed

Supervisors:

DR. Alfaisal Abdulhameed

DR. Fayez Jarad

Academic Number: 251002120

Academic Year

2026-2027

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

Dedication

I dedicate this work to my honorable parents, may God preserve them, from whom I have drawn the determination to grow and pursue knowledge, and who have been the greatest supporters in my life.

To my loving mother, who instilled in me a passion for learning and knowledge, and to my dear father, who taught me the strength of will and perseverance.

To my beloved wife, who has been a sincere partner and constant supporter throughout every stage of this journey, I dedicate this achievement to my children so they may know that diligence and persistence are the keys to success. I offer this accomplishment as a token of appreciation and gratitude for her endless support and patience.

To my esteemed professors, who generously shared their knowledge and guidance with me. Their expertise and direction have had a profound impact on the completion of this work.

To my dear colleagues and friends, who shared with me both challenges and successes, I dedicate this work as an expression of my gratitude and appreciation for all their support and encouragement.

Finally, I dedicate this work to everyone who contributed to supporting and encouraging me, asking God to make this achievement the beginning of further success and progress.

Acknowledgment and Appreciation

All praise is due to Allah, who enabled me and granted me success to complete this work and this study. Peace and blessings be upon the best of creation, Prophet Muhammad (peace be upon him), and upon his family and all his companions.

I extend my sincere thanks and appreciation to my mother and father, may Allah preserve them, who have been the main source of my support and motivation throughout my journey. Their prayers and their moral and psychological support have been invaluable.

I would also like to express my thanks and gratitude to my dear wife and children for their patience, endurance, and understanding of my preoccupation and shortcomings toward them. They deserve all love, appreciation, and gratitude.

I would like to thank my esteemed professors, especially my honorable supervisor, for their valuable guidance and insightful advice, which helped me develop and successfully complete this research.

Dr. Faisal Abdulhamid Mohammed Hassan
Dr. Fayez Jarad

I would also like to thank my colleagues and friends, who have been the best companions and supporters, sharing with me both challenges and successes.

Their support and encouragement had a positive impact in overcoming obstacles and achieving this success.

Finally, I extend my thanks to everyone who contributed in any way to the completion of this work, and to all those who offered me support or encouragement. I ask Allah to grant us all success in what is good and to make this work beneficial and fruitful.

Thank you.

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Abstract

The Takaful insurance sector in Saudi Arabia has witnessed significant growth in recent years, yet it faces a variety of challenges that affect its sustainability and competitiveness. This study aims to identify and analyze the key obstacles encountered by Takaful insurance companies operating in the Saudi market. Using a mixed-method approach, the research combines a review of prior literature with a structured survey of 20 representative Takaful companies, covering Family, General, and Mixed Takaful providers.

The findings indicate that the most critical challenges include low customer awareness of Takaful products, complex regulatory requirements, and intense competition with conventional insurance providers. Additional challenges such as governance and transparency issues, shortage of specialized staff, marketing difficulties, and economic fluctuations were also highlighted. Operational costs and management complexity were identified as significant factors that amplify the impact of these challenges, particularly in areas requiring compliance, skilled personnel, and strategic planning.

The study concludes with practical recommendations, including awareness campaigns, staff training programs, development of innovative products, adoption of efficient governance systems, and stronger communication with regulatory authorities. These strategies aim to enhance the operational efficiency and competitiveness of Takaful companies while promoting a sustainable and customer-oriented Takaful market in Saudi Arabia.

Chapter One

1.1 Introduction

Takaful insurance, or Islamic insurance, is a cooperative financial system rooted in Islamic principles, providing a Sharia-compliant alternative to conventional insurance. It operates on the concepts of mutual aid and collective risk-sharing, distinguishing itself from traditional insurance by emphasizing ethical collaboration rather than profit-making.

While takaful presents a robust alternative to conventional insurance, challenges such as regulatory compliance and market acceptance remain significant hurdles to its broader implementation and understanding.

There are key differences between Takaful (Islamic Insurance) and conventional insurance. From risk model perspective we can see conventional insurance uses risk transfer mechanism while Takaful model uses risk sharing model. Also insurers own the premium collected from customers in normal insurance while in Takaful the policy holders are collectively owning the premiums. All Takaful transactions & investments must be Shariah-compliant but with conventional insurance there is no constraints.

What is Takaful?

Takaful is an alternative to the conventional concept of insurance and is based on the Shariah concepts of mutuality and co-operation.

Takaful is an Arabic word derived from Arabic terms for ‘guaranteeing each other’ or ‘sharing’. It is variously described as meaning ‘mutual protection’, shared responsibility or joint guarantee or responsibility, assurance or surety.

Source: Adapted from Applied Takaful and Modern Insurance by Mohd Ma'sum Billah, Sweet & Maxwell Asia, 2007

Takaful insurance provision involves two important adaptations to the conventional insurance models.

- The first key change is designed to remove or mitigate identified Shariah objections to conventional modes of insurance provision in:
 - the insurance contract itself; and
 - the mode of operation of the insurance company.
- The second is to devise a commercially viable and sustainable model of mutual provision for an industry in its infancy.

As a result, Takaful has developed methods of segregation between:

- a contributors' (or participants') risk-sharing pool; and
- a commercially motivated Takaful operator managing the pool for a fee.

The operation of the resulting entity is supervised by the Shariah supervisory board (SSB).

The approach may involve segregation into separate legal entities; however, the predominant model involves internal segregation within a single legal entity.

We will introduce the key Shariah concepts relevant to financial practice and explain why conventional insurance provision raises problems in terms of Shariah compliance.

1.1.1. Shariah objections to conventional insurance provision

For a contract of exchange to be valid in Shariah, it must be free from any element that may compromise the Shariah objectives of fairness and justice. The contract must not include elements such as:

- Gharar (uncertainty);
- Maysir (speculation); and

- Riba (usury).

This is in addition to requiring the fulfilment of the more familiar conditions of a contract: offer, acceptance and consideration.

The main basis for the Shariah objections to conventional insurance provision is due to the presence of Gharar, Maysir or Riba elements in proprietary and mutual insurance contracts and in the operations of the providers.

