INTERNATIONAL JOURNAL OF ACADEMIC RESEARCH IN BUSINESS & SOCIAL SCIENCES

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ISSN: 2222-6990

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To Link this Article: http://dx.doi.org/10.6007/IJARBSS/v12-i9/14633 DOI:10.6007/IJARBSS/v12-i9/14633

Received: *14* July 2022*, **Revised:*** *18* August 2022*, **Accepted:*** *29* August 2022

Published Online: *10* September 2022

In-Text Citation: (Yusof et al., 2022)

To Cite this Article: Yusof, M. F. M., Ismail, W. Z. W., & Ahmad, I. (2022). Viability of Securitized Takaful and Retakaful in Takaful Industry. *International Journal of Academic Research in Business and Social Sciences*, *12*(9), 816 – 828.

Vol. 12, No. 9, 2022, Pg. 816 – 828

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INTERNATIONAL JOURNAL OF ACADEMIC RESEARCH IN BUSINESS & SOCIAL SCIENCES

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ISSN: 2222-6990

Viability of Securitized Takaful and Retakaful in Takaful Industry

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Abstract

Retakaful management and capital management of the takaful industry may be achieved by replicating the economic benefits of similar products. However, Alternative Risk Transfer (ART) is a conventional product which is not compliant with Shariʿah. For this purpose, this research is undertaken to explore the viability of introducing takaful securitization based on principles and practices of takaful and other relevant Shariʿah approved contracts for securitization, such as ṣukūk. This will also enhance financial intermediation through convergence of the takaful industry with the Islamic capital market. The researcher suggests that the products be termed as 'Securitized Takaful and Retakaful' (STAR). This is a qualitative and applied study which is undertaken in the context of Malaysia, a premier centre for Islamic finance; thus, a potential choice for the development of STAR. The primary data gathered from interview conducted with selected industry experts consisting of Shariʿah scholars, regulator, takaful and Islamic capital market practitioners, reveals a general lack of understanding on the subject. Secondary data is derived from published reports from various authorities on the subject. However, as a new innovation, there is an apparent dearth of literature and research on the subject. Hence, the investigation on the viability of STAR, is benchmarked with the conventional ART mechanism, that has a wide body of knowledge, experience and expertise on the subject. Data comprising of interview, published reports and literature is analyzed. Upon condensation of data, a proposed framework is formulated, that encompasses the major elements as a proposed blueprint for the implementation of STAR. This research achieves its objectives of highlighting the viability and the way forward to enhance retakaful and capital management by replicating the economics benefits of ART products through takaful securitization in the form of STAR solutions.

Keywords: Vialibility, Securitization, Takaful, Retakaful, Takaful Industry

Introduction

In the case of Malaysia, which aims to cement its standing as the global hub for Islamic finance, Bank Negara Malaysia (BNM), has promulgated the Financial Sector Blueprint (2011-2020). This blueprint targets that Islamic financial industry in the country, will contribute at least forty percent (40%) of the total market share, and potential of about 56,000 new employment opportunities. Similarly, the Securities Commission of Malaysia (SC), has also issued the Capital Market Master Plan (2011-2020), and the Islamic Fund and Wealth Management Blueprint . This is done in order to push forward the full potential of the country, as a global leader in this sector of finance. The Malaysian government's efforts to deepen Islamic finance in the country, has received recognition by Moody's 'credit positive' ranking (New Straits Times Online, 2018). The nature of Islamic finance, which propagates the virtues of transparency, fairness, ethical, equitable dealings, and the overarching aim of promoting economic and social justice, has also attracted non-Muslims (Chow, et al., 2014; Laldin & Furqani, 2013; Khan & Bhatti, 2008).

