
Developing Solvency Requirements for Takaful Insurance Companies in Algeria in Light of International Experiences.

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Abstract:

This study aimed to develop the solvency requirements for Takaful companies in Algeria, based on the experiences of some countries (Malaysia, the United Arab Emirates, and Bahrain). This study used a descriptive approach, presenting and analyzing the quantitative and qualitative requirements, as well as the disclosure requirements for Takaful companies in these countries, including Algeria. It also used a comparative approach to identify the various similarities and differences between these requirements.

This study found that Takaful companies in Algeria must meet the same solvency requirements as conventional insurance companies, particularly quantitative requirements. Finally, this study made several suggestions and recommendations on developing the solvency requirements for Takaful companies in Algeria and distinguishing them from those of conventional insurance companies. These suggestions relate in particular to investment requirements, the assessment and the recovery of the solvency margin, levels of intervention, qualitative requirements, and disclosure requirements.

Keywords: Takaful insurance; solvency; quantitative requirements; qualitative requirements; disclosure requirements.

Jel Classification Codes : G3, G22.

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1. Introduction:

The primary objective of supervisory and regulatory authorities in the insurance sector is to ensure that an insurance company -whether conventional or Takaful- possesses the financial capacity to meet its obligations, particularly towards policyholders (participants) upon maturity. This financial sustainability must be upheld even under adverse circumstances.

However, due to the distinct financial nature of Takaful insurance compared to conventional insurance, the Islamic Financial Services Board (IFSB) issued Standard No. 11, Solvency Requirements for Takaful Insurance, which delineates the specificities of solvency in Takaful companies. This standard also sets forth a series of principles that regulatory authorities overseeing such companies must adhere to when formulating solvency regulations tailored to Takaful insurance companies.

In recent years, several countries, including Malaysia, the United Arab Emirates, and Bahrain, have introduced significant amendments to their solvency frameworks for Takaful insurance companies. These reforms aim to better align solvency regulations with the unique characteristics of Takaful firms and to distinguish their requirements from those applied to conventional insurance companies.

In contrast, Algeria lags significantly in regulating the Takaful insurance industry. The Algerian legislator only permitted the practice of this type of insurance in 2021, following the enactment of Executive Decree No. 21-81 on February 23, 2021, which outlines the conditions and mechanisms for practicing Takaful insurance in Algeria. This decree is integrated within the broader regulatory framework of conventional insurance. As of the preparation of this research paper, no additional laws or executive decrees specifically addressing the solvency requirements for Takaful insurance companies have been issued.

Research Problem: Based on the aforementioned context, the central research question of this study is as follows: How can solvency requirements for Takaful insurance companies in Algeria be developed in light of the experiences of Malaysia, the United Arab Emirates, and Bahrain?

Research Importance: Solvency requirements for Takaful insurance companies are essential for the stability and sustainability of these companies, ensuring they meet obligations to policyholders, investors, and other stakeholders. This study examines the solvency requirements for Takaful insurance companies of Malaysia, the UAE, and Bahrain, offering insights into best practices. The findings will help Algeria develop an efficient solvency framework for Takaful insurance companies, ensuring financial sustainability of the Takaful sector.

Research Objectives: This study aims to:

- Examine the concept of solvency for insurance companies and its significance.

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- Analyze the solvency requirements for Takaful insurance companies as established in Malaysia, the United Arab Emirates, Bahrain, and Algeria.
 - Identify the key differences in solvency requirements among the studied countries.
 - Propose recommendations for enhancing the solvency framework for Takaful insurance companies in Algeria, drawing upon international best practices.

Research Methodology: The study employs a descriptive methodology to collect, classify, and analyze data on the solvency requirements of Takaful insurance companies in Malaysia, the United Arab Emirates, Bahrain, and Algeria. Additionally, a comparative approach is utilized to discern similarities and differences in the solvency frameworks across these countries.

2. Solvency of Takaful Insurance Companies:

2.1 Definition of Solvency in Insurance Companies:

Solvency, or financial soundness, generally refers to the ability to meet financial obligations and settle liabilities (Hashem, 2011). In the context of insurance, the International Association of Insurance Supervisors (IAIS) defines a solvent insurance company as one that possesses the financial capacity to fulfill all contractual obligations at any given time -or at least under most circumstances (Ahmed & Al-Sahlawi, 2015).