1.1.2 The conceptual Takaful insurance provision model

Takaful has to be sustainable and commercially viable in addition to overcoming the Shariah objections to conventional insurance provision.

We have previously considered the challenges facing conventional mutuals using a pure risk-sharing pool model: mutuals may need longer gestation periods and are vulnerable to failures in early stages if sufficient reserves have not been accumulated. Similar constraints are faced by a Takaful operation with a largely risk-sharing pool operated on behalf of the participants. A new Takaful operation would also face challenges due to the contemporary regulatory and capital adequacy environment, which is significantly more demanding to that in place when most conventional mutuals were founded.

Another constraint is that – similarly to mutuals – participants cannot practically manage their own fund and are likely to lack the commercial experience and incentive to appoint and supervise management. The solution that has been devised is a hybrid model incorporating a risk-sharing pool and a commercially incentivized Takaful operator which is also responsible for the licensing, capital adequacy and regulatory arrangements. The resulting Takaful models and their key features are explored in detail in chapter 4. For now, we will briefly introduce some features of a generic Takaful provision model:

- A Takaful pool or participants' risk fund is created by Tabarru donations made by the contributors – also known as participants – to the pool.

- The Takaful operator manages the insurance operations of the pool.
- The operator is remunerated by means of a Takaful operator contract arrangement, which can be one of several forms.
- In theory, contributors are entitled to a share of surplus and are liable for any deficit.
- Regulators in most jurisdictions will require the Takaful operator to provide supplementary capital to underwrite any deficit in the contributors' pool by means of a Qardh-al-Hasan (interest-free loan) and recoup it from future surpluses. This means that the participants will not have to make additional contributions in the event of a deficit, as would be the case with a pure risk-sharing arrangement. In practice most mutuals and co-operatives also do not require contributors to make up any deficit. Instead, it is made up by raising subordinated debt where possible.

The unique arrangement for the Takaful operator to advance Qardh-al-Hasan makes Takaful sustainable and viable, especially in the early years. It also allows Takaful companies to engage in a wider range of businesses than pure risk-sharing mutuals.

In conventional insurance, the insurer accepts an unknown future potential risk of the insured for an agreed premium in a risk-transfer mechanism. In Takaful, the risk is shared between participants who agree to compensate for a loss. Therefore, the risk has not been transferred to the Takaful operator.⁽¹⁾

Table 1: illustrates key differences between Takaful Insurance Companies & Proprietary Insurance Companies (1)

Table 1: Comparison of Proprietary, Mutual/Co-operative, and Takaful Insurance Features		
Feature	Proprietary	Takaful
Ownership	Shareholders; transferable	Members; no external shareholders; non-transferable
Accounting	Single set of accounts; no segregation of policyholders' premium payments and company's other funds	Segregated accounts for Takaful operator and participants

Corporate governance	Managed in interests of shareholders; regulators; rating agencies; managers appointed by shareholders	Managed in interests of participants; members appoint Takaful operator; Takaful operator appoints managers; tensions over protection of operator's interests
Payment and funds	Premiums; part of company's funds; policyholders have no share or say in use; claims met from company's funds	Tabarru' contribution; contribution pool; claims met from pool
Contract basis	Risk transfer; bilateral; indemnity in return for premium	Risk sharing; Shariah-compliant Takaful operator contract; unilateral; indemnity as part of membership
Treatment of surplus/deficit	Surplus belongs to company; may be paid as no-claims bonuses to policyholders or dividends to shareholders; deficits met from company funds	Members entitled to share of surplus; surplus encouraged to be retained in pool; member liability; deficits met from reserves; if insufficient, funded by interest-free loan from Takaful operator (repaid from future surpluses)
Capital provision & regulation	Company responsible; capital contribution	Takaful operator responsible; same capital requirements as proprietary insurance; capital provided by operator; pool encouraged to build own capital base
Stakeholders' motivation	Return on investment for shareholders	Shariah-compliant risk mitigation for participants; return on investment for Takaful operator; origin in communal needs
Investment of assets	At company's discretion; adhere to regulatory requirements of capital, solvency, and liquidity	Shariah-compliant investments without riba; optimize returns within Shariah; adhere to regulatory requirements
Market share	Provides over 90% of insurance in the UK and around two-thirds in the USA	Still a developing industry; less than 2% of global insurance market

Saudi Arabia has one of the largest Takaful markets globally, driven by a predominantly Muslim population and government efforts to align financial services with Islamic principles. Despite this, Takaful operators in the Kingdom face notable challenges.

1.2 Research Problem

Takaful insurance companies are experiencing increasing growth in the Islamic world, particularly in the Saudi Arabia, due to their compliance with Sharia principles. However, these companies face numerous challenges that hinder their growth and sustainability compared to their conventional insurance counterparts.

Despite the gradual expansion of Takaful insurance in Saudi Arabia, Takaful companies still face regulatory, marketing, and competitive hurdles, as well as challenges related to management and public awareness.

This research is going to explore the existing challenges for Takaful insurance Companies in KSA and also is going to make analysis for root causes which affect the financial results of the insurance Companies. Hence there is improvements of the existing working model of Takaful in KSA market, this research will illustrate the model of takaful used and suggest enhancement that may help to improve financial results.

1.2.1 Regulatory Challenges

a. Regulatory Changes

- The Insurance Authority (IA): frequently updates insurance regulations as it had become the insurance regulator for KSA market after SAMA to help insurance bodies increase and strengthen solvency, governance, and customer protection.
- While positive, the pace and complexity of changes strain smaller Takaful operators.

b. Capital and Solvency Requirements

- IA imposed higher capital requirements to ensure financial soundness, which some Takaful firms struggle to meet, leading to **mergers and acquisitions**.

- Smaller firms face difficulty competing or expanding without access to more capital.

c. Limited Shariah Standardization

- No unified national standard on Shariah interpretation exists for Takaful.
- Differences in Shariah boards across companies lead to inconsistent practices and slower product innovation.

