Milliman Research Report

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Takaful (Islamic Insurance): Concept, Challenges, and Opportunities

CONTENTS

EXECUTIVE SUMMARY

Through desktop research, one can get a plethora of materials and papers on Takaful, but most tend to focus either on the fundamentals of Takaful or on Takaful models. In contrast, the objective of this report is to highlight the key issues and challenges facing the world of Takaful and suggested areas where work is required to find solutions.

Therefore this report is intended to provide useful reference material for practioners by summarising the following key items:

- An overview of Takaful and the intricacies of the models
- Insights into the issues and challenges facing the Takaful industry
- Finding sustainable solutions to some of these challenges

BACKGROUND AND MARKET OUTLOOK

Muslims account for around 25% of the world's total population, but despite rapid growth in recent years, insurance sales within the Muslim population remain a small fraction of the total insurance market. Historically, the incompatibility between conventional insurance and key tenets of the Islamic faith has acted as a significant barrier to sales. These differences have led to very low penetration rates and have left many Muslims with little external protection for their dependents or possessions.

The development of Takaful, which originates from the Arabic verb 'kafalah,' which means 'to help one another' or 'mutual guarantee,' has been driven by a need to overcome these obstacles and create an insurance proposition that is fully compliant with Shariah (Islamic law). It offers Muslims a valuable risk management tool and the first true alternative to conventional insurance in both the life and non-life sectors that is acceptable to the Muslim faith.

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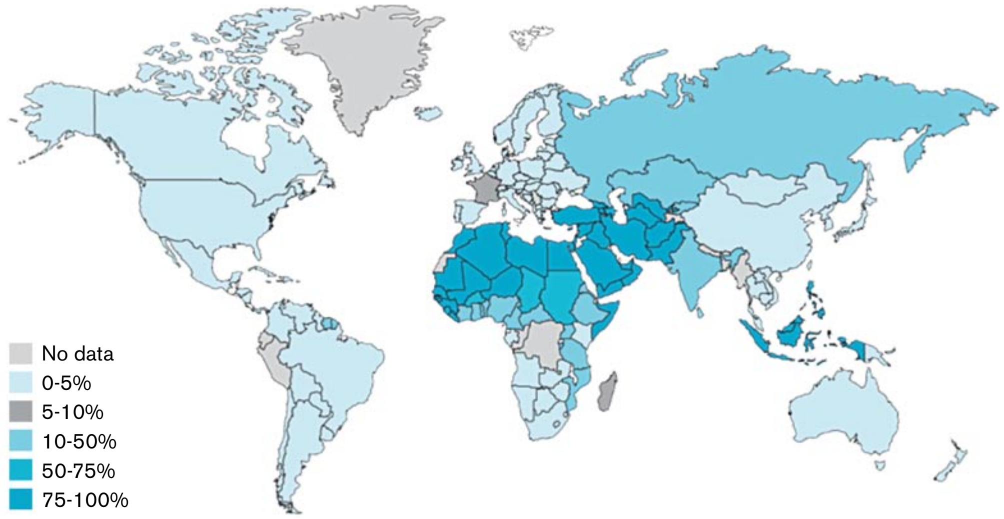
For non-Muslims, Takaful products potentially offer an alternative source of insurance protection—with different investment objectives, an approach to surplus distribution, and an oversight system with an ethical dimension. Hence in Malaysia, for example, non-Muslims account for more than 60% of the total Takaful premiums.

FIGURE 1: GEOGRAPHICAL SPREAD OF MUSLIMS AS A % OF TOTAL POPULATION



Sources: U.S. State Department, CIA WORLD FACTBOOK, Swiss Re Economic Research & Consulting

Market Size and Outlook

Whilst Takaful started in 1979 in Sudan, it only gained momentum in early 2000 when the Malaysian government promoted it and significant growth was witnessed thereafter. The growth of Takaful has varied significantly from country to country and its success, or otherwise, has been largely dependent on the awareness and affluence of the local population, as well as on the robustness of the local regulatory framework. Hence the highest growth has been observed in places such as Malaysia (with its considerable awareness of Takaful and robust regulatory framework), whereas growth in the Middle East has only recently begun to take off.

Depending on the definition of Takaful, the currently quoted volumes in terms of premiums range from USD$1 billion to USD$5.6 billion. Although the exact size of the Takaful market has often been disputed, there is general acknowledgment of the rapid growth of the industry. In 2007, Takaful premiums in emerging markets grew by roughly 26% and accounted for 5% of insurance premiums written in Muslim countries.[1] According to Takaful Re, a Dubai-based Retakaful company, Takaful premiums crossed the USD$3 billion mark in 2007 as seen in the table in Figure 2.

