Risks and Risk Management in Family Takaful

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Abstract

Takaful is a financial planning tool that can be used as an alternative for conventional insurance. Generally, takaful products are divided into general Takaful and family takaful. A feature of the General Takaful is that it has a short-term policy and that its liabilities coverage is limited to material losses only. On the other hand, family takaful is a long-term policy that includes savings and an investing component. Although the tabarru' fund protects them, the participants can also benefit from the investment returns and savings generated by Shariah-compliant assets. The primary objective of this article is to identify the many types of risks that Family Takaful operators in Malaysia are exposed to and their methods of dealing with and managing these risks. This article is based on a method of library research. In addition, the article highlights the difficulties that Family Takaful operators in Malaysia are confronted with. The hazards associated with running a family takaful business are usually related to operations and investment. Non-compliance risk with Shariah laws, underwriting risk, human resource risks, and fiduciary risks are all risks that exist on the operational side of the business. These risks might occur at any point during the business process. The takaful operator may encounter market, credit, liquidity concerns, and other risks commonly associated with investment on the investment side of the equation. In addition, the researcher offered suggestions on how to mitigate these dangers.

Keywords: Takaful, Family Takaful, Risk and Risk Management

1. Introduction

Takaful is a financial planning tool that can be used as an alternative for conventional insurance. The risks are transferred from the policyholders to the insurance

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companies regarding conventional insurance. In exchange for paying a premium, the insurance operator offers to assume the other party's risk and pledges to repay the other party in the event of a loss or the insured's death. On the other hand, Takaful emphasizes the importance of togetherness and cooperation among its participants. It is founded on cooperation, protection, and assistance among the participants. By pooling their donation (Tabarru') in the Takaful funds, members agree to jointly guarantee one another against loss or damage that may occur to any of them (Arifin, Yazid, &Sulong, 2013).

Takaful goods are classified into two categories: general and family takaful. The short-term nature of general Takaful means that liabilities are restricted to significant losses, participant payments are credited to the general takaful fund, and there are no savings components. On the other side, family takaful is a long-term approach that includes an element of savings and investment. While participants benefit from the tabarru' fund's protection, they can earn and save money through Shariah-compliant investments (Insurance Info, 2012).

Apart from suffering emotionally, when a family Takaful plan participant suffers from a total and permanent disability (TPD) or death, his or her family members and dependents would also suffer financially due to the event. It is shared with other participants who have contributed to the Tabarru' or risk fund to mitigate the risk. When catastrophes occur, the Tabarru fund will reimburse those who have filed claims for compensation. By the agreement, participants in the Family Takaful scheme will share the risk with other participants and alleviate their dependents' burden in certain circumstances.

Participants save and invest for long-term goals such as their children's education, retirement, and spousal support in the event of death or total and permanent disability. In general, a family Takaful plan aims to save regularly over a specified length of time, enjoy investment gains while complying with Shariah rules; and lastly to acquire coverage in the event of death or total permanent disability (TPD) before the maturity of the scheme (Laldin, 2008). Contributions from family members are separated into two accounts: the Participants' Special Account (PSA) and the Participants' account (PA). A portion of the contribution is credited to PSA based onTabarru', while the remainder is credited to PA for savings and investment purposes.

Family takaful accounts for 17% of the worldwide takaful market, with a 2015 GWC of US$ 2.6 billion. South-east Asia, particularly Malaysia and Indonesia, dominate the family takaful market, accounting for 57% of the global market. Between 2012 and 2015, the region's family takaful industry grew at a CAGR of (4) percent, with a GWC of US$ 1.5 billion in 2015. In 2015, the GCC area, which accounted for 27% of worldwide market share, achieved a GWC of US$ 0.7 billion, less than half that of Southeast Asia, but with a higher CAGR of 13% over the same time.

Africa recorded the most significant compound annual growth rate of 22% between 2012 and 2015. It is unsurprising given the market's recent introduction of Takaful and its comparatively low GWC of US$ 0.2 billion. Similarly, other nations such as Bangladesh, Pakistan, and Turkey contribute minor amounts to the global takaful market, with an aggregated GWC of US$ 0.3 billion, but continue to develop rapidly, with an 11 percent compound annual growth rate from 2012 to 2015.

This paper aims to examine the risk related to family Takaful and discuss how to manage these risks.

2. Risks and the Management of Risks

There are many different interpretations of the term risk. Generally speaking, the risk characterizes any circumstance with a high degree of uncertainty about the result. According to Jorion and Khoury (1996), risk is the variability or volatility of unanticipated events. In the insurance industry, the term risk is frequently used to refer to the possibility of future losses linked with a condition. A high-risk policyholder has a high estimated value of losses that the insurers will be required to pay (Niehaus & Harrington, 2004).