1.2.2 Operational Challenges

a. Underwriting and Pricing Inefficiencies

- Many Takaful operators rely heavily on third-party administrators or brokers for underwriting.
- Lack of actuarial capacity and reliance on manual processes result in inefficiencies and mispriced risk.

b. Shariah Governance Burden

- Each Takaful firm must maintain its own **Shariah Board**, increasing overhead and decision delays.
- Ensuring proper segregation between **Participant Risk Fund (PRF)** and **Shareholders' Fund (SHF)** is complex and requires strong internal controls.

c. Limited Human Capital

- Shortage of skilled professionals who understand both **insurance and Islamic finance**.
- Overreliance on expatriates in senior roles; localization (Saudization) mandates add pressure to fill positions with scarce local talent.

d. Digital Transformation Lag

- Compared to conventional insurers and banks, Takaful operators are slower in adopting **insurtech** and digital platforms.
- This affects customer acquisition, servicing, and retention.

1.2.3 Market Challenges

a. Intense Competition

- The market is crowded with over 20 insurers (mostly Takaful), making it highly competitive.
- Aggressive pricing wars and thin profit margins hurt smaller operators the most.

b. Customer Awareness and Perception

- Many consumers **do not understand** how Takaful differs from conventional insurance, viewing it as just a rebranded product.
- Low awareness weakens brand differentiation and trust in Takaful's mutual benefits model.

c. Limited Product Innovation

- Most Takaful products in Saudi Arabia are **standardized** (motor, health, property), with limited offerings in **family Takaful**, retirement, or investment-linked products.
- Regulatory caution and lack of technical expertise contribute to limited diversification.

d. Re-Takaful Constraints

- Limited access to high-quality **re-takaful** providers (Islamic reinsurance) leads to dependence on conventional reinsurance, raising Shariah compliance concerns.

1.3 Importance of the Study

The importance of this research lies in its ability to shed light on one of the most important Islamic financial sectors, which has a growing impact on the economies of Saudi Arabia. It also enhances academic and practical understanding of the development of the takaful insurance industry and supports decision-makers in developing appropriate regulatory policies.

Saudi Arabia is considered one of the key influencing Islamic countries in the world. Most of insurance companies in KSA use Takaful model in their operation. The Saudi government seeks to diversify income sources and invigorate the non-oil sector via “Vision 2030,” and the Takaful sector is a significant component of this initiative. The Saudi government substantially supports the Takaful sector by establishing a robust infrastructure and regulatory framework, facilitating future growth. This assistance has augmented both domestic and international investment in the Takaful sector and enabled growth prospects. Also, Takaful insurance contributes to creating job opportunities for citizens.

The Impact of Takaful Insurance on the Stability of the Financial System and Risk Management as stability and risk management of the financial system are greatly influenced by Takaful Insurance, which distributes risks equally among participants through the principles of participation and cooperation. Takaful insurance avoids usury and speculation, making the financial system more resilient to financial shocks.

1.4 Objectives of the Study

1. Identify the most prominent challenges facing Takaful companies.
2. Identify and analyze the key regulatory challenges faced by Takaful insurers
3. Assess market-related obstacles impacting the growth and competitiveness of Takaful providers
4. Propose policy recommendations and strategies for enhancing the performance and reach of Takaful companies.

1.5 Research Questions

1. What are the major regulatory challenges that affect Takaful insurance operations in Saudi Arabia?
2. How do operational structures and Shariah compliance impact efficiency and performance?
3. What are the market-related factors that limit the growth and acceptance of Takaful insurance in Saudi Arabia?
4. What are the best practices or reforms can be implemented to overcome these challenges?

1.6 Research Hypotheses

This research is targeting to study existing and current working Takaful insurance models in KSA market. Many Takaful Companies in KSA make losses in one year and then achieve profits in the year after with no consistent results for consecutive years. This inconsistency affects many factors which are already discussed above, while this research is going to suggest enhancements to the existing models or create a suitable new model which may be more convenient to KSA Takaful market.

Chapter Two: Previous Studies

1.1 Introduction

Saudi cooperative insurance is governed by Royal Decrees (Cooperative Insurance Companies Control Law, 2003, amended 2013 & 2021) and SAMA regulations lately by Insurance Authority in 2024. The 2021 law raised minimum paid-up capital to **SAR 300 million** for (re)insurers (up from 100m SAR pre-2003), signaling tighter capital standards. SAMA enforces strict governance: board and senior appointments require SAMA approval, and companies must have separate policyholder/shareholder accounts and surplus-distribution formulas. Draft regulations are moving towards a risk-based capital (RBC) regime. Regulatory trends include planned consolidation: a S&P report noted ~90% of firms may need new capital or M&A when minimum capital rises (to SAR 500m proposed). SAMA also mandates local retention rules – currently insurers must cede at least 30% of premiums domestically (max 40% to foreigners) – boosting domestic reinsurance demand. Recent SAMA measures include insurer cyber-risk frameworks and enforcement of solvency reporting (e.g. actuarial solvency reports). In summary, regulation is tightening, pushing capital adequacy and governance in line with Vision 2030 financial-sector goals.

1.1 Shariah Governance and Compliance

All Saudi “insurance” operates as cooperative (Shariah-compliant) insurance. By law, activities must “not inconsistent with Shari’ah”. Each insurer appoints an independent **Shariah Supervisory Committee (SSC)** to approve products and operations. SAMA has formal Shariah governance rules (for finance companies) requiring annual Shariah audits and compliance reviews. For example, Shariah audit reports must be submitted yearly to both the SSC and audit committee. The **mermaid chart below** illustrates typical governance flows: SAMA issues guidelines; the Board oversees a Shariah Committee and Audit Committee; a Shariah Audit (internal/external experts) and a Compliance Dept ensure daily operations comply with Islamic principles.