FIGURE 2: TAKAFUL PREMIUMS

(USD$ MILLIONS)	2004	2005	2006	2007
GCC	**770**	**1,238**	**1,579**	**2,046**
SAUDI ARABIA	645	1,065	1,340	1,695
KUWAIT	54	83	90	124
UAE	31	42	65	109
QATAR	25	34	50	76
BAHRAIN	15	15	34	59
SOUTH EAST ASIA	**474**	**544**	**692**	**951**
MALAYSIA	343	412	534	797
INDONESIA	77	75	80	94
THAILAND	30	30	32	35
BRUNEI	24	27	30	35
AFRICA	**121**	**181**	**215**	**317**
LEVANT	**14**	**17**	**21**	**32**
INDIAN SUB-CONTINENT	**5**	**8**	**11**	**18**
TOTAL	**1,384**	**1,988**	**2,518**	**3,364**

Source: Takaful Re

The projected Takaful written premium estimates have often been debated by practitioners because of the wide range of numbers published by various sources. There is difficulty in determining firm estimates of the total industry potential as there is a wide variety of Takaful definitions and categorisation, as well as a lack of consistent and credible data. Oliver Wyman suggested in a recent study that the Takaful premium potential is at least USD$20 billion whereas Swiss Re in its annual Sigma report sees a potential of USD$56 billion. Takaful premiums by 2015 are estimated to be in the range of USD$7 billion to USD$8 billion. Hence it is necessary to exercise caution when analysing projected figures.

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Takaful provides access to a large, relatively untapped market, in which insurance penetration hovers somewhere well below 2% of GDP, and its growth in the global market is expected to continue in the long term. Global estimates for the growth of the worldwide Takaful industry come in at 20% per year, far outstripping the 2.5% annual growth for conventional insurance premiums.[2] It is interesting to note that many Takaful providers have emerged largely unscathed from the financial crisis, as investments are commonly held in highly liquid assets, which is due to limited Shariah-compliant investments.

Insurers considering entry to the Takaful market are better off assessing the markets and opportunities sooner rather than later. Targeted marketing and consumer education are essential to develop market awareness and established insurers can leverage their existing marketing and distribution platforms. The lack of a clear market leader in Europe and the UK means that insurers can take advantage of the challenges and opportunities present in a developing global industry.

1 Swiss Re (2008). Insurance in the emerging markets. Sigma, Issue No. 5.
2 PricewaterhouseCoopers (2008). Takaful : Growth opportunities in a dynamic market. Retrieved Nov. 3, 2010, from http://www.pwc.com/en_GX/gx/financial-services/pdf/pwc_takaful.pdf.

PRINCIPLES AND PRACTICES UNDERLYING TAKAFUL

Principles Underlying the Takaful Industry

The Islamic Financial Services Board (IFSB), a self-regulated organisation in Islamic finances, produced a paper on governance (in December 2009) and defines Takaful as follows:

> *Takaful is the Islamic counterpart of conventional insurance, and exists in both Family (or 'Life') and General forms. Takaful is derived from an Arabic word that means joint guarantee, whereby a group of participants agree among themselves to support one another jointly for the losses arising from specified risks. In a Takaful arrangement the participants contribute a sum of money as a Tabarru' commitment into a common fund that will be used mutually to assist the members against a specified type of loss or damage. The underwriting in a Takaful is thus undertaken on a mutual basis, similar in some respects to conventional mutual insurance. A typical Takaful undertaking consists of a two-tier structure that is a hybrid of a mutual and a commercial form of company – which is the Takaful operator (TO) – although in principle it could be a pure mutual structure.*

Hence there is a recognition that whilst the current 'Takaful' concept and practice is in fact a hybrid of a mutual and commercial insurer, in principle it needs to move more towards a pure mutual structure. This will be analysed later when discussing the opportunities and challenges of the Takaful industry.