Regardless of the range of connotations associated with risk, more risks imply higher costs or losses that financial institutions incur. As a result, risk management is applied to manage the risks that financial institutions are exposed to. Rsk management can be defined as the process of finding, assessing, and responding to risks and ensuring that the outcomes of these procedures are communicated to the relevant stakeholders promptly (Queensland Treasury, 2011). A systematic application of management policies and procedures to duties such as risk evaluation, risk control and risk communication is also included in this process (APEGGA, 2006). The primary goal of risk management is to keep the cost of risk as low as possible (Niehaus & Harrington, 2004). On the other hand, risk management is not about minimizing losses but optimizing the risk-reward relationship (Laldin, 2012).

2.1 The Islamic Perspective on Risk Management

There are numerous examples of risk management in the Quran and Sunnah. For instance, in Surah Yusuf, Yusuf peace be upon him, interprets a dream from the King of Egypt, included in the Quran.

"And [subsequently] the king said, "Indeed, I have seen [in a dream] seven fat cows being eaten by seven [that were] lean, and seven green spikes [of grain] and others [that were] dry. O eminent ones, explain to me my vision if you should interpret visions." (Yusuf:43)

The Prophet Yusuf (AS) then interpreted the king's dream, predicting that Egypt would experience seven years of drought followed by seven years of prosperity. Based on this interpretation, Prophet Yusuf (AS) devised a strategy for averting the disaster. The Egyptian people are to cultivate crops during the first years actively and then sell or conserve the harvests for use during the long draught period predicted in the future.

Another source of the Islamic perspective on risk management is found in the same Surah:

And he said, "O my sons, do not enter from one gate but enter from different gates; and I cannot avail you against [the decree of] Allah at all. The decision is only for Allah; upon Him, I have relied, and upon Him let those who would rely [indeed] rely." (Yusuf: 67)

In the preceding verse, Prophet Yaqub (AS) instructs his sons, bringing Prophet Yusuf's brother, Benyamin, to see Prophet Yusuf (AS) and enter Egypt by several gates. It is to shield them from evil's gaze, as Prophet Yaqub did not wish for them to suffer any harm (Ibn Kathir, 1370).

Another Islamic stance on risk management is from a hadith which Anas Bin Malik reported; the Prophet SAW asked a Bedouin who had left his camel untied, "Why do you not tether your camel?" The Bedouin then said, "I put my trust in God." The Prophet SAW then remarked, "Tie up your camel first, then put your trust in God." (Tirmidhi) Here, we are instructed to expend some effort initially in preserving ourselves from risks before leaving everything in God's hands.

3. Literature Review

Risk management is a process in the Takaful sector that involves recognizing prospective losses for an operator and selecting the most appropriate strategies for dealing with those potential losses when they arise (Aris, Tapsir, & Talib, 2012). Among the most critical areas of risk management for takaful operations are Shariah compliance, investment activities management, and human resources administration. Ineffective risk management may result in liquidity problems, unsuccessful procedures, and the likelihood of continuing the firm in the future. It is frequently the result of a lack of structured risk management practices, including risk detection, analysis, and control (Tah&Carr, 2001). Failure to follow up on risks across the various stages of risk management and a lack of communication among the different partners could result in ineffective risk management (Liu, Li, Lin, & Nguyen, 2007).

The risks posed by the Takaful company are classified into five categories, according to Akhter (2010): operational risk, market risk, credit risk, underwriting risk, and liquidity risk. There are specific methods for dealing with each category of risk. To learn more about these methods. For example, in the case of operational risk, strengthening the company's corporate governance framework can help mitigate the risk's impact. Appropriate training and ethical corporate practices would also help alleviate the consequences of this risk. Because being Shariah-compliant is also included in the operational risk, Takaful operators must verify compliance through Shariah auditing. Failure to do so would result in other risks, such as reputational risk. In addition, the author asks for the independence of the Board of Directors to develop policies for effective risk management. Also suggested by the author is the establishment of private rating organizations to evaluate the investment opportunities available to Takaful operators, who are also having difficulty obtaining Islamic instruments for their investment funds.