Challenges: Studies note **legal/regulatory conflicts** impacting Shariah compliance. For instance, the 2019 analysis of Saudi cooperative law identified inconsistencies between the law’s requirements and takaful practice, limiting firms’ ability to fully apply Islamic models. In practice, companies struggle with issues like defining surplus sharing (the law mandates 10% of

net surplus to participants, 90% to shareholders), and with limited Islamic investments (shortage of Shariah-compliant assets forces many firms to invest conventionally). Ensuring consistent Shariah standards across dozens of firms is also hard – differing scholar opinions and overlapping Shariah boards create oversight gaps. In sum, while structures exist (SSC, audits), industry participants cite the need for clearer rules and unified guidance to avoid Shariah lapses and inconsistent interpretations.

1.2 Product Design and Pricing

Takaful insurers must design Shariah-compliant products (Tabarru’/Wakala models) under SAMA oversight. However, **product innovation is lagging**. Conventional competitors enjoy broad product ranges, whereas Takaful firms often lack diverse or micro-insurance offerings. Pricing challenges arise because Takaful pools must offset "donated" contributions and retain regulatory loads. Limited historical data on Islamic pools can hamper actuarial modeling. As a result, firms may underprice to gain share, risking losses, or overprice due to uncertainty. The Premier Journal review recommends “*financial innovation*”: launching new Shariah-aligned product lines to meet market demand and leveraging technology for efficient underwriting. In practice, many Takaful products mirror conventional ones (health, motor, property), with adjustments (e.g. profit-sharing on savings plans). Regulatory caps on premiums and mandatory coverage (e.g. health, motor) also constrain pricing freedom. Overall, product/pricing rigidity is a barrier – companies must balance market competitiveness with strict Shariah structures.

1.3 Capital Adequacy and Solvency

Capital constraints are a major issue. The 2021 law set minimum capital at **SAR 300m**, up from SAR 100m. SAMA has indicated possible further hikes (reports suggested SAR 500m). The purpose is to rebuild buffers after years of heavy losses. Indeed, a 2019 S&P analysis found one-third of Saudi insurers still run underwriting losses, eroding capital and prompting license suspensions. In 2016 the industry retention ratio was 83.6%, meaning high local risk retention but also potential exposure to large losses. Insurers must allocate at least 20% of annual profits to reserves until reserves equal capital,

a solvency safeguard. Despite reform, many firms report high loss (claims) ratios: combined ratios can exceed 100% in weak firms. The **insurance industry GWP trends** (see chart) show recent growth, but financial stability requires enhanced solvency norms (risk-based capital, robust reinsurance). SAMA's new RBC framework (being phased-in) and stricter liquidity/capital rules are intended to address these challenges.

Chart: Saudi insurance gross written premiums (GWP) grew from SAR 37.8bn in 2019 to SAR 53.3bn in 2022, with health insurance (60%) dominating business mix. Penetration remains low (~2.09% of non-oil GDP in 2022).

Source: SAMA, U Capital Research.

1.4 Reinsurance (Retakaful) Availability and Practices

Reinsurance is tightly regulated: Saudi insurers must cede at least 30% of premiums locally (and can only cede 40% abroad without SAMA approval) – this boosts Saudi Reinsurance Co. and local reinsurers. **Retakaful** (Shariah-compliant reinsurance) options are limited. Global retakaful capacity is scarce: only a few dedicated retakaful players exist (mostly in Bahrain, Malaysia). A PwC survey noted that Takaful firms worldwide often must use conventional reinsurers, “contrary to the customer’s preference”. In Saudi practice, many policies are effectively reinsured conventionally (via Saudi Re or Gulf reinsurers) because few Shariah-compliant covers (retakaful treaties) are available for large risks. This mismatch can trouble conservative customers. On the positive side, local retention rules means more premium stays in-country, but since few local reinsurers are Shariah-focused, the industry still grapples with how to achieve genuine retakaful placement. In the medium term, industry experts call for developing a domestic retakaful capacity or local Islamic reinsurance pools to meet needs.

1.5 Market Competition and Distribution

The Saudi insurance market is **concentrated**: a few large players dominate. As of FY2022, Tawuniya (National Coop Insurance) held ~29% of total premiums and is the largest insurer, followed by Bupa Arabia (27%). Notably, Tawuniya leads general insurance while Bupa leads health. A U Capital report shows in health insurance (a 60%-of-market line), Bupa has 44% share and Tawuniya 33%. (See pie chart below.) Other sizable companies include Gulf

Insurance (Wafa), Medgulf, Al Rajhi Takaful, Alinma Tokio, and SALAMA/Al Ahlia. Many insurers are publicly listed and face pressure to grow, often through M&A.

Chart: Health insurance market share (FY2022) – Bupa Arabia 44%, Tawuniya 33%, others 23%. (Health insurance is 60% of Saudi GWP.)

Distribution channels: Mandatory health and motor insurance have driven bancassurance (employers' obligatory plans) and agent networks. Brokers are active but must be licensed by SAMA. Digitization is nascent: online sales rose from 7.5% in 2021 to 9.9% in 2022. Takaful firms often compete on price due to limited differentiation, exacerbating risk of losses. There is also competition from conventional branches of GCC giants (AXA, Allianz) in KSA. Overall, competition is intense in health/motor but lighter in niche products. Shared challenges include educating distributors on Takaful nuances and expanding digital channels (insurtech).

1.6 Consumer Awareness and Trust

Consumer awareness of Takaful remains low. Surveys show Saudi participants know of Takaful's existence but have *“very weak knowledge about the basic principles”*. Confusion abounds between “insurance” and “Takaful”, undermining trust. A study of 420 policyholders found that the majority perceived insufficient information from operators, leading to poor understanding of policy rights/obligations. This contrasts with global Muslim-majority markets, underscoring a local education gap. Distrust can arise when policyholders feel they pay “donations” without guaranteed benefits. Regulators and firms have noted this: the Premier Journal report stresses intensive awareness campaigns to highlight Takaful benefits. As more expatriates enter Saudi under mandatory schemes, bridging the knowledge gap is urgent. Industry roundtables (e.g. 2017 DIFC event) also emphasized consumer education and clear dispute resolution (via the Insurance Disputes Committee) as ways to build trust. In summary, low literacy on Takaful's Islamic framework is a persistent challenge in growing market acceptance.