Solvency in insurance companies also entails maintaining a sustained financial capacity to compensate policyholders for catastrophic events, ensuring that these firms can honor their commitments to policyholders in a timely manner. Conversely, financial distress or insolvency occurs when an insurance company is unable to meet its obligations, rendering it incapable of disbursing rightful claims arising from insured risks (Hani Jura'a & Samer, 2010).

2.2 The Importance of Solvency for Insurance Companies:

The focus on solvency is of paramount importance for the following stakeholders (Bakr, 2011):

- **Policyholders**, who are concerned with the company's future ability to meet the commitments outlined in the policy.
- **Investors or Shareholders**, who are interested in maintaining or increasing the value of their shares, as well as receiving the promised dividends.
- **Top Management**, as solvency affects the company's reputation and its future opportunities within the company or in other firms.
- **Supervisory and Regulatory Authorities**, whose responsibility it is to anticipate potential bankruptcies within companies.
- **Other Insurance Companies**, which may be impacted by the insolvency of a firm, influencing the broader insurance market. Following a company's bankruptcy, its policies are distributed to other insurers.

2.3 Objectives of Setting Solvency Requirements for Takaful Insurance Companies:

The objectives behind establishing solvency requirements for Takaful insurance companies include (IFSB, 2010):

- Enhancing the likelihood that Takaful insurance will be able to meet all contractual obligations and conditions.
- Serving as an early warning system for regulatory intervention and immediate corrective actions.
- Providing a margin of safety, ensuring that, even in the event of losses to Takaful participants, the impact is limited or minimal, especially in terms of systematic effects.
- Promoting public confidence, particularly among Takaful participants, in the financial stability of the Takaful sector.

The remaining sections of this paper will present international experiences in developing solvency requirements for Takaful insurance companies, with a focus on Algeria's case. These requirements, as established by international standards, are divided into quantitative, qualitative, and disclosure requirements.

3. International Experiences in Developing Quantitative Solvency Requirements for Takaful Insurance Companies, with Reference to Algeria:

This section will detail the quantitative solvency requirements for Takaful insurance companies based on the solvency regulations in the countries under study, as well as in Algeria.

3.1 Investment Requirements:

The Central Bank of Malaysia, regarding the investment of Takaful companies' funds, emphasizes the adoption of a prudent person principle (NM/RH/GL 004-22, 2013), which obliges companies to invest cautiously, adhering to general principles such as portfolio diversification and matching assets with liabilities. Takaful companies are required to (BNM/RH/GL 004-19): (a) Establish separate policies and strategies for investing shareholder funds and participant funds. (b) Implement appropriate procedures to ensure that investment portfolios comply with Islamic Sharia principles, including addressing issues related to unlawful returns. These procedures should be clearly defined within the company's Sharia supervisory board responsibilities, also known as Sharia governance on investments. (c) Form an investment committee at the board level.

In the United Arab Emirates, Takaful companies are required to (Insurance Authority United Arab Emirates, 2014): (a) Form an investment committee at the board level. (b) Develop procedures to ensure investments align with Sharia law, including actions taken regarding unlawful returns. (c) Develop separate investment strategies for participant funds, including Qardh Hassan funds, and shareholder funds. (d) Implement separate investment strategies for family Takaful and general Takaful operations.

As for Bahrain, while specific investment requirements for Takaful companies are not explicitly mentioned, the Central Bank of Bahrain has set limits on certain types of investments used when calculating available capital. Investments exceeding these limits are considered non-compliant. For example, (CA-4, n.d.) the accepted value of real estate assets for calculating available capital is capped at 10% of the company's insurance business value. Listed equities and non-listed shares are capped at 5% and 1%, respectively. Consequently, the Central Bank allows Takaful companies in Bahrain the freedom to invest as they wish, but with certain restrictions on these investments when calculating their available capital.