Islamic finance has certain similar traits to the concept of ethical and socially responsible investment and banking practices; which have sizeable followers in the conventional financial markets. The Global Ethical Finance Forum (2017), reported that, the estimated global ethical finance asset was about US$22.89 trillion. Adams (2021) reported that this sector of finance is expected to hit US53 trillion by 2025, representing a third of global Asset Under Management (AUM). Islamic finance has the potential to tap into this huge customer base. In a similar manner, cooperative and mutual insurance practices which have certain similar traits as takaful, have a huge following in the conventional market (Odierno & Kassim, 2013). It was reported by the International Cooperative and Mutual Insurance Federation (International Cooperative and Mutual Insurance Federation, 2019), that the volume of business from this sector accounts to about thirty percent (30%), of global insurance premiums; estimated at US$2.18 trillion. The track record of takaful for the past years, in providing ethical and equitable insurance solutions, has the potential to tap into this huge reservoir of business prospect. Realising the numerous challenges and huge potential for the industry, it is apparent that much more need to be done to transform the Islamic financial landscape.

The objective is to achieve the depth and breadth of its business appeal, as well as to create optimal value to the nascent industry. Above all, it must be premised on strong Shariʿah fundamentals and in observance of Maqaṣid al-Shariʿah (Abdullah, 2015; Laldin & Furqani, 2013; Dusuki & Bouheraoua, 2011).

Among others, the march forward for Islamic finance can be accelerated through the convergence or integration or linkages of the various sectors of the Islamic financial system, comprising of the banking, takaful and capital market. Such integration will entail enhanced efficiency and effectiveness of financial intermediation and risk management in the industry. Studies by Rysin et al (2021); Deng et al (2014); Mullinuex (2007); Singhal & Madhu (2006); Berghe & Verweire (2001); Rice (2001) have proven that convergence in the conventional financial system, which was accelerated through globalization, liberalization, and sophistication in the market; have resulted in higher growth and depth for the industry. An example is the introduction of the Alternative Risk Transfer Mechanism (ART), or alternatively known as structured insurance products, or insurance linked securities by the conventional insurance industry, through securitization of insurance and reinsurance. These products are transformed into tradeable securities and subscribed by the capital market investors. This innovation has created new avenues for financial management of the industry, as well as enhancing the depth of the capital markets (Re, 2020; World Economic Forum, 2018; Fabozzi, 2010). Islamic banking and Islamic capital market, in their desired growth trajectory, will need to cater for similar needs. This may be undertaken, where takaful and retakaful products and services are closely linked and aligned with the larger Islamic banking and Islamic capital markets; in meeting the challenging and competitive market dynamics.

Problem Statement

This research articulates the problem statement by following the description by Bryman (2007), as a phenomenon that requires better understanding, Improvement or action through investigation. The problem statement for this research, seeks to highlight the nature of takaful business, which are normally exposed and subject to several challenges, risks, issues, and problems. These are specific to the industry; as compared to other components of the financial industry as a whole (National Association of Insurance Commissioners, 2015; Thimann, 2014). In this respect, the insurance (and takaful) business is described by Lam (2003) Insurance is, by nature a risky business. The value of an insurance company is in its ability to forecast risk and price its contract appropriately: if the risk can be quantified accurately, the leftover cash from premiums becomes the profit.

Learning from this, takaful operators too need to attain prudent management of the SHF and the PRFs. This is to ensure that they discharge their fiduciary duties to the participants and other stakeholders accordingly – with the overarching aim of ensuring a sustainable and profitable venture for the industry. For example, the duties are: corporate and Shariʿah governance, financial and capital management, operational management, talent management, underwriting management, business development management, claims management, reserves/actuarial management and retakaful management (Fadzli, et al., 2015; Kriele & Wolf, 2012). this research will focus on the issues of capital and retakaful management for the takaful industry - that necessitates a more cost-effective and efficient approach. Therefore, in the management of capital and retakaful, a more effective approach needs to be explored and adopted to enhance prudence, cost effectiveness and efficiency as discussed below:

(i) Issue 1: Cost and efficiency of retakaful as a leveraging mechanism is an area of concern for takaful operators, which may be categorized into four aspects: (a) Retakaful expenses, represent a sizeable cost to the PRF. Cost of reinsurance in general, (also applies to retakaful) - according to Cummins, et al (2008) is not commensurate with real risk ceded. In some instances, it exceeds the actuarial price of the risks underwritten7. This is also proven in a study by Organisation for Economic Cooperation and Development (2018a), that for the period 2014-2016, reinsurance companies have received more premiums from insurance companies, as against paying claims. Similarly, Zamri (2013) has verified from BNM statistics, that the retakaful practice by takaful operators in Malaysia is not cost efficient. The statistics revealed that the average cost of retakaful outgo for the industry was about 25% of takaful contribution, as against the average outgo of 19% for the conventional insurance industry. In terms of retakaful recoveries (retakaful operators share of claims), the statistics revealed that only RM.036 was recovered for every RM1 spent on retakaful. It is for this reason that BNM, has urged the industry to control their retakaful /reinsurance expenses to not more than 15% - 20% of gross takaful contributions/premiums. On the macro-level, this will also help to ‘contain’ the unnecessary retakaful/reinsurance contributions/premiums outflow, especially to the international reinsurance market; to help improve the nation’s balance of payments policy.

(b) The unsettling effect of the periodic retakaful cycle - which may adversely affect the long-term financial management of the takaful operator. Jarzabkwoski, et al (2015); Meier & Outreville (2003) attributed the cause of reinsurance cycles to: volatility between supply and demand of reinsurance – due to competition, issues of capital, issues of pricing; external shocks - such as movements in interest rates, catastrophic losses, regulatory and accounting issues; general business influences – such as changes in economic performance and GDP of a country, and other business practices.

(ii) Issue 2: Capital Management – as custodians of public funds, dealing in the direct intermediation of contingent risks (of the PRFs), takaful operators should have the financial capability to undertake such functions. Thus, there is a need for 15 takaful and retakaful operators, to be adequately capitalised as mandated by the regulators. In addition, adequate capital is needed to meet the operational and expansion needs of the business, to meet the financial return targets of the company. The need for prudent capital management is also important in complying with the domestic and global solvency and risk-based capital requirements (Geneva Association, 2016). For this research, three aspects of capital management for takaful shall be highlighted:

(a) Raising additional capital by takaful operators - to meet solvency and risk- based capital requirements, as well as for operational and business expansion. Basic economic theory stipulates that capital is scarce and limited in nature. Sourcing for additional capital is a complicated and costly affair; especially in the on-going uncertainties in global financial markets (Hyman, 2006; Vance, 2005).
(b) Financial theory has discussed the symbiotic interconnectedness between risk and capital. This is more so for insurance (and takaful) business, which is directly involved in intermediation of risk in the economy (Mankaï & Belgacem, 2016; Shiu, 2011; Coutts & Thomas, 1997). This is the reason for the push for higher RBC standards for the industry. With this in mind, it can be observed that, there is a very high correlation between retakaful undertakings and capital; in terms of the ability of a takaful operator to maintain an optimum retention of risks in its books. This means that with a stronger capital base, a takaful operator or retakaful operator may retain more risks it has underwritten. This will reduce retakaful dependence and retrotakaful outgo - which in turn will lower the financial burden to the PRFs.
(c) Takaful and retakaful operators are obliged by the regulators to provide qard to cover any deficit in the PRFs. Unlike, conventional insurance whose capital requirements is tied to its insurance liabilities; it is not the same for takaful where the SHF are not theoretically tied to the takaful liabilities. Takaful liabilities is funded fully by the PRF. However, the PRF does not have the independent means of raising capital to meet such liabilities; except through the accumulation of takaful contributions which will take time (Asafa & Archer, 2018). Hence, the need for the takaful operator to be adequately capitalized; especially in the initial period of its formation where the PRF's are normally in deficit. This maybe generally attributed to the type of operational model used, where the upfront wakalah fee is high – resulting in inadequate amount left in the PRF to cover the claims liabilities (Al-Amri, et al., 2020). Another reason may be attributed to the small size of the risk pool at the initial period of the takaful operation – which cannot sustain the potential claim liabilities9 Realizing the above-

mentioned issues affecting the takaful industry, innovative Shariʿah-compliant alternatives need to be explored.