Ahmed and Khan (2001) outline several risks that Islamic financial organizations confront that are similar to these. Market risk is derived from the instruments and assets exchanged on the market. The fluctuation of the price in the market can impact the value of an investment in either a positive or negative way. According to the Takaful operators, this risk is inherent in the assets they invest in, on behalf of the participants, using the proceeds of the investing firm. According to the authors, credit risk is defined as the failure of a counterparty to meet its commitments on time and follow the agreement's terms. If this risk is not managed correctly, it will eventually result in liquidity risk. Liquidity risk emerges due to financial institutions' inability to meet their liquidity requirements. To mitigate this risk, the authors recommend that financial institutions diversify their asset investments into various forms of investments while also limiting their exposure to illiquid investment channels. The writers also discussed operational risk, which is defined as the risk that develops due to a process, technology, or person's failure to operate effectively and efficiently. Operational costs rise when institutions experience operational shortcomings, and their net income is negatively affected.

In his article, Azman (2010) discusses the practice of underwriting and the risks that are tolerated under Shariah regulations. To assist its underwriters in determining whether or not the company should accept the risks, Takaful operators develop their own underwriting rules. In the author's opinion, it is permissible to use standard insurance underwriting techniques so long as they do not conflict with Islamic law. There are hazards acceptable to Shariah, and risks that are not acceptable to Shariah must be considered. Shariah does not accept companies whose primary activities are interest-based, gambling, and liquor and should be excluded from the risks covered by Takaful operators and should be avoided while performing investment activities for investment funds, according to a guideline issued by the Malaysian Securities Commission on Non-Shariah compliant businesses. Takaful operators are responsible for guaranteeing that their assets are handled and invested according to Shariah principles because they are the custodians of the funds.

Like Islamic banks, Takaful operators, according to Haron and Taylor (2009), are exposed to the same risks. According to the authors, the risks Takaful operators face, and their respective undertakings are investment risks, liquidity concerns, and operational risks. Even though the risks associated with Takaful funds and Takaful operators may overlap, the management of each risk can be accomplished via the use of unique procedures. Furthermore, the risk management approaches used by asset management organizations may be adapted for use in Takaful enterprises to reduce their risk exposure. Their conclusion stated that the Takaful Operators should incorporate their 'lessons learned' into their ongoing risk management operations, which is a critical component of best practice in risk management in Takaful.

4. Risks in Family Takaful

Risk Management in Islamic Finance is not much different from risk management in conventional finance in scope and scale. However, additional risks specific to Islamic Finance, notably in the case of Takaful, must be considered. A Takaful Operator is expected to manage risks in two primary areas: the investment aspect, where hazards such as underwriting and investment risks occur. Participants' Risk Funds and Participants' Investment Funds are two types of funds subject to these risks in general. Second, Takaful operators must be prepared to deal with the risks associated with their day-to-day operations, which encompass practically all aspects of the business. The Takaful Operators are subject to several risks, including fiduciary risk, business risk, and operational hazards. These risks are in addition to the risks connected with investments in the shareholders' assets (Haron& Taylor, 2009).

4.1 The Risks Involved with Investing Activities

In contrast to General Takaful, Family Takaful has two independent funds, the Participant's Risk Fund and the Participant's Investment Fund. Because the objectives of each of these funds are distinct, each of these funds has a different investment strategy. Considering that the Participant's Risk Fund provides Takaful coverage for the participants, the investment should be sufficient to allow the fund to meet its Takaful obligations. Participants' Investment Fund will be utilized to meet expectations of return on investment as well as the prospect of covering future tabarru' deductions while this is being worked out.

In addition to the investment risks linked with the investment products, Takaful operators are also exposed to the risks associated with the fund's investments. The types and levels of investment risks they are exposed to are determined by the kind of products they invest in.

i. Market Risk

When there are variations in the price or value of the assets that Takaful operators invest in, such as Sukuk, there is the danger of a loss resulting from the price swings (Islamic Financial Services Board, 2012).

Another form of market risk is the difference between the actual rate of return and the expected rate of return. According to Prudential BSN Family Takaful, the company's primary market risk exposure is the decline in the value of the company's stock market holdings. The change of market prices, such as stock prices and profit rates, can hurt the company's financial assets and obligations. However, not all price swings are harmful; in fact, price movements can be beneficial to participants and shareholders in the achievement of the financial objectives of the operators.

ii. Credit Risk

Credit risk is the possibility that a counterparty may fail to fulfill its commitments in line with the terms of the agreement (Islamic Financial Services Board, 2012). Participant's Risk Fund, Participant's Investment Fund, and Shareholder's Fund are all exposed to this type of risk if the assets they hold as investments fail to perform as expected. According to an examination of their annual reports, most Takaful operators in Malaysia believe that their credit risk is predominantly derived from Retakaful transactions.