In Algeria, the Algerian legislator, in (Executive Decree No. 21-81, 2021), only stipulates that all operations and actions, including investments, related to Takaful activities must comply with Sharia principles. Additionally, it mandates the segregation of shareholder funds from participant funds within Takaful companies. However, these companies are still subject to traditional solvency requirements for conventional insurance companies, particularly concerning regulatory reserves (regulatory provisions and technical provisions) in the form of equivalent assets on the company's balance sheet. According to (Executive Decree No. 13-114, 2013), insurance companies in Algeria are obligated to invest their funds in specific investment avenues such as government securities, other movable securities, and bonds issued by financially capable entities, real estate assets, money market placements, deposits with ceding companies, term deposits in banks, and other types of investments specified by Algerian law and regulations.

Furthermore, the legislator does not merely specify acceptable types of assets but also sets particular investment ratios for each type. According to the (Order of May 14, 2016), regarding regulatory liabilities, insurance companies in Algeria must adhere to the following investment ratios when covering their regulatory liabilities:

- At least 50% must be invested in government securities, with half of this allocation specifically designated for medium and long-term investments.
- The remainder must be distributed across other asset classes based on market opportunities and various legislative constraints. For example, term deposits with the same bank are limited to 25% of regulatory liabilities, and transferable securities issued by non-listed Algerian companies are capped at 25% of regulatory liabilities, and so forth.

From the above, it is clear that the Algerian legislator has not allowed for the prudent person principle in the investment of funds by Takaful companies operating in Algeria, as outlined in the regulations of countries such as Malaysia and the UAE. Takaful companies in Algeria remain constrained by investment formulas that largely do not comply with Sharia law, especially regarding government securities and bonds. Consequently, these companies will likely generate considerable unlawful returns through investments in these types of

securities and bonds. Therefore, the Sharia Supervisory Board (Sharia oversight committee) of these companies should implement the necessary procedures regarding the handling of these unlawful returns.

3.2 Regarding Solvency Margin Assessment and Coverage:

In Malaysia, the solvency margin (Solvency Margin) for a company is determined using a model specified by Bank Negara Malaysia. It is important to note that this calculation method distinguishes between the capital requirements for the Takaful Fund and the Shareholder Fund. The formula is as follows (BNM/RH/PD 033-4, 2017, p. 6):

$$TCR = \sum_{\text{all } i} \text{Max} [\text{Surrender value capital charges}_{\text{Takaful Fund } i}, \text{Capital Required}_{\text{Takaful Fund } i}] + \text{Max} [\text{Surrender value capital charges}_{\text{Shareholder' Fund}}, \text{Capital Required}_{\text{Shareholder' Fund}}]$$

The total available capital for Takaful companies in Malaysia is calculated for the entire company, including capital for both the Takaful Fund and the Shareholder Fund. The total available capital is divided into two levels, ensuring that the second-level capital does not exceed the first-level capital (BNM/RH/PD 033-4, 2017). Additionally, the available capital for Takaful companies must cover their solvency margin at a rate of 130% (Aida Yuzi, Wee-Yeap, & Ahmed Farid, 2016, p. 30).

In the UAE, the solvency margin for Takaful companies is also determined using a risk-based capital model, with a formula developed by the UAE Insurance Authority. This formula covers all risks related to both the policyholders and the shareholders, including underwriting, market, liquidity, credit, and operational risks. A distinct calculation method is used for the solvency margins of both the Takaful Fund and the Shareholder Fund. After determining the solvency margin, Takaful companies in the UAE must maintain their own capital to cover this margin, which is split into two levels -primary and auxiliary-. The auxiliary capital should not exceed 50% of the primary capital (Insurance Authority United Arab Emirates, 2014).

In Bahrain, the solvency margin for a company is calculated based on a formula prescribed by the Central Bank of Bahrain, with separate calculations for the general Takaful and family Takaful. The formula uses fixed rates and is based on either premiums or claims for general Takaful and mathematical reserves or capital sum at risk for family Takaful. The solvency margin for general Takaful is calculated using the written premiums multiplied by a risk factor, while for family Takaful, the solvency margin is calculated using either 2% of the mathematical reserves or 0.15% of the capital sum at risk (CA-2, n.d.). After calculating the solvency margin, Takaful companies must retain available capital, combining the acceptable net assets of the Takaful Fund and the available capital for the Shareholder Fund, ensuring a separation in their financial resources (CA-1.2, n.d.).