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There is a common misunderstanding that insurance or risk mitigation is not allowed under Islam, as Muslims believe that only God knows one's future and faith. The following conversation taken from the sayings of the Prophet Muhammad depicts an interesting message as to why Muslims should indeed reduce the risk of loss:

> *Prophet Muhammad asked a Bedouin who had left his camel untied, 'Why do you not tie your camel?' The Bedouin answered, 'I put my trust in God.' The prophet then said, 'Tie up your camel first and then put your trust in God.'*

Every society has risk management needs and, with the evolution of time, the methodologies also evolve. Almost 10 centuries before the advent of conventional insurance companies, the Muslim societies in Arabia adopted concepts of risk mitigation such as 'hilf' to assist victims of natural disasters or hazards of trade journey. Another common practice widely used in Islam was 'al-aqilah.' Under the custom of 'al-aqilah,' it is mutually agreed that, if a person is killed unintentionally by another person, the paternal relatives will take the responsibility to make a mutual contribution for the purpose of paying the blood money to the victim's relatives. This practice of having a fund that pools contributions from a group of people to assist others in need is akin to mutual insurance.

It is important to point out that the mutual assistance was not originally a commercial transaction and did not contain any profit or gain at the expense of others. Rather it evolved as a useful social practice to mitigate the burden of an individual by dividing it among fellow members.

There are certain key issues within conventional insurance that Islam does not permit:

- **Riba, or usury**: The first of these is the earning of interest, referred to in Islam as Riba. It is a concept expressly prohibited at several points in the Quran. Traditionally viewed from the perspective of a loan, Riba is considered unfair and inequitable to the borrowing party and therefore earning interest is forbidden under Shariah law and Muslims must avoid Riba in all of their financial transactions.

- **Gharar, or uncertainty**: The second element is the presence of uncertainty embedded in the design of conventional insurance products. Uncertainty and the trading in risk are classed as Gharar, a concept forbidden in Shariah law to protect participants from hazardous or unjust transactions. Conventional insurance is designed around the transfer of risk in return for a premium, and the timing, severity, and/or frequency of insured events are each subject to varying degrees of uncertainty. The perception that insurance products commonly contain unclear contract terms furthers the view that a high level of uncertainty pervades all aspects of conventional insurance.

- **Maisir, or gambling**: Related to Gharar is the concept of Maisir, also prohibited under Islam, which captures those transactions with an underlying gambling or speculative nature. In the context of life insurance, many contract designs can be viewed as gambles which ultimately benefit one side of an insurance contract at the expense of the other. For example, by taking out a term assurance contract, the risk is transferred to the insurer for a fixed premium and the payment of a small sum could potentially yield a disproportionately large payout, benefiting the policyholder at the expense of the insurer. Alternatively, the payment of a stream of premiums for many years could result in no return at all, which benefits the insurer.

- **Haram, or forbidden**: Conventional insurance designs may have investments in a number of asset classes that partake in activities prohibited within the Muslim faith, such as investments in alcohol-related companies, pornography, or gambling-related enterprises such as casinos. Such activities are considered Haram or forbidden in Islam, and consequently, the proceeds of the conventional insurance are also deemed to be unacceptable in the Muslim faith.

There is a further focus in Takaful (and in Islam in general) around the importance of moral values and ethics as business is meant to be conducted openly in accordance with the utmost good faith, honesty, full disclosure, truthfulness, and fairness in all dealings.

It is not within the scope of this report to look into the Shariah matters in depth as there is a diversity of opinion on the exact principles of Takaful. There are some schools of thought within Islam that allow conventional insurance so long as it does not involve Riba (or usury) whilst others have a range of tolerance with some of the key issues mentioned above. However, by and large, there is broad consensus on the solution to these issues. This emerged in the late 1970s in Sudan, but gained more prominence in the 1980s in Malaysia and the Persian Gulf countries in the form of Takaful.

Instead of paying an insurance premium, Takaful participants (policyholders) donate their Takaful contribution to a common pool to mutually assist the members against a defined loss or damage.

Takaful can thus be seen as the Islamic counterpart of conventional mutual insurance (i.e., insurance that is compliant with the Shariah). Takaful is not a type of insurance but rather an alternative to insurance. It has to operate on cooperative principles and incorporate the concept of Tabarru' (donation, gift). Instead of paying an insurance premium, Takaful participants (policyholders) donate their Takaful contribution to a common pool to mutually assist the members against a defined loss or damage. It is a one-way transaction which does not expect a definite return on the donation, unlike the more traditional bilateral conventional insurance contract where a premium is paid in return for an insurance benefit.

The pooling does eliminate Gharar, as the uncertainty about future claim events certainly still exists but now is acceptable as the donation (Tabarru') is meant for mutual assistance and not for profit-taking or gambling (contracts of charity are not affected by the prohibition of Gharar). However, unlike conventional insurance where the risk is transferred to the insurer, all participants mutually share the risk in Takaful, which is an important fundamental difference.