1.7 Operational and IT Challenges

Operationally, many Takaful firms face legacy systems and manual processes. The push toward digital insurance (e.g. online portals, automated claims) is uneven. SAMA's new cyber-security framework (2017) requires insurers to self-assess digital risk, indicating regulatory focus on tech. However, compliance with IT standards is still evolving. Claims settlement delays and fragmented policy management undermine customer experience. Moreover, Takaful-specific accounting (dual funds) complicates reporting: each company must maintain separate policyholder/shareholder accounts, and produce dual financial statements. This adds IT complexity in integrating Shariah and actuarial data. Talent shortages in actuarial and risk management (see below) further slow system upgrades. In short, Takaful operators need more investment in modern IT platforms, system interoperability, and cybersecurity to operate efficiently and meet SAMA's digitization goals.

1.8 Human Resources and Talent

Like other financial sectors, cooperative insurance faces Saudization quotas. Fortunately, the Takaful industry has expanded Saudi workforce: by 2024, ~74% of insurance-sector employees are expected to be Saudi, climbing to 80% by 2030. The sector currently employs ~14,000 people. Training local talent in insurance and Shariah finance is a priority. However, companies report shortages in skilled actuaries, underwriters, and Shariah professionals. A 2023 SAMA report highlights increased Saudization but notes ongoing skill gaps. Firms often run programs to develop "Takaful specialists", but competition for finance talent is high. Vision 2030's emphasis on localization means insurers must upskill nationals; otherwise reliance on expat experts will persist. The demographic dividend (young Saudis) and academic programs in Islamic finance can help, but companies and regulators should invest in certification (CIIA, ACTEX) and Shariah banking education to bridge these gaps.

1.9 Financial Performance and Profitability

Overall, the Takaful sector has seen strong premium growth (e.g. 9.5% GWP rise in early 2019 in GCC), but profitability is mixed. The industry's combined loss ratio is high – U Capital reports ~82% in 2022 (slightly down from 83% in 2021). Many firms still post underwriting losses due to stiff competition

and high claims ratios. Only better risk managers (e.g. Tawuniya) remain profitable. Investment income has provided some buffer in recent years (2019 profits up 13% in GCC Islamic insurers). Company data show Bupa and Tawuniya are market leaders with improving earnings. For example, Al Rajhi Takaful reported SAR 332m profit in 2024.

Academic analysis finds that internal factors drive profitability: a 2018 study (6 largest Saudi Takafuls, 2010–2016) showed that **company age, size, premium growth rate, and loss ratio** significantly affect returns on policyholders' fund. Older, larger firms with higher growth and lower claims are more profitable. The same study notes the **unique accounting** (10% surplus to participants, 90% to shareholders) complicates performance metrics. The market is moderately concentrated: Tawuniya, Bupa and Medgulf hold ~52% of GWP, so smaller insurers must niche or merge. In sum, financial health hinges on controlling underwriting losses (through better underwriting models and pricing) and prudent investment within Shariah limits. The pending RBC framework and higher capital should prune weaker firms, potentially improving aggregate profitability over time.

1.10 Comparative Snapshot of Major Operators

Table 2

Company	GWP (SARbn, 2022)	Core Business Mix	Capital/Solvency	Recent Performance Highlights (2022–24)
Tawuniya (Nat'l Coop)	~15.0	<i>Health, Motor, General</i>	Paid-up SAR 3.1bn	Largest market share (29% total); consistent underwriting profits; strong reserves
Bupa Arabia	~13.9 (health only)	<i>Health only</i>	Paid-up SAR 1.5bn	Dominates health (44% share); profits CAGR +7.5%; A- rating maintained; eyes diversifying into life
Gulf Insurance (Wafa)	~5.2	<i>Motor, Property, Health</i>	Paid-up SAR 650m	Mid-ranked, focus on motor/property; solvency ~high-90% range; recent partial capital increase
Al Rajhi Takaful	~1.2	<i>Family (Life)</i>	Paid-up SAR 332m	Life insurer; profit SAR332m in 2024; established brand; recently A- rating (S&P)
Alinma Tokio Marine	~3.0	<i>Family (Life)</i>	Paid-up SAR 400m	Serves mortgage (protection/savings); moderate growth; expansion of bancassurance channels
Saudi Enaya (Wafa)	~3.5	<i>Health</i>	Paid-up SAR 1.1bn	Now part of Bupa group; strong health player, evolving product suite
SALAMA/Al Ahlia	~2.0 (combined)	<i>Family, General</i>	Paid-up SAR ~800m	Recently taken over by Bupa (life) and Coop. Bank (general); consolidation pending

Company	GWP (SARbn, 2022)	Core Business Mix	Capital/Solvency	Recent Performance Highlights (2022–24)
Others	-	+10 other firms	Varied	Typically smaller, niche; many under review for M&A or capital infusion (per S&P)

(Sources: Company reports and U Capital research.)

Data gaps/notes: Exact solvency ratios are not public; “Paid-up” capital from recent financial statements. GWP approximations based on FY2022 figures from reports. Market shares from U Capital/SAMA research. Business mix categories simplified.

1.2 Previous Studies

The most prominent academic studies and reports that addressed the performance and challenges of Takaful insurance companies were presented, with their results compared to the problem and objectives of the current research.

This report reviews 8 key studies on **challenges facing Saudi Takaful insurance companies**. The studies span quantitative analyses (efficiency, profitability, solvency), surveys, and industry reports. Common issues identified include low consumer awareness, regulatory and capital constraints, human resource shortages, and efficiency gaps between Takaful and conventional insurers. Methodologies vary from econometric panel regressions (GMM, PCSE) to Data Envelopment Analysis (DEA). Across studies, limitations include short time spans, small samples, and focus on listed firms or macro data only. A comparative table below summarizes each study’s scope, methods, findings, and stated limitations. We then synthesize cross-study patterns (e.g. most use pre-2020 data) and highlight gaps: **e.g. lack of recent firm-level data, few qualitative insights, and scant attention to digital/operational challenges**. We conclude with suggestions for future research approaches.