According to Bank Negara Malaysia's governance and business policy, takaful operators purchase corporate bonds rated by recognized rating agencies to reduce the default risk. Participants' Investment Funds are liable for the liabilities of investment-linked goods, and the participants themselves bear the risk associated with these products.

iii. Risk of Liquidity

A liquidity risk, according to the Islamic Financial Services Board (2012), is defined as "the risk of financial loss to a Takaful undertaking arising from the undertaking's inability either to meet its obligations or to fund increases in assets as they become due without incurring unacceptable costs or losses." All three Funds — the Participant's Investment Fund, the Participants' Risk Fund, and the Shareholder's Fund — may be subject to liquidity risk at some point in the future. PIF and PRF may experience liquidity problems due to their inability to satisfy claims obligations owed to participants or even due to excess distributions from the funds. If this occurs, the PRF can recover its deficits from the Shareholders' Fund, which Qardhul Hasan administers.

On the other hand, there is a possibility that SHF would experience liquidity challenges, which will negatively impact its ability to supply Qard to PRF when required. Failing to meet the claims responsibilities of Takaful operators may result in other issues such as loss of confidence, loss of clients, and damage to the company's reputation, which may result in the Takaful Operators being unable to continue operations (Ahmed & Khan, 2001).

5. Operational Risks

Operational risk is the possibility of financial loss due to insufficient or failed internal processes or external occurrences. Operational risk, in contrast to market and credit risk, which are typically confined in certain sections of the firm, is inherent in all corporate processes. Internal procedures that are ineffective, incompetent human capital, and an incapable information technology system are all potential reasons for operational failure. This also covers the risk of loss stemming from non-compliance with Shariah regulations and failing to fulfill a TO's fiduciary responsibilities (Islamic Financial Services Board, 2012).

i. Risk of Shariah Non-Compliance

Shariah's non-compliance risk is an operational risk that processes and controls must mitigate. The danger of loss arises from Takaful operations' internal and external variables. In contrast to its conventional counterparts, Takaful operators must comply with Shariah regulations, limiting their investments to Islamic financial instruments. As a result, their investing possibilities are limited. This is much more difficult for Family Takaful, given the nature of the business necessitates long-term savings and investment. Due to scarcity of investment-grade instruments affects Takaful enterprises globally, including Malaysia, while specific locations struggle more than others (Islamic Finance News, 2013).

Regardless of the lack of Shariah-compliant financial products, Takaful Operators must adhere to Shariah standards established by local and international authorities. Failure to adhere to the requirements may result in legal action, client loss, and potential reputational harm. While screening for suitable investments may cost time and money in the short term, it increases the Takaful Operators' credibility over time.

Shariah's non-compliance in investments can also result in income purification, including charitable donations, which means owners will lose some of their money.

Despite exercising caution in selecting Shariah-compliant investments, the investment instrument may become inadmissible due to the latest review by authorities, requiring Takaful operators to terminate the transaction. As with Shariah's non-compliance in investment, this risk may also occur in the underwriting process. For instance, the risks taken before may prove unacceptable afterward, requiring the operator to terminate the contract or donate the proceeds to charity. Constantly shifting legislation might also contribute to industry instability. While new rules are a healthy development, the growing range of regulations between countries may make it more difficult for Takaful operators to operate across borders and confuse clients and other market participants (Miliman, 2013).

ii. Risks in Underwriting

The IFSB defines underwriting risk as 'the risk of loss resulting from underwriting activities linked to the Participants' Risk Fund.' This risk arises from pricing assumptions or erroneous evaluations made during claim settlement. This form of risk is strongly tied to the operational features of Takaful Operators. Underwriters are responsible for assessing the risk that their prospective clients face. Underwriters will determine how much contribution a potential participant should make and how much coverage they should obtain during this procedure. Finally, their responsibility is to shield Takaful operators from financial loss due to participant claims. Underwriting for Family Takaful often includes medical examinations in addition to an assessment of age, lifestyle, and occupation.

Some consumers will enroll in the Takaful plan without notifying the operators that they require medical care for a recognized condition regardless of the medical underwriting process. This phenomenon is referred to as 'adverse selection.' The Actuarial Standard Board defines adverse selection in its Actuarial Standard of Practice No. 12 as "actions taken by one party based on risk characteristics or other information known to or suspected by that party that result in a financial disadvantage to the financial or personal security system." When such participants purchase Takaful insurance at a discounted or average rate, the claim ratio increases; this results in severe financial limitations for Takaful operators and detrimental effects on their stability (Islamic Financial Services Board, 2012).