The chart in Figure 3 summarises the key differences between conventional insurance and Takaful.

FIGURE 3: COMPARISON OF CONVENTIONAL INSURANCE AND TAKAFUL

CONVENTIONAL INSURANCE	TAKAFUL
A risk transfer mechanism whereby risk is transferred from the policyholder (the insured) to the insurance company (the insurer) in consideration of an 'insurance premium' paid by the insured.	Based on mutuality; hence the risk is not transferred but shared by the participants, who form a common pool. The company (takaful operator) acts only as the manager of the pool. In effect, the policyholders are both the insurer and the insured.
Contains the element of uncertainty, i.e., Gharar, which is forbidden in islam. The terms of the contract are unclear as to certainty of when any loss would occur and how much compensation would be payable.	The element of uncertainty, i.e., Gharar, is brought down to acceptable levels under shariah by characterising contributions as donations (Tabarru'), not obligations, and for a good cause, i.e., To mitigate the loss suffered by any one of the participants, as opposed to payments linked to definite expectation of insured benefits to be received.
Contains an element of gambling, i.e., Maisir, in that the insured pays an amount (premium) in the expectation of gain (compensation/payment against claim). If the anticipated loss (claim) does not occur, the insured loses the amount paid as premium. If the loss does occur, the insurer loses a far larger amount than collected as premium and the insured gains by the same.	The participant pays the contribution (Tabarru') in the spirit of ne'ea (purity) and brotherhood to cover mutual losses of members of the pool. Losses and gains are mutually shared by the pool members who contribute to the pool. That is, third parties (insurers or reinsurers) are not affected by the outcome of risk events.
Funds are mostly invested in fixed interest-bearing instruments such as bonds, fixed interest securities, etc. Hence these contain the element of riba (usury), which is forbidden in islam.	Funds are only invested in non-interest-bearing, i.e., Riba-free, instruments. Note that regular income investments are still possible (such as under Sukuk, islamic bonds) as long as the income is not interest-based.
Surplus or profit belongs to both the shareholders and the with-profit policyholders. The insured is covered during the policy period but is not entitled to any return at the end of such period.	Surplus belongs to the participants and is accordingly returned to them.

The concept of Shariah (Islamic law) compliance is an evolving one and is overseen by the Islamic scholars that sit on the Shariah Supervisory Board, which provides the final certification of compliance. The scholars base their views primarily on the principles of the Quran, supplemented by Sunnah (the teachings of the Prophet), Fatwas (judicial opinions of Shariah scholars), and Islamic jurisprudence on economic transactions. While the words of the Quran and Sunnah are sacrosanct, the independent reasoning of Shariah scholars can be revoked or adapted to suit changing circumstances, and new developments are dealt with by legal reasoning and judgment of Shariah scholars. This creates a moving goalpost, which is one of the challenges in the Takaful industry which will be discussed further in Section 4.

Takaful provides Shariah-compliant solutions to the prohibited concepts with conventional insurance while still protecting against uncertain events in return for a commensurate fee. The mutual guarantee offered by Takaful is centred on a transparent, ethical, and Shariah-compliant agreement between the operator and participants.

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Practices in the Takaful Industry

This section provides an overview of the components and current practices in the Takaful industry, including:

- Practices within Family Takaful (Life) and General Takaful
- Shariah-compliant assets
- Retakaful
- Retro-Takaful

Family Takaful (Life) and General Takaful

As introduced above, conventional insurance as sold in Western markets is fundamentally irreconcilable with several tenets of the Islamic faith. In terms of life insurance, Shariah scholars view these contracts as a gamble on the insured's life. There is uncertainty surrounding when and if death will occur within the covered period, and in the event that no claim is made the policyholder is considered to have made a loss.

For Muslims, this incompatibility rules out traditional life insurance as a means of obtaining protection for their dependents. Family Takaful offerings provide access to life coverage in a manner which does not conflict with their religious beliefs.

Takaful is structured around the core principle of sharing and pooling mortality/ morbidity risk with fellow participants rather than transferring it to a profit-oriented corporate entity.

Takaful is structured around the core principle of sharing and pooling mortality/morbidity risk with fellow participants rather than transferring it to a profit-oriented corporate entity. The concept of mutual support allows many parallels to be drawn between Shariah-compliant Takaful operations and mutual insurers. However, unlike mutual insurers and friendly societies, current Takaful operations involve shareholders who have a profit motive, who provide the capital and fund the administration of the risk pool, and who are separate from the participants. Hence, Takaful operations can be viewed as Shariah-compliant commercialised mutual insurance operations. This structure of necessity, which is due to the need for capital, creates another set of challenges to be discussed further in Section 4.