Research Methodology

The researcher adopts the Grounded Theory approach. The choice of Grounded Theory method for exploratory and qualitative research, is supported by (Ruppel & Mey, 2017; Charmaz, 2006; Clarke, 2005; Strauss & Corbin, 1998.) In addition, Birks & Mills (2015) argued that Grounded Theory approach in research is a process where theory is developed and constructed through analysis of data. In addition, Birks & Mills (2015) also asserts that the quality and rigour of Grounded Theory is supported by the researcher's knowledge and expertise on the subject, methodological correspondence with the Research Questions and the methods applied.

Dick (2003) also supports the Grounded Theory approach for applied or action research which are often used by research practitioners to develop theories which are grounded in data and can be applied in practice. Hence, Grounded Theory is most suited to the exploratory and applied nature of this research in order to examine existing conventional ART mechanism, as a benchmark in addressing reinsurance and capital management issues. Thereafter, it is compared to the practices in Islamic finance, involving ṣukūks, takāful and retakāful: through review of relevant literature and analysis of primary data from interviews with subject-matter experts in the industry. This is undertaken with the overarching aim of formulating Sharīʿah-compliant STAR blueprint framework for the market.

Data Collection

Data for the research, consist of both primary and secondary data. Primary data is the information obtained first-hand by the researcher, specifically collected for a particular research. As for secondary data, it refers to information originally gathered by researchers, which is referred to, by other researchers (Hox & Boeiji, 2005; Sekaran, 2003). The primary data is collated through face-to-face interviews, with selected practitioners and experts in the market. This is to enable the researcher to gauge their knowledge and perception on the subject of the research. The eight respondents comprise of senior practitioners from the Islamic finance industry, Sharīʿah scholars and regulator. This is supported by McNabb (2004), that an exploratory research often involves personal interviews with experts on a subject matter termed as 'key informants'.

The secondary data is derived from the various published reports, standards, articles, magazines, newspapers, web-sites, dissertations, peer-reviewed journals, policy papers, and books by the relevant stakeholders such as: BNM, SC, MIFC, IFSB, AAOIFI, IAIS, IMF, World Bank, OECD, regulators, industry players, scholars, journalists, researchers, etc. The reliability and validity of secondary data is determined by a number of factors such as credential of author, date of publication, type of publication (especially for journals), quality of discussions, depth of analysis, reliability of source and extent of contribution to knowledge and research (Dudovskiy, 2018).

Data Analysis

Flick (2013) describes qualitative data analysis as an effort to provide meanings from data. Scholars, generally enumerate the types of data analysis for qualitative research, as described by Ratcliff (2002), such as: content analysis, narrative analysis, discourse analysis, event analysis, logical analysis, metaphorical analysis, hermeneutical analysis,

phenomenology/heuristic analysis, case study analysis, taxonomy, and typology. The researcher adopts the content analysis for the data analysis. Hsieh & Shannon (2005), describes content analysis as a research tool, that is used to systematically analyse meaning and relationship of words, themes or concepts on the subject being studied. This is affirmed by Moretti et al (2011), who referred to content analysis as a method, which classifies written or oral materials into categories with similar meanings, themes, or patterns. Content analysis is categorised into two types namely: conceptual analysis and relational analysis. Conceptual analysis is a method to determine the existence and frequency of concepts in the data. Relational analysis is achieved by examining how the concepts relates to each other (Huckin, 2003).
From the analysis of data, common patterns and themes will be identified for further critical evaluation; in the context of meeting the research objectives. In essence, the data from the interviews will then be appraised, in terms of: its compatibility and compliance with the framework of Sharīʿah, takāful principles and practices, as well as the legal, regulatory, and operational framework.