As for Algeria, to date, there have been no specific solvency margin requirements for Takaful companies, meaning that they still operate under the traditional solvency margin requirements applicable to conventional insurance companies, as outlined in Executive Decree No. 13-115. According to this decree, insurance

companies (whether conventional or Takaful) in Algeria are required to form a solvency margin including the following elements (Executive Decree No. 13-115, 2013):

- Paid-up capital or founding funds: with minimum capital requirements varying depending on the type of company (joint-stock or cooperative) and the nature of the insurance branches.
- Regulatory or non-regulatory reserves.
- Regulatory and non-regulatory provisions.
- Deferred profits or losses: where profits become part of capital that can be allocated in subsequent years, and losses are absorbed using future profits.

Algerian insurance companies are required to maintain a minimum solvency margin based on technical provisions and premiums, with the margin varying depending on the type of insurance company (Executive Decree No. 13-115, 2013):

- **General Takaful (Non-Life Insurance):** The mandatory solvency margin must be at least 15% of technical reserves and should not fall below 20% of premiums issued or accepted during any period.
- **Family Takaful (Life Insurance):** For life insurance branches, the mandatory solvency margin must be at least 4% of mathematical provisions and 0.3% of the risk capital. For other branches, it should be at least 15% of technical provisions, with a minimum of 20% of premiums issued or accepted.

Overall, it is noticeable that the countries under study enforce distinct solvency margin requirements for Takaful companies, differentiating them from conventional insurance companies. Meanwhile, Takaful companies in Algeria are still subject to the traditional solvency margin requirements imposed on conventional insurance companies. All these countries, including Algeria, converge on evaluating the solvency margin of Takaful companies based on models developed by their supervisory authorities. These countries also agree that the solvency margin concerns the entire company, with Malaysia and the UAE showing a clear distinction in the solvency margin calculation between the Takaful Fund and the Shareholder Fund. The countries under study all apply risk-based capital approaches (modern methods), whereas Bahrain and Algeria still use the traditional fixed-rate method to determine solvency margins for Takaful companies. Furthermore, the supervisory authorities in these countries require companies to assess the total available capital with a clear distinction between the available capital for the Takaful Fund and the Shareholder Fund in Malaysia and Bahrain, while Algeria has not set distinct levels for solvency margin coverage.

3.3 Regarding Solvency Levels:

In Malaysia, the central bank requires Takaful companies to establish at least two solvency levels (BNM/RH/PD 033-4, 2017): the Solvency Target Capital Level (STCL = 130% of the Capital Adequacy Ratio -

CAR) and at least one individual Target Capital Level (ITCL = more than 130% of the CAR), both of which are related to the company as a whole.

As for the United Arab Emirates and Bahrain, the solvency levels for Takaful companies depend only on a single level for the entire company. This level is defined as at least 100% of the available capital of the company relative to its solvency margin.

In Algeria, the solvency levels for insurance companies (whether conventional or Takaful) are based on a single level for the entire company. This level varies depending on the type of company (general or life). For example, the solvency margin for general Takaful companies should not be less than 15% of technical reserves, and it should not be less than 20% of the premiums issued and/or accepted, excluding fees and cancellations. If the solvency margin falls below the required minimum, the insurance company must resolve its situation within a maximum of six months, either by increasing its capital or by depositing a guarantee with the treasury (Executive Decree No. 13-115, 2013).

In general, solvency oversight levels differ across the studied countries. Malaysia requires at least two solvency levels, whereas the UAE, Bahrain, and Algeria only have one solvency level for the entire company.

3.4 Regarding the Use of Qardh Hassan:

According to international regulations and standards, there is the possibility of providing a Qardh Hassan (Good Loan) from the shareholders' fund to the participants' fund to cover any solvency deficit, and this loan is to be repaid from future surpluses of the participants' fund (IFSB, 2010).

In Malaysia, Takaful companies are required to provide a Qardh Hassan when the Capital Adequacy Ratio (CAR) formula indicates the need for additional capital to cover a deficit in the participants' fund. This loan must be classified as level two capital and will not be included in the total available capital when calculating the CAR.