Similar to the concept of with-profits products sold by mutual insurers, Family Takaful is designed to combine protection for the benefit of one's dependents with a savings element and requires the distribution of surplus to participants. However, the requirement of transparent disclosure of charges makes Family Takaful contracts akin to the clear charging structure underlying a unit-linked insurance contract.

Current practice is to develop Shariah-compliant variants of conventional insurance products. Family Takaful variants of most common life products, including level and decreasing term assurance, savings and retirement plans, and critical illness coverage, have been successfully launched in various markets. For example, a direct contribution style of savings scheme offering equity exposure could be developed by limiting investment to stock issued by companies that meet the non-Haram or Halal (lawful) requirements. Even product designs, such as annuities and whole life plans, whose inherent features include an uncertain duration, are currently being considered as Takaful offerings.

A consequence of mutuality, voluntary contributions, and absence of third parties (such as the insurer in conventional insurance) to share in the risks is that Family Takaful contracts cannot (or do not) offer guarantees to the participants. Guarantees on investment returns, bonuses, risk charges, or premiums, etc., are not offered under Takaful products. While Takaful practice allows the spread of risk through reinsurance from Retakaful companies, or conventional reinsurers on a necessity basis, this practice is not to allow guarantees as the reinsurance pool is seen as an extension of the primary risk pool. Accordingly, investment returns on contributed funds by the participants are based on actual investment experience. However, the Takaful operator is obligated to advance a loan (qard), on an interest-free basis, to support any shortfalls in the risk pool in meeting claims. This implicit guarantee of underwriting risk by shareholders of the Takaful operation creates some weakness in the current commercial model of a Takaful operation. Commonly, while there are no guarantees, there are expectations established at point of sale through product illustrations.

However, the concept of mutual assistance does not prohibit the use of underwriting and prospective pricing based on experience studies. As with conventional insurance, if the health of a potential participant would result in significant additional strain being placed on the underwriting fund then an extra contribution would be required.

The prohibition of interest-bearing instruments does not impact on the use of interest functions in pricing or valuation of long-term liabilities in Takaful. The pricing interest assumption is based on expected returns from Shariah-compliant assets underlying the liabilities.

In terms of surplus distribution, any distribution made to participants is based purely on actual surplus arising. As long as the underwriting fund is not in deficit, surplus arising from both investment and underwriting activities can be used to make a cash payment to participants and/or contribute to any claim fluctuation reserve. The latter is set up to cover short-term volatility in the size and incidence of payments out of the underwriting fund.

As with regular bonus declarations on conventional with-profits contracts in the UK, surplus distributions, if any, are most commonly made on an annual basis. Participants in a Takaful operation will need to be appropriately and comprehensively educated on this feature of the product design so that reasonable expectations are built up as to the level of distribution.

Shariah-Compliant Assets

The avoidance of Riba, Gharar, Haram, and Maisir in the design of Takaful products has a significant impact on the investment decisions of a Takaful operation. Contributions must be invested purely in Shariah-compliant assets, i.e., assets that are non-interest-bearing and whose returns are not derived from activities considered unethical. Haram or forbidden investments in Islam include financial derivatives such as futures and options, interest-bearing bonds, and equity issued by companies partaking in non-Halal business activities as described earlier. The development of the Sukuk market and a robust Shariah-compliant stock selection process together offer Takaful providers an increasingly viable solution to this investment conundrum.

Contributions must be invested purely in Shariah-compliant assets, i.e., assets that are non-interest-bearing and whose returns are not derived from activities considered unethical.

Shariah law forbids loan issues that are at a discount to their nominal value and, as already discussed, completely restricts the earning of interest (Riba). These two conditions effectively rule out conventional corporate or government bonds. The expanding Sukuk market offers access to an asset class which shares some properties with conventional bonds and others with equity stock, whilst remaining Shariah-compliant.

Regular Income Assets: Sukuk are issued via the creation of a special purpose vehicle (SPV) by an issuing bank that has been approached by a company or government seeking funding for a particular project. Sukuk certificates are then issued in return for an investor's funding contribution, and rank alongside the bank's other senior, unsecured debt.