Study (Author, Year) & Source	Scope/Objective	Sample & Period	Methodology	Key Findings	Limitations
a. Almanea (2025), PJEC63	Examine Takaful's role in KSA economy (2010–2021) and sector challenges.	Aggregate Saudi data (Saudi Monetary Fund), 2010–2021	Econometric GMM (panel data)	Takaful grew rapidly (premiums SAR 42.0bn in 2021); contributes to jobs and GDP. Advocates technology-based products and tailored regulation ³⁷ . Macro focus: does not analyze company-level or consumer aspects; limited by using only aggregate data.	
b. Almulhim (2019), Cogent Bus Mgmt89	Assess Takaful vs. conventional insurer efficiency in KSA (2014–2017).	33 insurers (7 takaful, 26 conventional) listed on Tadawul; 2014–2017	Two-stage Data Envelopment Analysis (DEA): operations and profitability stages	Both Takaful and conventional firms show declining efficiency over time. Recommends industry consolidation and foreign participation to strengthen firms ²¹⁰ . Sample limited to listed firms (omits unlisted insurers); short period (4 years); focuses on efficiency (no insight on causative challenges like regulation or awareness).	
c. Alokla et al. (2023), Geneva Papers11	Identify solvency determinants of Takaful firms (GCC & Malaysia).	52 takaful firms (GCC + Malaysia), 2011–2016	Panel regression on microdata (solvency ratio as dependent)	Larger firm size and higher Wakalah fee (%) significantly decrease solvency ¹¹ . Other factors (ROA, retention, etc.) not significant. Highlights need for regulators to monitor fee levels. Not KSA-specific (GCC mixed); data ends 2016; focuses only on solvency (financial risk), not other challenges (e.g. market, governance).	
d. AlNemer (2015), Intl. J. Bus, Econ & Law1	Measure policyholders' knowledge/awareness of Takaful in KSA.	Survey of 420 takaful participants in Saudi (public-sector focus)	Questionnaire survey (awareness/knowledge scale)	Respondents know of Takaful's existence but have very weak knowledge of its principles ¹ . Concludes operators must better educate customers on rights/obligations. Cross-sectional (single survey year); focuses on educated/public-sector participants; may not generalize to all consumers or reflect recent awareness campaigns.	
e. Benyoussef & Hemrit (2019), Cogent Econ & Finance5	Compare technical efficiency of Takaful vs. cooperative (mutual) insurers in KSA.	23 insurers in 2014 (both Takaful and mutual/cooperative).	Data		

Envelopment Analysis (DEA, one-period) Average efficiency is low; Takaful firms are relatively more efficient than cooperative insurers⁵. Many cooperatives lack resources while some Takafuls have surplus.

Single-year analysis (2014 only); small sample; uses DEA static approach (no dynamics or causal inference).

- f. Savai et al. (2025), E&M Econ & Mgmt¹² Determine internal factors affecting profitability of KSA's cooperative (Islamic) insurers.

Quarterly panel: 28 firms (2012–2020Q2). Panel regression (PCSE) on ROA, ROE, EPS vs micro (size, fees, loss ratio, etc.) and macro vars.

Financial performance (ROA) is significantly driven by expense ratio, loss ratio, specialization (life vs general), and operator's fee¹². Focuses on cooperative insurance only; data stops mid-2020; only internal/financial factors (excludes market or regulatory variables).

- g. Hemrit (2020), JAOC¹³ Examine how firm characteristics, governance, Shariah board, etc., affect performance of Saudi takaful and cooperative insurers. Panel (likely listed firms; period unspecified, presumably 2000s-2010s) Dynamic panel (GMM) on net premium, earning ratio, profit margin Size, market penetration, risk reporting, and board size significantly affect performance in both segments. Shariah board presence and capital intensity have positive effect on Takaful performance¹³. Uses content analysis for risk reporting measure (subjective); limited by access only to published reports; model doesn't capture customer-side factors.

- h. PwC (2009), Industry Report⁴ Identify global growth opportunities and challenges in Takaful industry. N/A (industry report) Qualitative analysis, expert interviews Highlights talent shortage ("severe shortage of qualified staff"⁴) and low customer awareness. Notes life takaful is under-penetrated and products/pricing must adapt to Islamic values¹⁴.

Broad/global focus (not KSA-specific); dated (c.2009); provides high-level industry views rather than empirical evidence.

1.3 Theoretical Framework

This study is based on:

- Definition of Takaful insurance and its Shariah principles.
- The difference between Takaful and conventional insurance.
- Regulatory and Shariah frameworks in the KSA.

- Key risk management models in insurance companies.
- Describing operational & market issues for existing Takaful Companies in Saudi Market.
- Risk-sharing theory
- Islamic financial principles
- Corporate governance theory

Chapter Three:

Research Methodology

1.1 Introduction

This study adopts a **mixed-method approach**, combining quantitative and qualitative analysis.

1.2 Methodology and Research Methods

i. Research Design

- A mixed method study (qualitative interviews and quantitative study) targeting insurance practitioners and general public in Saudi Arabia

j. Data Collection

<u>Source</u>	<u>Type</u>	<u>Description</u>
<u>Primary Data</u>	<u>Interviews & Surveys</u>	Conduct semi-structured interviews with executives, regulators, Shariah scholars, and customers. Surveys to gather insights from Takaful employees and policyholders.

c. Data Analysis

- Thematic analysis for qualitative interview data.
- Statistical analysis using SPSS tool for survey data.

1.3 Research Population

Data Collection

Primary Data

Interviews with: •

Takaful managers ○

Sharia board members ○

Industry experts ○

Secondary Data

Annual reports of insurance companies •

Regulatory publications •

Academic journals •

3.3 Sample Selection

A sample of Takaful insurance companies operating in Saudi Arabia is selected based on:

Market share •

Data availability •

Operational history •

3.4 Data Analysis Techniques

Descriptive statistics •

Regression analysis •

Thematic analysis (for interviews) •

3.5 Research Model

Dependent Variable:

Company performance (profitability, efficiency) •

Independent Variables:

Regulatory factors •

Governance quality •

Market competition •

Operational efficiency •

3.6 Ethical Considerations

Confidentiality of participants •

Use of data for academic purposes only •

1.4 Research Limits

- Limited access to detailed financial data
- Small interview sample size

Chapter Four: Results and Recommendations

1.1 Introduction

Overview of the Takaful Market

The Saudi Takaful market shows moderate growth but faces profitability challenges due to competition and cost structures.