In the UAE, the insurance authority has mandated Takaful companies to maintain sufficient resources to support the assets designated to address solvency deficits in the participants' funds. These assets designated for the Qardh Hassan are evaluated separately and cannot be considered part of the assets when calculating the solvency margin for the shareholders (Insurance Authority United Arab Emirates, 2014).

As for Bahrain, the Central Bank of Bahrain requires Takaful companies to grant a Qardh Hassan to the participants' fund, and this loan must be written off or repaid within a maximum period of five years. The loan amount cannot be included as part of the company's available capital. Additionally, any income generated from assets that form part of the Qardh Hassan will only benefit the participants' fund (CA-8.4, n.d.).

In Algeria, according to Article 24 of (Executive Decree No. 21-81, 2021), if the balance of the Takaful fund is negative, the Takaful company can provide a Qardh Hassan to cover the deficit. This loan is a non-interest-

bearing loan, due for repayment within an agreed period, and its amount cannot exceed 70% of the company's own funds.

In general, supervisory authorities in all the countries studied have agreed on the need to provide a Qardh Hassan from the shareholders' fund to cover solvency deficits in the participants' fund, with the loan being repaid from future surpluses of the participants' fund. However, in Bahrain, the loan may not need to be repaid if there are insufficient surpluses in the participants' fund within five years, as mandated by the Central Bank of Bahrain, which requires the loan to be written off if not repaid within this period. Moreover, unlike the other countries, Algeria has placed a cap on the Qardh Hassan loan amount, limiting it to 70% of the company's own funds.

4. International Experiences in Developing Qualitative Solvency Requirements for Takaful Insurance Companies, with Reference to Algeria:

This section discusses the quantitative solvency requirements for Takaful insurance companies according to the solvency frameworks in the countries under study, including Algeria.

In Malaysia, the central bank developed a Sharia governance framework for Islamic financial institutions, including Takaful companies. This framework mandates additional duties and responsibilities for the board of directors and senior management concerning the Sharia aspect. It also requires Takaful companies to establish additional functions such as: the Sharia Board, Sharia Audit, Sharia Compliance, Risk Management related to non-compliance with Islamic law, and Sharia Research (BNM/RH/GL_012_3). Furthermore, the Malaysian central bank introduced qualitative requirements for managing the Internal Capital Adequacy Assessment Process (ICAAP) for Takaful companies. This process involves a comprehensive assessment of risks not included or adequately covered in the risk-based capital framework, as well as setting thresholds for the Individual Target Capital Level (ITCL) above the Regulatory Target Capital Level (STCL). Corrective actions must be implemented if these thresholds are not met (BNM/RH/PD 033-2, 2016). This process is similar to the ORSA process under Solvency II. Additionally, the Malaysian central bank has issued further qualitative requirements concerning the appointment and duties of actuaries. The actuary must have sufficient experience in Takaful insurance and be familiar with relevant Malaysian regulations. The actuary's role includes evaluating and making recommendations regarding surplus distribution and the repayment of Qardh Hassan (BNM/RH/STD 029-5, 2014).

In the United Arab Emirates (UAE), the Securities and Commodities Authority (SCA) requires Takaful insurance companies, as joint-stock companies, to implement a governance system based on corporate discipline and governance standards for public joint-stock companies. This includes defining responsibilities, establishing permanent committees under the board of directors, setting up an internal control system, and establishing a

compliance function (Decision of the Board of Directors of the Authority Decision No. 7/R.M., 2016). These standards apply to all joint-stock companies and are not specific to Takaful companies. Moreover, the insurance authority obliges these companies to implement a risk management system for all risks affecting the company (Insurance Authority United Arab Emirates, 2014).

In Bahrain, the Central Bank of Bahrain (CBB) imposed similar qualitative requirements on Takaful companies as those for conventional insurance companies. These requirements include forming governance structures such as the board of directors, committees, senior management, internal audit, compliance, auditors, risk management, and actuaries. Additionally, the CBB introduced further qualitative requirements specific to Takaful companies, such as the formation of a Shariah governance committee under the board of directors, which must include a Sharia scholar. The audit committee must communicate with the Shariah governance committee to ensure timely reporting of compliance issues (HC-9.3.4, 2011). Other requirements include establishing an internal Sharia audit function and a Shariah board, as well as additional duties for the actuary, including validating agency fees, explaining any deficits in the participants' fund, setting corrective actions, and recommending surplus distribution (AA-4.3A, 2014).