Sukuk instruments are structured to provide a direct link to the assets that underlie the particular project and through this link confer shared ownership of these assets to the investor. Investors then receive a regular income based on a target rate of return. Neither this income nor the return of capital on maturity is guaranteed and both will typically vary in line with the revenue of the company (or equivalently the return on or value of the underlying assets). This potential variance is partially offset by the ability of the Sukuk manager to build up reserves when revenue exceeds the target rate, which can be subsequently used to make up shortfalls.

Sukuk provides the Takaful market with a legitimate investment alternative to government and corporate bonds. Several issues surround these Sukuk, such as availability, control, and ownership. These issues impact their overall effectiveness in supporting long-term liabilities, especially income annuities.

Equities: A Takaful operator does not need to seek an alternative investment in order to gain exposure to equity-type risk and return. Equity stock does not pay interest and offers direct participation in the profits of a listed business whether through dividends or growth in the price of the stock. However, restrictions do exist in relation to the type of company a Takaful operator may invest in to remain Shariah-compliant.

To gain exposure to equity returns Takaful operators or their investment managers must apply a screening process to eliminate stocks of companies that are exposed to forbidden industries or breach certain financial conditions. The industries deemed to be non-Shariah-compliant include banking, insurance, gambling, and those linked to pork, alcohol, or tobacco. The financial screening looks at key financial ratios of a particular company, such as conventional debt ratio and the sum of the interest and non-compliant income compared to total revenue. Where these ratios exceed limits laid down by a company's Shariah Supervisory Board, the equity issued by the company in question is excluded from permissible investment. This screening is a continual process, as the evolving nature of a firm's business practices and capital structure mean that its status as either compliant or non-compliant is not static.

Real Estate and Mortgages: Although there are Shariah-compliant forms of investments in real estate and mortgages, these are currently under-utilised but have significant potentials.

Retakaful

By entering into a reinsurance contract, conventional insurance companies are able to share risk, gain capital support, or benefit from a broader base of experience in areas such as pricing, underwriting, and claim management. Historically, Takaful operators have sometimes also had to make use of conventional reinsurance owing to the lack of a Shariah-compliant alternative—this exception was based on the 'dharura' or necessity principle. The growth in the Retakaful market offers a solution to this problem. Retakaful provides these same facilities to Takaful operators but within a structure that remains Shariah-compliant and in a manner specifically tailored to the particulars of the Takaful market.

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In the same way as Takaful provides a vehicle for participants to provide support to and share their own risk with a pool of other members, Retakaful allows Takaful funds to share risk among multiple Takaful pools. In this regard, the operation of a Retakaful fund is very similar to that of a direct Takaful fund. A Retakaful fund must have a Shariah Supervisory Board and the criteria it must satisfy to be considered Shariah-compliant mirror those to which a Takaful fund must adhere.

The Retakaful fund receives contributions from each participating Takaful fund and distributes back surplus arising from investment and underwriting activities using one of the models described later in this report. Further, if the Retakaful fund goes into deficit then the Retakaful operator is required to make an interest-free loan or Qard Hasan to the fund to eliminate this shortfall. Re-Takaful operators may not pay commission to a Takaful fund with which it is engaged.

In recent years there has been a significant growth in global Retakaful capacity, owing to major reinsurance companies such as Swiss Re, Hannover Re, and Munich Re entering the market. Their entries will help facilitate further expansion of the Takaful market, and the capital support and depth of advice that these players can offer will be invaluable in setting up an operation, wherever the chosen market.

Retro-Takaful

Some Retakaful operators retrocede conventionally on the 'basis of necessity' because currently there is limited Retro-Takaful capacity available. There is talk of a Lloyd's syndicate for Retakaful players that would imply retroceding each other's business to reduce volatility and provide the spread of risk, but this has yet to materialise.

TAKAFUL OPERATING MODELS

The basic structure of a Takaful scheme involves the policyholders or participants enlisting a Takaful operator to perform the necessary investment and underwriting roles. Family Takaful, the Shariah-compliant equivalent of life insurance, is commonly structured so that a participant's contributions are apportioned between two segregated funds: the investment fund and the underwriting fund. An individual (investment) account is maintained for each participant with the contributions made, net of any upfront fees. From this account, risk charges are deducted to be deposited into the pooled underwriting fund. Contributions paid into the underwriting fund are considered to be made on the Tabarru' basis, to support all participants in their exposure to mortality/morbidity risk. Any covered claims suffered by the participants are paid from the underwriting fund to avoid the transferral of risk.

The basic structure of a Takaful scheme involves the policyholders or participants enlisting a Takaful operator to perform the necessary investment and underwriting roles.