Discussion and Finding
Viability of STAR
Upon critical appraisal and analysis of literature, secondary and primary data, the researcher wish to make the following observations:

1. (i) STAR solutions are a necessary innovation for takāful and retakāful industry – looking at the success of ART solutions in the conventional insurance and reinsurance market to optimize reinsurance and capital management.
2. (ii) There seems to be no immediate interest on the product by the market players in the current market environment – due to the apparent problems attributed to a nascent industry. However, as the industry grows, the need for STAR solutions will manifest.
3. (iii) Sharīʿah compliance – as observed from the Etiqa Ṣukūk, new capital can be raised from the capital market through securitization by applying asset-based Mushārakah Ṣukūk structure. This can be replicated by other takāful operators that have achieved necessary financial standing, as required by credit rating agencies.
4. (iv) A new asset class for the Islamic capital market – that have a very low correlation with other investment risks (as a takāful product, STAR is more concerned with underwriting risks). This may attract certain institutional investors who looks for diversification in their investments. Judging from the success of both Etiqa Ṣukūk and FWU Ṣukūk, there is investor appetite for the products, in terms of raising capital by securitization of cash-flow of the takāful business.

It can be deduced from the above, that STAR has potential benefits for the industry and economy. With the appropriate legal and Sharīʿah-compliant structures, it can meet both the requirements of Hukum Qaḍa'i and Hukum Diyāni in its transactions.

Enabling Factors for the Successful Implementation of STAR
The enabling factors for the successful implementation of STAR involving various aspects and issues can be undertaken by using the SWOT Analysis, and Critical Success Factors as a frame of reference.

SWOT analysis is a common tool used to synthesize and simplify the critical components of a project or undertaking in a diagram. This is supported by Stapenhurst (2009), who highlighted the importance of using SWOT Analysis to assist organisations decision making process to develop new products or venture in new markets. It involves identifying both internal (strength and weakness) and external (threats and opportunities) factors in the decision making. Helms & Nixon (2010) articulates the application of SWOT analysis *"for addressing the complex strategic situations by reducing the quantity of information to improve decision-making"*. The SWOT Analysis in the implementation of STAR is articulated in Table 1.1 below:

Table 1.1
SWOT Analysis for STAR

Strength	**Weakness**
1. Growing trends for convergence and collaboration of the various sectors of Islamic finance to enhance financial intermediation and risk management. 2. Responsive legal and regulatory environment to advance Islamic finance.	1. General lack of understanding of ART & STAR among practitioners, and Sharī'ah scholars. 2. Takāful and retakāful currently still lack scale and scope in product offerings and sophistication.
Opportunities	**Threats**
1. Clarion call by various stakeholders for the takāful industry to accelerate its growth and boost resilience. 2. Need for new innovation for the industry such as, capital and retakāful management through collaboration with Islamic capital market in the form of ṣukūk.	1. STAR is a new innovation with no track record. 2. In its initial development phase, STAR structures maybe exposed to operational and default risks.

Another approach to materialize the formulation and implementation of STAR is undertake a number of strategic actions by the relevant stakeholders by identifying the Critical Success Factors (CSF). CSF is defined by ACCA Global (2019) as *"those areas in which an organisation needs to perform best if it is to achieve overall success".* Hence, to ensure the successful launch of STAR, the following critical success factors as described in Table 1.2 below should be implemented and achieved:

Table 1.2
Critical Success Factors for STAR

No.	**Area of Strategy/Stakeholders**	**Implementation**
1.	Sharī'ah Compliance.	Continuous and concerted engagement with the Sharī'ah scholars, and SACs of BNM & SC on related Sharī'ah issues of STAR.
2.	Suitable Legal and Regulatory Framework involving BNM, SC, Labuan IOFC, IFSB, AAOIFI.	Continuous and concerted engagement by market players with the relevant regulatory authorities on need to expand the current framework to cater for STAR.
3.	Industry players consisting of takāful retakāful, capital market players, and the relevant regulatory authorities.	- Enhance knowledge and skill in ART & STAR - Convince market players on viability and benefits of STAR.
4.	Investors	Educate market investors on unique risk profile of STAR as a new asset class.

Conclusion

Takaful and retakaful has proven to be a viable alternative to conventional insurance and reinsurance. It continues to capture the interest of the public globally, especially in Muslim majority countries as well as countries with sizeable Muslim population – as evidenced with the proliferation of new takaful companies being set-up across many countries worldwide. As the industry grows, so does the increased understanding by the stakeholders of the multitude of issues, challenges and prospect for the industry moving forward. The research articulated in this article investigates the viability of takaful securitization for the purpose of enhancing retakaful and capital management for the takaful industry. It highlights the benefits, success, and challenges of ART mechanism through conventional insurance securitization; and how similar Shariʿah compliant takaful securitization can be practiced. Through careful analysis of data, the researcher proposed a framework that takes into cognizant the critical factors in framing the blueprint for STAR.