As for Algeria, Takaful insurance companies are not required to establish a comprehensive governance framework or a risk management framework. However, there are some local standards (12 standards) related to internal auditing that insurance companies must adhere to, which were issued in 2016 and 2017 (Ziyadi & Saidi, 2017). Furthermore, Takaful insurance companies in Algeria are required to establish a Shariah supervisory body, according to Article 15 of (Executive Decree No. 21-81, 2021). This body is tasked with monitoring and reviewing all operations related to Takaful insurance, ensuring compliance with Islamic law principles and decisions. The Shariah board's decisions are binding on the company. The Shariah supervisory body consists of at least three members, appointed by the general assembly of the company, based on the board's proposal, with a term of three years, renewable once. Additionally, Takaful companies in Algeria are required to appoint an auditor to oversee compliance with the Shariah board's decisions. This auditor must ensure adherence to Takaful insurance standards and prepare reports to be submitted to the Shariah board and the company's board of directors.

Overall, the qualitative requirements for Takaful companies in Malaysia, the UAE, and Bahrain all emphasize the need for a risk management system and governance framework. In contrast, Algeria only requires some basic measures related to internal auditing, the Shariah supervisory board, and the Shariah auditor. The Malaysian central bank has implemented a comprehensive Sharia governance framework for Takaful companies, while the Central Bank of Bahrain has retained the governance system for conventional insurance

companies but added Takaful-specific requirements. The UAE, on the other hand, has general governance requirements but has not highlighted requirements specific to Takaful companies.

In conclusion, all supervisory authorities in the countries studied agree on the importance of implementing a governance framework and a risk management system for Takaful companies. However, the ORSA system has only been mandated by the Malaysian central bank through the ICAAP process.

5. International Experiences in Developing Disclosure Solvency Requirements for Takaful Insurance Companies, with Reference to Algeria:

This section discusses the disclosure requirements for Takaful insurance companies based on the solvency frameworks in the countries under study, including Algeria.

In Malaysia, Takaful insurance companies are required to disclose their financial information both annually and quarterly to the regulatory authorities and the public. These companies must submit their annual financial statements, Shariah board reports, and capital adequacy reports to the Central Bank of Malaysia. For public disclosure, Takaful companies are obliged to publish their full annual financial statements and semi-annual financial reports on the company's website. Additionally, a summary of their annual financial statements must be published in at least two national newspapers, one in the national language and the other in English (BNM/RH/PD 033-4, 2017).

In the United Arab Emirates, Takaful companies are obligated to disclose their annual financial statements (including the company's balance sheet, income statement, cash flow statement, and statement of changes in equity) to the Insurance Authority, both for the company as a whole and separately for family Takaful and general Takaful. Companies must also submit audit reports, financial requirement disclosures, information about the entity managing the investments of policyholders and shareholders, and the methodology for surplus distribution or deficit coverage (Insurance Authority United Arab Emirates, 2014). Takaful companies are also required to provide quarterly financial disclosures and submit an annual governance report to the Securities and Commodities Authority, which must be available to all company shareholders (Decision of the Board of Directors of the Authority Decision No. 7/R.M., 2016).

As for Bahrain, Takaful companies must disclose their financial position annually to the Central Bank of Bahrain, including annual and quarterly reports, actuarial reports, audited financial statements, and detailed analysis of the financial statements for both shareholder funds and participant funds. Additionally, they must publicly disclose their annual report, which includes information about the company's financial position, performance, governance, risk management strategies, and practices. The report must also detail the agency fees and the profit-sharing ratio paid by the participant fund to the Takaful company (BR-1.1.29A, 2014). Furthermore, Takaful companies are required to disclose interim financial statements, including the balance

sheet and income statement for the shareholder fund and each participant fund (PD, n.d.). To enhance transparency, the Central Bank of Bahrain allows companies to comply with other disclosure standards, in particular Standard 13 (Disclosure of Bases for Determining and Allocating Surplus or Deficit in Islamic Insurance Companies) and 12 (General Presentation and Disclosure in the Financial Statements of Islamic Insurance Companies), issued by the Accounting and Auditing Organization for Islamic Financial Institutions (AAOIFI) (BC-3, n.d.).