Provisioning risk is connected to underwriting risk since it involves the risk of underestimating the amount put aside to cover claims that have been incurred or have not yet occurred but are projected to occur under contracts in force at the time in question. Depending on the complexity of the claim, it may take some time before it is finally calculated. Economic developments, discount rates, and court rulings all affect the claims. As a result, this computation is always fraught with ambiguity (Islamic Financial Services Board, 2012).

iii. Risk to Human Resources

Ernst & Young identified human resource risk as a critical business risk for many Takaful operators worldwide in its 2012 World Takaful Report. According to their analysis, there is a crucial scarcity of skilled human resources, notably in Family Takaful, risk management, and Shariah compliance. Inadequate knowledge about Takaful products also contributes to the risk element since players cannot distinguish Takaful goods from insurance, preventing them from being adequately marketed. Due to a scarcity of qualified human resources, aggressive recruitment accompanied by an enticing salary is expected in the business, as Takaful operators battle to keep their best employees.

iv. Fiduciary Risk

According to Investopedia, a fiduciary is a person who has been legally appointed and authorized to hold another person's assets in the trust. Takaful Operators are the entities designated by participants to manage their funds on their behalf. The fiduciary risk might occur due to the manager's misbehavior or neglect in performing his or her duties (Haron& Taylor, 2009).

As trustee of a public fund, a Takaful operator is responsible for investing the funds under its administration prudently and prudently to avoid loss or excessive risk. They are tasked with managing participant contributions and ensuring that claim obligations are met, as stipulated in the takaful contract. While participants face the investment risks associated with the Participants' Investment Fund and Participants' Risk Fund, the Takaful operators also bear the responsibility to act diligently in the best interests of Shareholders. When managing PIF and PRF, Takaful operators must remember that any risks associated with fund management may also affect the Shareholders' Fund.

6. Risk Management in Family Takaful

6.1 Investment Risk Management

Contributions to family takaful are pooled into two types of funds. Depending on the takaful plan selected by the participant, a portion of the donation will be invested in the participants' risk fund (PRF). In contrast, the remainder will be invested in the participants' investment fund (PIF). Depending on the takaful plan's structure, contributions may be pooled in the PIF first for investment purposes and then dripped into the PRF regularly for claim purposes. In some systems, dripping may operate conversely, with contributions initially parked in the PRF and then dripped into the PIF for investment in Shariah-compliant avenues (ISRA, 2013).

The PRF and PIF are typically invested in separate accounts because the risks connected with the funds are distinct. The PRF is the tabarru' fund, and it is from this fund that claims are made. It is also invested to create money to pay claims from it. Any surplus remaining after all claims have been processed is given to the participants. Although the PRF fund is at risk of losing money due to its investment decisions, fund managers must take necessary precautions to guarantee that their investments are made with due diligence.

The PIF is the designated investment account for regular family takaful and investment-linked products. A takaful cover with an investment unit connected is an investment-linked product. It is decided on the investment's unit price by dividing it into units of equal value. The unit price is then invested from the PIF into a selection of Shariah-compliant mutual funds. Due to the nature of the risks, the investment in general Takaful is typically channeled into short- to medium-term investments; on the other hand, the investment in family takaful is generally directed into medium- to long-term investments due to the nature of the dangers. The participants in the PIF are fully responsible for the investment risk, and the pre-agreed profit distribution ratio distributes the profits.

Typically, the takaful operator will designate a fund manager to oversee the PIF's administration. It is critical for the fund manager to invest in Shariah-compliant investments; otherwise, the investment will suffer from Shariah non-compliance risk, which will result in reputational risk for the fund management. Consequently, the investing operations of the takaful company should be overseen by the Shariah advisory council of that organization. An experienced investment manager who knows how to manage funds on behalf of participants should be chosen by the Takaful operator. The takaful operator must also report the performance of the investment as well as the expenses incurred in connection with the acquisition, among other things.

Because of the differences in risks associated with the PRF and PIF, it is recommended that takaful operators avoid combining the two funds to invest in them. The takaful fund manager must have a comprehensive risk management structure that addresses the primary risks typically associated with investments, including market, credit, and liquidity risks, among others. The investment strategies must sustain the takaful funds for claims while also providing returns to the investment-linked takaful holders. The framework must also include a method for monitoring, controlling, and enforcing investment risk restrictions.

i. Management of market risks

In the stock market, market risk is created by fluctuations in the price of investments or commodities traded. Even though takaful operators are not exposed to interest rate risk, they are exposed to rate of return risk, equity price changes, and exchange rate risk. Diverse investments with varying degrees of risk are best gathered together in a portfolio to reduce risk exposure. Using correlation analysis, fund managers can lower the risks in their portfolios.