The sharing of risk with fellow participants is in contrast to full or partial transfer of the risk to a proprietary company. This also means that if the underwriting fund is insufficient to pay claims then no recourse can be made to shareholder assets. However, in practical terms, to prevent closure of the fund, the deficiency is covered by a temporary interest-free loan (Qard Hasan) provided by the Takaful operator. This would be repaid from future surpluses arising within the underwriting fund. Nevertheless, this arrangement acts as a strong incentive for operators to properly manage the fund, thereby limiting the possibility of making future loans.

Takaful is most commonly structured using the following models:

- **The Mudarabah model**: This is a 'Proprietary' or 'Partnership' model that considers the Takaful operator as a business partner with the participants. It is structured on classic profit-sharing principles, i.e., a partnership model where the participants provide the capital, while the Takaful operator provides expertise and management of the Takaful fund. A contract details how underwriting surplus and investment profits are shared between operator and participants, similar to conventional insurance (with-profits or participating business).

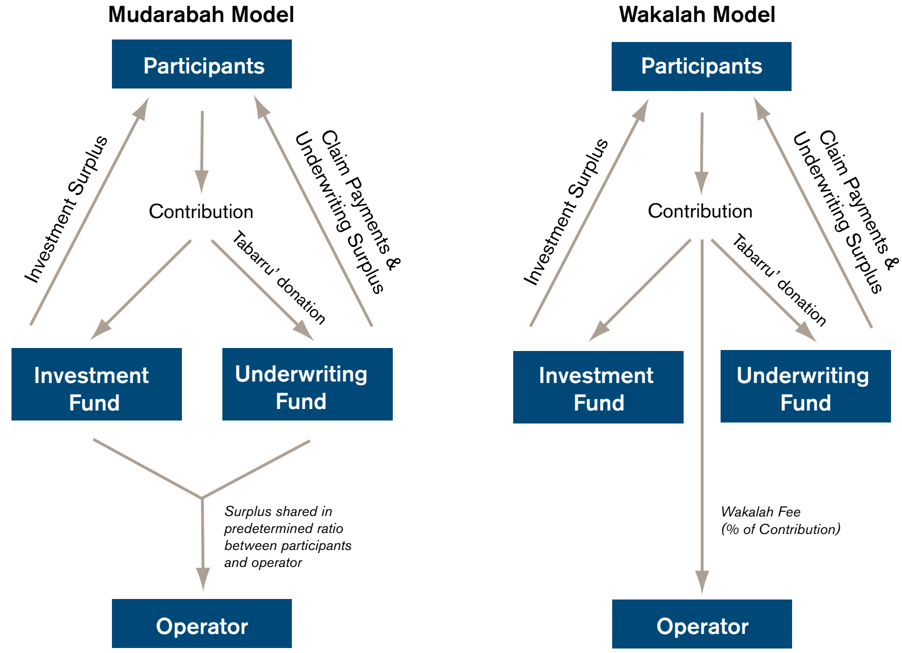
  The Takaful operator shares in the investment and underwriting surpluses via a predetermined ratio mutually agreed with the policyholders at outset. Neither the operator nor the participant can unilaterally alter this agreed sharing ratio, which is usually explicitly set out in the contract at outset. From the perspective of the participants, they do not contribute directly to the operator's costs and all contributions are effectively available to meet claims. Correspondingly, the operator can generally only expect to make a profit by ensuring that the expenses of managing the operation are less than the total share of investment profit and/or underwriting surplus it may receive. If the underwriting fund runs into deficit then the operator is obliged to provide an interest-free loan or Qard Hasan, to be repaid once the fund is in surplus.

- **The Wakala model**: This is an 'Agency' model that treats the Takaful operator as an agent of the participants tasked with the administration of the Takaful fund, for which it is compensated through a fixed fee. The operator does not share in the risk nor in the surplus generated from the two funds (investment and underwriting) but instead receives a fixed up-front fee (commonly a percentage of contributions paid) to cover management expenses, distribution costs–including intermediaries' remuneration–cost of capital, and a margin for operational profit. This fee must be pre-agreed and is commonly expressly stated in the contract. This fee can vary by product and some contracts can change over time. Competitive consideration predominates in the setting of the level and structure of this fee. On the whole, the operator will be profitable if the fee it receives is greater than its incurred expenses.