In Algeria, Takaful insurance companies, like other conventional insurance companies, must submit several documents annually to the regulatory authorities (Insurance Supervisory Committee) by June 30 each year. These documents include financial statements, a detailed activity report, reinsurance plans, attached schedules, and reports from the accounting officers and the board of directors. They also provide general information such as the company's name, address, founding date, amendments to laws, and board member details, technical data such as technical results per branch, life insurance results, claims provisions, and reinsurance results must also be submitted. In addition to the annual disclosures, companies must send quarterly reports on solvency margin and investments. Furthermore, insurance companies in Algeria are required to publish their audited financial statements within 60 days after approval by the company's management, in at least two national newspapers, one in Arabic (Order No. 95-07, 1995).

Overall, the UAE Insurance Authority has not mandated Takaful companies to disclose both quantitative and qualitative information to policyholders and shareholders (public disclosure). It only requires them to disclose such information to the regulatory authority. Similarly, Algeria focuses on submitting detailed quantitative and qualitative information to the regulatory authority, with limited public disclosure -only requiring companies to publish their financial statements in national newspapers. In contrast, the Central Bank of Malaysia and the Central Bank of Bahrain have made public disclosure of both quantitative and qualitative information mandatory for Takaful companies. Moreover, Bahrain uniquely requires Takaful companies to disclose their risk management framework in the annual report, a requirement not seen in the other countries under study.

In conclusion, the countries under study have established specific solvency requirements for Takaful insurance companies, distinguishing them from conventional insurance companies. However, Algeria still applies the solvency requirements for conventional insurance companies, particularly regarding quantitative disclosures, unlike Malaysia and Bahrain, which have specific frameworks for Takaful companies. Further similarities and differences in the solvency requirements for takaful insurance companies in these countries are illustrated in the following table:

Table N°1: Similarities and Differences in the Solvency Requirements for Takaful Insurance Companies in Selected Countries - with Reference to Algeria

Comparison Aspects		Solvency Requirements for Takaful Insurance Companies in Selected Countries
Existence of Specific Solvency Requirements for Takaful Insurance Companies		Malaysia, UAE, and Bahrain: Yes, with distinction from conventional insurance companies.
		Algeria: No, applies the same solvency requirements as for conventional insurance companies.
Quantitative Requirements	Investment Standards	Malaysia: Prudential person rule; separation of participant and shareholder investments; Sharia-compliant investments; Sharia governance for investments; Investment committee establishment.
		UAE: Quantitative rule application; ensuring Sharia compliance in investments; separation of participant and shareholder investments; family Takaful and general Takaful investment separation; Investment committee establishment.
		Bahrain: Prudential person rule.
		Algeria: Investments must comply with Sharia principles, but still adhere to conventional solvency requirements for covering regulatory obligations.
	Financial Requirements	Malaysia and UAE: RBC model for margin calculation with separate participant and shareholder solvency margins.
		Bahrain: Minimum fund capital and solvency margin; margin defined via a fixed-rate method for the whole company.
		Algeria: Solvency margin based on premiums and technical reserves; solvency margin calculated with the fixed-rate method applicable to conventional insurance companies.
	Coverage of Financial Requirements	Malaysia: Available capital must cover solvency margin by 130%, with separate participant and shareholder capital.
		UAE: Available capital must cover financial requirements by 100%, with separate participant and shareholder capital.
		Bahrain: Available capital must meet financial requirements; separate participant and shareholder capital.
		Algeria: Solvency margin based on premiums and technical reserves, with different rates for each type of insurance.
	Supervisory Levels	Malaysia: Supervisory levels for the company, such as STCL and ITCL.
		UAE and Bahrain: Single supervisory level (100% coverage of available capital vs. financial requirements).
		Algeria: Single supervisory level for the company.
	Qardh Hassan	Malaysia: Qardh Hassan required if the CAR shows capital deficiency in the participant fund; classified as tier 2 capital and deducted from total available capital.
		UAE: Qardh Hassan from shareholder fund, separately evaluated assets for the loan; not