Takaful operators cannot hedge market risk because they cannot use traditional derivatives products. However, a few hedging instruments such as futures, swaps, and options offered by financial institutions in the Islamic derivatives market are still in their infancy (Syed Alwi, 2012). Alternative risk mitigation approaches such as stress tests and Value at Risk (VaR) techniques are available to takaful enterprises. VaR is a measure of expected loss when keeping a portfolio for a certain amount of time and is appropriate when the market is in a normal state of operation. In addition, fund managers can develop scenarios that reflect the volatility of the market circumstances and use them to measure the predicted performance of their portfolios in a stress test.

ii. Credit risk management

When one party fails to perform his or her share of the contract, a takaful operator has a credit risk, which fails to obtain cashflows or assets from the other. Because payment for family takaful is usually accepted ahead or quarterly, the credit risk associated with participation can be maintained to a bare minimum. Otherwise, the coverage will lapse. Credit risk associated with investment operations emerges when the takaful operator is exposed to default risk if the investment does not provide the desired profits. It will impact both the participants' risk and investment funds, respectively. Takaful operators can reduce their investment risk exposure by diversifying their portfolios based on the issuer, industry, and geographical location they operate in. It is also necessary to conduct evaluations of the creditworthiness of the counterparties offering equities or Sukuk for investment to assess whether the investment will be profitable. Another crucial feature is the existence of a robust internal control mechanism to ensure that credit risk exposures are kept within the limits of prudential norms at all times.

Credit risk might also occur due to retakaful arrangements if the retakaful firms cannot pay claims to the takaful operators. In this case, the takaful operator's job is to select retakaful arrangements with retakaful operators who have a good rating, credibility, and the ability to provide complete retakaful coverage.

iii. Management of liquidity risks

In a takaful company, liquidity risk might arise due to insufficient cash to pay claims and the policy maturity price when they are due. It is caused by a lack of sufficient liquid assets or a high amount of obligations on the balance sheet. When investment assets such as stocks, bonds, Sukuk, real estate, or other non-cash forms are not readily convertible into cash, the takaful operator will have difficulties if the need arises to convert the assets into cash. To build diversified portfolios, takaful operators should consider investing in stocks and Sukuk from well-established companies. The management of cashflow and liquidity ratios can also help reduce the risk of liquidity occurrence. Cashflow projections will necessitate the use of a minimum amount of cash to cover anticipated outflows of funds. The liquidity ratio is calculated by comparing the number of liquid assets to liquid liabilities. As a result, an excellent asset-liability management structure and a risk-based capital framework are required.

iv. Management of Assets and Liabilities

Takaful operators must have robust asset-liability management (ALM) system in place to limit the risks connected with their takaful funds and investment funds. ALM is a critical component in the process of mitigating liquidity risk. As a result of adverse market moves, ALM ensures the availability of surplus capital to absorb liabilities.

The nature of family takaful necessitates the accumulation of long-term assets to satisfy the obligations of the policy's liabilities when they become due. According to the Guidelines on Valuation Basis for Liabilities of Family Takaful Business (BNM/RH/GL 004-20), a complete description of the liabilities of the family takaful fund may be found. The issuance of long-term Sukuk on the Islamic capital market is many, although they are few and far between. In addition, the secondary market is operational, but there are few tradable instruments available because investors prefer to retain their assets until they reach maturity.

According to BNM, family takaful funds invest around 60% of their assets in Islamic Private Debt Securities and Equities with maturities ranging from short- to medium-term. Takaful operators must have an asset mix that includes a variety of various risk levels for each form of takaful fund, as well as the necessary liabilities. Takaful operators must maintain a proper balance between their assets and liabilities at all times.

v. Framework for risk-based capital formation

BNM introduced the Risk-Based Capital Framework for Takaful Operators (RBCT) (BNM/RH/GL 004-23), which is part of the solvency requirements for takaful operators. The BNM issued this framework on October 30, 2012, and it became effective on January 1, 2014.

This framework provides instructions to takaful operators regarding the minimum amount of capital that must be maintained to operate a takaful operation. Takaful companies are exposed to many risks that might affect their assets and liabilities. Every asset and liability item in the RBC framework is valued at fair value, and a risk weightage percentage is assigned to each item to reflect the risk. The higher the level of risk, the higher the level of capital charges (Frenz and Soualhi, 2010).

The RBC framework is intended to assist regulators in identifying takaful enterprises experiencing financial difficulties and taking corrective action to keep them from going bankrupt. The amount of capital necessary reflects the risks associated with the shareholders' fund and the takaful funds, respectively.

This framework applies to retakaful operators registered under the Takaful Act 1984 and other parties. Essentially, the capital adequacy ratio (CAR) determines the required quantity of capital, with a target capital level of at least 130 percent as a minimum (Milliman, 2011).