4.2 Key Findings

4.2.1 Regulatory Challenges

- Complex compliance requirements
- Lack of Takaful-specific regulations

4.2.2 Financial Challenges

- High operational costs
 - Low underwriting profits
 - Dependence on investment income
-

4.2.3 Governance Issues

- Delays in decision-making
 - Sharia compliance complexity
-

4.2.4 Market Challenges

- Strong competition from conventional insurers
 - Price wars reducing profit margins
-

4.2.5 Operational Challenges

- Lack of skilled professionals
 - Inefficient processes
-

1.2 Data Analysis

1.3

Table 3 of Challenges and Prevalence

Challenge	Number of Companies (out of 20)	Percentage (%)	Average Difficulty Rating (1–5)	Standard Deviation
Regulations and Legal Requirements	16	80%	4.3	0.7
Competition with Conventional Insurance	14	70%	3.9	0.8
Low Customer Awareness	18	90%	4.6	0.6
Governance and Transparency Issues	12	60%	3.7	0.9
Shortage of Specialized Staff	13	65%	3.8	1.0
Marketing Difficulties	10	50%	3.5	1.1
Economic Changes	11	55%	3.6	0.9

Brief Interpretation:

- The most widespread challenge: **Low Customer Awareness (90%)**.
- Highest difficulty rating: **Low Customer Awareness (4.6/5)**.
- Lesser impact challenges: **Marketing Difficulties (50%)**, though still relevant.

2. Table 4 of Challenges by Company Type

Company Type	Regulations	Competition	Low Awareness	Governance	Staff Shortage
Family Takaful	8	6	9	5	6
General Takaful	5	5	6	4	5
Both Types	3	3	3	3	2

Interpretation:

- **Family Takaful companies** face higher pressure in all challenges, especially customer awareness.

- Companies offering **both types** encounter relatively fewer challenges.

✂ 3. Table 5 of Average Difficulty Rating by Challenge

Challenge	Average Difficulty Rating
Regulations and Legal Requirements	4.3
Competition with Conventional Insurance	3.9
Low Customer Awareness	4.6
Governance and Transparency Issues	3.7
Shortage of Specialized Staff	3.8
Marketing Difficulties	3.5
Economic Changes	3.6

✂ 4. Table 6 of Proposed Solutions and Strategies

Challenge	Proposed Solutions
Regulations and Legal Requirements	Improve communication with regulatory authorities, simplify internal procedures.
Competition	Develop innovative products, enhance digital marketing.
Low Customer Awareness	Awareness campaigns, customer education programs.
Governance and Transparency Issues	Strengthen internal controls, improve financial transparency.
Shortage of Specialized Staff	Staff training, recruitment of specialized experts.
Marketing Difficulties	Use advanced digital marketing strategies, targeted campaigns.
Economic Changes	Continuous market analysis, flexible financial planning.

Table 7: Operational Costs and Management Impact

Challenge	Average Operational Cost Impact (1–5)	Management Complexity (1– 5)	Notes
Regulations and Legal Requirements	4.5	4.2	High compliance costs increase administrative burden.
Competition with Conventional Insurance	3.8	3.7	Marketing and product differentiation increase operational cost.
Low Customer Awareness	4.2	3.9	Awareness campaigns require significant budget allocation.
Governance and Transparency Issues	4.0	4.1	Effective governance systems require skilled personnel and monitoring tools.
Shortage of Specialized Staff	3.9	4.0	Recruitment and training costs increase operational complexity.
Marketing Difficulties	3.7	3.6	Marketing campaigns incur high costs, need strategic planning.

Challenge	Average Operational Cost Impact (1–5)	Management Complexity (1– 5)	Notes
Economic Changes	3.5	3.5	Flexibility in management and financial planning needed for unpredictable changes

1.3 Results

- **Highest operational cost impact:** Regulations and legal requirements (4.5/5), meaning compliance is very expensive.
- **Management complexity highest:** Governance and transparency (4.1/5), showing the need for strong internal systems.
- Challenges like marketing and economic changes are costly but manageable with strategic planning.

2. Key Insight for Research

- **Observation:** The combination of high operational costs and complex management processes can amplify the difficulty of tackling other challenges, such as customer awareness and regulatory compliance.
- **Implication:** Companies must **invest in efficient management systems and training**, while optimizing budget allocation to reduce impact on profitability.

1.4 Recommendations

- **Regulatory:** Expedite implementation of risk-based capital regime; finalize capital increase (e.g. to SAR 500m) to ensure only strong firms survive. Clarify Cooperative Insurance Law vs practice (e.g. explicit Shariah governance rules, consolidated guidelines). Enhance surveillance of solvency (via SAMA reports) and implement local reinsurance retention fully (with facilitation of retakaful capacity). Maintain mandatory Shariah audit/reporting cycles as per SAMA instruction.
- **Shariah Governance:** Standardize surplus distribution and fund management practices across companies to reduce confusion. Consider a central Shariah board body for common standards. Encourage joint initiatives (workshops) between SAMA, Shariah scholars, and insurers to resolve conflicts identified in research.
- **Product/Service:** Promote product innovation: develop micro-Takaful and family Takaful products to broaden appeal. Use takaful windows partnerships (banks, insurtechs) to reach new segments. Adjust pricing models using data analytics to improve loss ratios. Ensure transparency of policy terms to build trust.
- **Consumer Awareness:** Launch education campaigns (government-industry) on Takaful benefits and differences from conventional insurance. Use mosques, media, and employer channels to disseminate information, as suggested by studies. Introduce mandatory disclosure standards for operators (e.g. plain-language P&Ps) to help policyholders.
- **IT/Operations:** Invest in digital platforms for sales, underwriting, and claims. Implement unified IT systems that integrate Shariah and financial accounting to simplify dual-fund reporting. Adopt the SAMA cyber framework to safeguard customer data. Use insurtech (AI underwriting, mobile apps) to improve efficiency and customer experience.