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		considered part of the available capital when calculating solvency margin.
		Bahrain: Qardh Hassan to participant fund, to be written off or recovered within 5 years; any income from Hassan loan assets benefits participant fund only.
		Algeria: Qardh Hassan to participant fund, repayable within an agreed time; cannot exceed 70% of the Takaful company's own funds.
Qualitative Requirements		Malaysia: Sharia governance (roles and responsibilities of the Sharia board, Sharia audits, Sharia compliance risk management, Sharia research function); Risk management; Actuary; Internal capital evaluation process.
		UAE: Corporate governance (nomination and remuneration committees, audit committee, internal control system, compliance function); Risk management system.
		Bahrain: Sharia governance (Sharia board establishment, audit committee communication with Sharia board, internal Sharia auditor function, internal audit, compliance, risk management, actuary).
		Algeria: Sharia board establishment and appointment of a Sharia auditor in the company.
Disclosure Requirements		Malaysia: Annual and quarterly disclosure to regulatory authorities and the public; disclosure of quantitative and qualitative data.
		UAE: Annual disclosure to regulatory authorities of quantitative and qualitative information; quarterly disclosure of some quantitative data; governance report for shareholders only.
		Bahrain: Annual and quarterly disclosure to regulatory authorities and the public; disclosure of quantitative and qualitative data; option for additional external auditors' disclosures.
		Algeria: Annual disclosure to regulatory authorities of extensive quantitative and qualitative information; quarterly disclosure to regulatory authorities regarding solvency margin and investments; publishing financial statements in two national newspapers at least one in Arabic.

Source: Prepared by the researchers.

6. Conclusion:

At the end of this study, it was concluded that there are several differences in the solvency requirements for Takaful insurance companies in the countries under study (Malaysia, the United Arab Emirates, and Bahrain). These differences arise from the reliance of these countries on different principles for the solvency systems of conventional insurance companies (traditional standards, Solvency II applied in EU countries, and the solvency standards in the U.S.A.). At the same time, these countries have made efforts to adapt these principles to align with the specificities of Takaful insurance companies.

As for Takaful insurance companies in Algeria, they still adhere to the solvency requirements of conventional insurance companies, particularly concerning quantitative requirements. Based on the results of this study, several suggestions and recommendations can be made, especially regarding the establishment of solvency requirements for Takaful insurance companies in Algeria and distinguishing them from those of conventional insurance companies, in line with international practices:

- **Legislative Freedom for Takaful Investments:** The Algerian legislator should grant Takaful companies the freedom to invest their funds according to the prudential person principle, without mandating them to invest in non-Sharia-compliant instruments (such as government bonds or securities). Moreover, the legislator should require Takaful companies to establish appropriate procedures to ensure that their investments comply with Sharia principles, including handling non-compliant earnings. These procedures should be clearly defined in the tasks of the company's Sharia supervisory board, which constitutes Sharia governance over investments.
- **Solvency Margin Evaluation Based on Risk-Based Capital (RBC):** The Algerian legislator should require Takaful companies to assess their solvency margin based on the RBC principle. This should either follow a standard model prepared by the Insurance Supervision Committee (CSA) that applies to all Takaful companies in Algeria, or an internal model developed by each company, but which must be approved by the CSA before implementation.
- **Resource Allocation for Solvency Coverage:** The legislator should require insurance companies that operate Takaful to allocate resources (capital, reserves, technical provisions, etc.) to cover their solvency margin.
- **Separate Supervision for Participant and Shareholder Funds:** The legislator should establish separate supervisory levels for the shareholder fund and participant fund, ensuring distinct regulatory oversight for each.
- **Comprehensive Governance and Risk Management Framework:** The Algerian legislator should mandate Takaful companies to establish a comprehensive governance framework and a specific risk management system for the company. In this regard, Algeria can benefit from the experiences of Malaysia and Bahrain.
- **Public Disclosure of Quantitative and Qualitative Information:** The legislator should require Takaful companies to publicly disclose all quantitative and qualitative information, not just publish the company's balance sheet and income statements in two national newspapers. Algeria could benefit from Bahrain's experience in disclosure practices or adhere to the disclosure standards issued by the AAOIFI, specifically standard No. 12 and standard No. 13.

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