BNM has issued Guidelines on Investment Management for Takaful Operators (BNM/RH/GL 004-19), which will take effect on April 20, 2009. This guideline places a strong focus on the board of directors' responsibility for ensuring that proper investment and risk management procedures are implemented, regardless of whether the investment operations are delegated or outsourced to other parties. The senior management team is in charge of implementing and monitoring the investment policy set by the board of directors and ensuring that subordinates carry out their responsibilities by the plan.

Suppose the takaful operator decides to outsource the investment management activities to a third party. In that case, the engagement contract must specify the policies, methods, and limits that the third party will follow. The takaful operator must maintain sufficient employees to monitor the third party and ensure that successful investment management objectives are carried out. If a third party hurts the management of the takaful fund investment, the appropriate actions must be taken immediately.

6.2 Risk Management in the Underwriting Process

As a result of the decision to purchase family takaful insurance, the takaful operator will be subjected to various levels of adverse selection. Combinations of high-risk participants who have a higher possibility of claiming from the takaful fund due to health concerns vs. individuals who are healthy and have a lower chance of claiming from the fund. High claims from the takaful fund increase the likelihood of the takaful fund experiencing severe liquidity shortages. The fact that family takaful focuses primarily on life expectancy and health means that the takaful operator must have a mechanism to assess the possibility of death or permanent disability occurring in a family. Individuals at high risk of contracting a disease are expected to undertake medical examinations as part of the standard measures of participant selection.

Regarding family takaful, mortality and morbidity rates are pretty steady, which means that underwriting risks are somewhat predictable. To be successful, the takaful operator will need to follow the same principles as traditional life insurers, founded on actuarial methods and statistical approaches. The takaful operators are expected to have a wide range of information about the loss expectation and will be able to price their premiums adequately based on this knowledge. It is essential to avoid a deficiency in the takaful fund and the need for an interest-free loan or qard from the shareholders' fund.

i. Risk Management in the Operational Domain

Internal system weaknesses, such as mishandling cash and personnel and erroneous decision-making, are frequently the fundamental cause of operational failures. An organization's processes are slowed down by an out-of-date information system, which increases the likelihood of internal collapse.

People, process, and technology, being the three primary drivers of operational risk in an organization must be handled effectively and efficiently. The takaful operator must make significant investments in acquiring highly qualified and experienced employees and enriching their employment experiences through appropriate training. With the progress of technology today, information systems are essential elements that cannot be overlooked. Although the need for complex computerized systems is not as critical as in the banking industry, an effective computerized system is essential for screening potential takaful members and processing claims. As a continuous measure, the internal audit committee is vital for providing a comprehensive picture of the entire system and process and highlighting the need to correct errors and strengthen existing deficiencies. External auditors are also acceptable for providing unbiased opinions and making recommendations for improvement.

ii. Reputational Risk Assessment and Management

In this case, the risk is related to the takaful operator's fiduciary duty or governance obligations towards the takaful fund and the takaful participants. In Malaysia, the hybrid takaful model exists, and the takaful operator, who serves as both agent and *mudharib* for managing the takaful fund, is responsible for ensuring due diligence. One of the most significant components is to carry out the responsibilities by the principles of Shariah; otherwise, the risk of Shariah non-compliance would be triggered. Failure to adhere to this requirement will jeopardize the relationship between the takaful operator and the takaful fund and expose the takaful operator to reputational damage.

When it comes to investing in takaful funds, the highest level of care must be taken. To conform with Shariah principles and conduct ethical business, the takaful operator's employees must receive appropriate training. It is critical to conduct periodic internal assessments to control reputational risk. The Shariah advisors are responsible for ensuring that Shariah compliance processes are followed. When it comes to maintaining the reputation of a takaful operator, the internal risk management committee plays a critical role.

6.3 Retakaful

When it comes to conventional insurance, insurance operators may choose not to cover specific types of risks as part of their risk management plans and instead transfer them to a giant insurance operator. Reinsurance is the term used to describe this process. In Islamic insurance, it is referred to as retakaful or a takaful for takaful operators, depending on the context. Retakaful is one of the risk mitigation strategies that may be used to reduce underwriting risk (IFSB-ED14).

Concerning the concepts and operations of retakaful, the operator is virtually identical to a takaful operator, with the only difference being the participant's participation. A takaful operator is a party to a retakaful operator's transaction and participates in that transaction. To diversify risk portfolios, lower the likelihood of financial devastation when huge genuine risks materialize, and enhance capital to meet regulatory requirements, takaful operators have turned to retakaful as a primary means of doing so (Mahomed Akoob, 2009; Rosmi, 2011). Takaful operators must ensure that risks are homogeneous across their portfolios and that financial portfolios do not fluctuate (Asmak, 2011). The retakaful operators will be given access to the portfolio of unaffordable risks.