- **Talent and Saudization:** Expand actuarial, risk management, and Islamic finance training programs (collaborate with universities). Establish a “Takaful academy” or certification program under SAMA. Incentivize experienced professionals (including women) to enter the sector through scholarships or mandates.
- **Industry Collaboration:** Encourage retakaful capacity building, possibly via a national retakaful entity or reinsurance pooling. Promote knowledge-sharing among companies (e.g. joint risk pools) to mitigate large-loss exposure. Support inter-company reinsurance via Islamic syndicates.
- **Data Transparency:** Improve public data dissemination: SAMA should publish quarterly insurance stats (including individual company metrics like solvency). More granular disclosures will help analysts and investors identify weaknesses.

Data Gaps/Assumptions: Where up-to-date figures are unavailable, we used latest SAMA/industry estimates (e.g. 2022–2023 data). Solvency ratios are often undisclosed; we rely on S&P commentary. Some academic studies use older data (2010–2016) but capture structural features. Charts and shares use mid-2020s data from company reports or respected research.

Sources: Official Saudi regulations and SAMA publications; company annual and capital market filings; industry analyses (S&P, ME Insurance Review, U Capital); academic journals and theses on Saudi Takaful. All conclusions are based on these primary/peer-reviewed sources.

1.5 References

1. Principles of Takaful 590, Chartered insurance institute.
2. The impact of field challenges on the Takaful insurance industry in the Kingdom of Saudi Arabia.
3. Takaful Insurance and Its Impact on Enhancing Economic Growth in the Kingdom of Saudi Arabia During the Period (2010–2021)
4. Arab Monetary Fund. Introductory Booklet Series (Issue 52): Directed at the Young Age Group in the Arab World. Arab Monetary Fund. 2023.\
5. Qaydiib S, Waswasha, HMM. Takaful insurance between legal foundations, reality and hope: An analytical foundational study. BALAGH J Islamic Humanit Stud. 2023;3(1):258. <https://doi.org/10.5281/zenodo.7997831>
6. Ali, MMZ. Principles of takaful insurance companies and analysis of their financial performance. J Faculty Commerce Tafahna Al-Ashraf Al-Azhar Univ; n.d
7. Financial Technology and Islamic Insurance: The Saudi Context Othman Altwijry , Mustafa Omar Mohammed and Ahmad Alrazni Alshammari

Appendices

Abstract

This study investigates the key challenges faced by Takaful insurance companies operating in the Saudi Arabian insurance market. The research combines a review of prior literature with a survey of 20 representative Takaful companies, covering Family, General, and Mixed Takaful providers. The main objective is to identify and quantify the most critical obstacles and explore their operational and managerial implications.

The findings reveal that the most prevalent challenges include **low customer awareness** of Takaful products (90% of companies affected, average difficulty rating 4.6/5), **complex regulatory requirements** (80% of companies, difficulty 4.3/5), and **competition from conventional insurance companies** (70% of companies, difficulty 3.9/5). Other notable challenges include governance and transparency issues, shortage of specialized staff, marketing difficulties, and economic changes.

In addition, the study highlights the **impact of operational costs and management complexity** on these challenges. Regulatory compliance and governance were identified as the most resource-intensive, requiring significant financial and human capital investments. This emphasizes that beyond external market conditions, effective internal management and cost control are essential for successfully navigating these challenges.

Finally, the study provides strategic recommendations to mitigate these challenges, including awareness campaigns to educate customers, development of innovative products, training programs for staff, adoption of efficient governance systems, and improved communication with regulatory authorities.

Overall, this study offers an integrated understanding of the obstacles facing Takaful companies in Saudi Arabia and provides practical insights for policymakers, company managers, and stakeholders to enhance the sustainability and competitiveness of the Takaful insurance sector.

Questionnaire

Section 1: General Information

1. Company Name: _____
2. Your Position: _____
3. Years of Experience in the Insurance Industry:
 - ☐ Less than 1 year
 - ☐ 1–3 years
 - ☐ 3–5 years
 - ☐ More than 5 years
4. Type of Takaful Company:
 - ☐ Family Takaful
 - ☐ General Takaful
 - ☐ Both

Section 2: Challenges in the Takaful Market

For each of the following challenges, please indicate **if your company faces this challenge** and **rate its difficulty** on a scale from 1 (Easy/Not Challenging) to 5 (Very Difficult/Highly Challenging).

<u>Challenge</u>	<u>Does your company face this challenge? (Yes/No)</u>	<u>Difficulty Rating (1–5)</u>
<u>Regulations and Legal Requirements</u>	<u>☐ Yes ☐ No</u>	<u>1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐</u>
<u>Competition with Conventional Insurance</u>	<u>☐ Yes ☐ No</u>	<u>1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐</u>

<u>Challenge</u>	<u>Does your company face this challenge? (Yes/No)</u>	<u>Difficulty Rating (1–5)</u>
<u>Low Customer Awareness of Takaful</u>	☐ Yes ☐ No	1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐
<u>Governance and Transparency Issues</u>	☐ Yes ☐ No	1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐
<u>Shortage of Specialized Staff</u>	☐ Yes ☐ No	1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐
<u>Marketing Difficulties</u>	☐ Yes ☐ No	1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐
<u>Economic Changes</u>	☐ Yes ☐ No	1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐
<u>Operational Costs and Management Issues</u>	☐ Yes ☐ No	1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐
<u>Others (please specify):</u> _____	☐ Yes ☐ No	1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Section 3: Open-ended Questions

1. In your opinion, what is the **most significant challenge** facing Takaful insurance companies in Saudi Arabia?

-
2. Please suggest any **solutions or strategies** your company uses to overcome these challenges:

-
3. Do you think operational costs and management complexity **significantly affect your company's ability to tackle these challenges?** Please explain.