This research is expected to contribute to a new body of knowledge on the subject. Most importantly, this research provides insights of value and practical solutions to the takaful industry. The proposed STAR solutions will benefit the takaful and retakaful industry. It helps to curtail the current impediments for the potential growth of the industry such as: inadequate financial resources, inadequate retakaful capacity, risk-based capital framework, limited investment avenues as well as limited risk management tools. This will help to increase enterprise value and resilience of the industry, as well as providing enhanced services to the takaful participants in general. It is envisaged that the introduction of STAR, as an innovative product development shall encourage further interest by the Islamic finance fraternity, especially in takaful and retakaful. This is in line with the need to continuously strive for innovative ideas and development of technical expertise, for the good of the industry moving forward.

The proposed STAR solutions have parallel benefits with the conventional ART solutions, as articulated in various literature such as: Pompella & Scordis (2017); Kampa & Siegert (2010); Cummins & Weis (2009); International Association of Insurance Supervisors (2003a & b); Organisation for Economic Cooperation and Development (2002) as described below:

Provides alternative and innovative Shariʿah compliant solutions, where takaful and retakaful operators can apply more efficient leveraging, to enhance its balance sheet for business growth; in light of the current risk-based regulatory framework for the industry. The aim is to enable takaful and retakaful operators, to securitize a portion of the portfolio of underwriting risks from their balance sheet to the capital market investors in the form of ṣukūk.

Provides alternative avenues for takaful and retakaful operators to raise capital, which may be more cost efficient, aside from the traditional methods of raising capital, as described in the Pecking Order Theory.

Address the limited capacity and high cost of cover (termed: hard market in the underwriting cycles), in the retakaful market. This extra cost will cause additional financial strain to the takaful fund. Retakaful operators, may face the same problem from the retrotakaful market. In addition, it will also provide greater latitude for takaful and retakaful to employ better leverage with lower transaction costs, as compared to traditional retakaful or retrotakaful arrangements. The conventional insurance market used the ART mechanism to alleviate this problem.

Provides alternative cover for catastrophic risk. Catastrophic risk may expose the takaful fund to financial jeopardy, should such catastrophes occur. Catastrophes in takaful, may arise from single events such as earthquakes, cyclones, tsunamis, major floods or through a series of events in a particular period of cover. This will expose the takaful operator to very high takaful compensation, affecting the solvency of the takaful fund, which will require a life line from the Shareholders Fund through loan (qard), or other financial support.

Provides coverage for risks which are not served or served with limited coverage by the traditional takaful and retakaful mechanism. This may be due to financial, technical, and operational reasons. Such risk may include financial guarantees, credit risks, climate-related risks, longevity risks, extra-mortality risks, pandemic risks, etc., which have been successfully transferred to the capital markets through securitization.

Widens the outreach of takaful in the Islamic financial system and create new avenues of Shariʿah compliant investments and asset class, especially to cater for the more sophisticated investors. Securities based on risks, associated with the takaful and retakaful industry such as catastrophic, mortality and longevity risks, are likely to have a relatively low co-variance with other financial market systemic risk, making them valuable for diversification purposes.

Enhances atomisation of risk – where risks are efficiently distributed in the market, through various successive methods beginning from the direct takaful to retakaful to retrotakaful, and to the capital markets. The principle of sucessive diminishing portions of the risk through the above chain, renders the risks in the economy to be financially tolerable.

Provides an alternative as well as to complement macro-takaful (sovereign takaful – in the form of takaful al-ijtima'i) schemes, in a more efficient manner against pandemics, natural disasters and catastrophic risks. This is especially crucial for natural disaster-prone countries, such as undertaken by the World Bank to issue CAT Bonds to provide funding the catastrophes and pandemics.

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