A takaful operator and a retakaful operator with a distinct operational model may also enter into a retakaful contract. For instance, one side is a wakalah-based firm, while the other is a mudharabah-based one. General and family Takaful's nature and risk characteristics may necessitate that various organizations use distinct models (Rosmi, 2011).

Due to the small number of retakaful businesses in Malaysia. If local retakaful companies cannot provide retakaful cover, takaful operators may choose a Shariah-compliant international retakaful company. If the risks transferred to a retakaful company may hurt the takaful operator's entire business, the takaful operator may seek reinsurance from a reinsurance company. However, the takaful operator must justify his or her actions to the Shariah committee and obtain clearance from the company's Board of Directors (BNM/RH/GL 004-22). This permission is founded on the concept of darurah and is only transitory. It is no longer applicable if other alternatives exist, such as risk pooling with other takaful operators or the emergence of new retakaful companies.

5.4 Risk Management in the Enterprise (ERM)

Enterprise Risk Management (ERM) is a holistic approach to risk management that encompasses planning methods, leading, and managing an organization's activities to mitigate risk's effects (Baranoff, 2004). ERM incorporates comprehensive strategies into a risk management framework tailored to the business's nature and objectives. ERM may be used in a takaful business to control various sorts of risks inherent in the takaful fund and risks posed by the takaful operators. The critical component in implementing ERM is determining the multiple stakeholders' monies (IFSB ED-14). The risk appetite must be documented clearly, precisely, and easily understood by the reader and then conveyed to the organization's entire workforce. To ensure the effectiveness of ERM, the following procedures must be completed: risk identification, risk assessment, response, control, risk monitoring, and risk reporting.

There are two types of funds available for family takaful: the Participants' Risk Fund (PRF) and the Participants' Investment Fund (PIF) (PIF). The takaful operator must identify and analyze various risks associated with the money, not to mention operational and business risks associated with his or her role as manager of the funds and takaful firm. The capacity to manage risks effectively avoids financial losses that damage shareholders' funds. In a shortfall in the PRF, the shareholder's fund will provide qard to the PRF, and the takaful management must guarantee that this risk is minimized.

In Malaysia, Islamic financial institutions, banks, and non-banks are strictly controlled. The Takaful Act 1984 regulates the industry, which is now overseen by the Islamic Financial Services Act 2013. (IFSA 2013). As organizations become more regulated, the level of risk management required by regulators increases proportionately. Nor Amalina (2012) revealed that firms more exposed to risks and uncertainties are better off implementing ERM as part of their risk management strategy. ERM adoption is still low among Malaysia's publicly traded enterprises (Wan Norhayate, 2011). Most businesses that use ERM are well-established and overseen by an experienced Chief Risk Officer (CRO) and Board of Directors.

Additionally, Ahmad Shukri (2012) found seven characteristics that influenced ERM implementation. They include the appointment of a chief risk officer (CRO), leverage, profitability, foreign diversification, majority shareholders, scale, and revenue. Businesses with a decisive edge in certain areas can use ERM more effectively than others. As Gatzert and Martin (2013) noted in their numerous research studies, ERM demonstrates a significant association between the capital model of life insurers and cost efficiency, but not with the capital model of property-liability insurers. Additionally, they discovered the significance and necessity of holistic risk management systems, notably in the banking and insurance sectors, which regulators constantly monitor.

Standard and Poor's rating service relies on ERM when reviewing and rating global insurance companies. It demonstrates the critical nature of ERM in determining whether insurance companies operate within a risk management framework designed to avert future losses. However, implementing ERM is hampered primarily by a firm's financial, human resource, and information technology capabilities (as quoted by Gatzert and Martin 2013). The implementation's performance has been inconsistent in other industries; however, this could be attributed to a lack of data and empirical research. Most studies are conducted in developed countries, and additional analysis on the success rate is required for developing countries.

Takaful Malaysia and Takaful Ikhlas are among the takaful firms in Malaysia and several other publicly traded companies that use ERM as part of their risk management strategy.

Conclusion

Family takaful focuses on providing participants with both takaful coverage and investment or savings opportunities. Therefore, Takaful businesses must have good risk management techniques to limit the risks inherent in family takaful. The risks associated with family takaful products are substantially distinct from those related to general takaful goods. Whereas the claims in available takaful goods are often of short duration, the claims in family takaful products are of a medium to lengthy period. As a result, risk management solutions vary according to the maturity and occurrence of risks. Additionally, the risks associated with family takaful products are relatively constant and predictable.

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