  Theoretically, the Takaful operator bears no insurance risks itself. The risk-bearing is seen as a process of solidarity between participants and takes place solely among the collective of insured persons (therefore the name 'joint guarantee'). However, due to the obligation to make up for any deficits in the pooled underwriting fund, the insurer is indeed exposed to a non-negligible insurance risk: it might not be able to recuperate a Qard Hasan if insufficient surplus is generated over time. Furthermore, no interest can be charged on the outstanding loan, but this is one of the very intrinsic principles of Islamic finance that has to be strictly followed. In reality, therefore, the Takaful operator under a Wakala model bears more risk than the designers of the model may have intended. In the extreme, the underwriting fund can be underfunded to create perpetual deficit in the fund thus making it the responsibility of the Takaful operator to be at risk perpetually.

The diagram in Figure 4 compares a typical Family Takaful structure using the Mudarabah and Wakala models.

FIGURE 4: COMPARISON OF MUDARABAH AND WAKALA MODELS



In the 1980s, in a pioneering Takaful regulatory development in Malaysia, scholars initially accepted the more commercial Mudarabah model. However, recently there have been concerns raised by scholars that Mudarabah may not be appropriate because of the fact that Takaful is supposed to create a 'surplus' and not 'profits,' and underwriting surplus is prohibited as this arises from insurance risk. Therefore the element of profit-sharing of underwriting surplus by the Takaful operator within the Mudarabah model is deemed to be not Shariah-compliant. The pure Mudarabah model seems more akin to a business venture rather than a mutually based contract based on solidarity of its participants, which would imply that the Tabarru' is working capital and is arguably not in the spirit of a donation. Furthermore, the relationship between policyholders and operators lacks transparency.

The development of Takaful in the Middle East took shape later in the 1990s, with the popular preference towards a Wakala model.

The development of Takaful in the Middle East took shape later in the 1990s, with the popular preference towards a Wakala model. The Wakala (agency) framework emerged as the dominant model, and Malaysian scholars have moved in favour of this model too.

However, in late 2004, some scholars–particularly those in Pakistan, Bangladesh, and South Africa–began to highlight deficiencies with the Wakala approach.

As a result of the recent findings in the Takaful industry, there have been many variations of Mudarabah and Wakala developed by practitioners to address the limitations. The variant Takaful models considered in this section are:

- **Variant Mudarabah model**: A variant of the pure Mudarabah model would be to limit the profit-sharing element such that it is only applied to the investment portion, which would then be fully in line with Shariah. However, this model might not be commercially viable as it is likely that the income generated from the investment portion will be insufficient for the Takaful operator. Another variant of this model would be to charge the operating expenses directly from the Takaful fund instead of funding it from the shareholders' fund (i.e., the underwriting result is net of Tabarru', claims, Retakaful, reserve adjustments, and operating expenses). The type and amount of expenses charged to the fund should be laid out to the participants in a transparent manner, although there are concerns about the type of expenses that can be charged to the fund. With the Mudarabah model, there is also the difficulty in managing fixed expenses alongside a variable and potentially volatile surplus, although this feature indirectly encourages the efficient management of the Takaful operation. However, given the many commercial challenges facing the pure and hybrid Mudarabah models, many Takaful operators have opted for the Wakala structure.

- **Wakala with incentive fee model**: Critics of the pure Wakala model cite the lack of incentives for the operator to manage the Takaful fund efficiently as the operator does not share in any profits. The operator's income is a fee, which is based on turnover (i.e., Takaful contributions). Therefore, the Takaful operator may be driven to write large amounts of new business without due regard to proper underwriting or claim management (although to some extent this action is deterred through the commitment of an interest-free loan or Qard). To encourage the operators to apply appropriate underwriting and investment approaches, some operators have adopted a Wakala model with incentive compensation, where the Wakala fee is adjusted (upwards) in the instance of an underwriting and investment surplus. This performance-related fee would not be permitted under a pure Wakala model though the Accounting and Auditing Organisation for Islamic Financial Institutions (AAOIFI, the self-regulatory body) recognises that an incentive fee is permissible.

To encourage the operators to apply appropriate underwriting and investment approaches, some operators have adopted a Wakala model with incentive compensation.

- **Wakala Mudarabah model (hybrid)**: This is the most popular model today for Family Takaful operators, where a Wakala is applied on the underwriting fund and a Mudarabah on the investment profit. Specifically, the operator charges a Wakala fee from the Takaful contributions and all underwriting profits are distributed back to the participants. However, investment profit is shared between the participants and the operator based on a predefined ratio. There is an appeal within this model as investment profits are usually the major source of income for Takaful operators, whereas underwriting results can easily be managed using quota share Retakaful arrangements.

- **Wakala with Waqf model**: The main issue in the pure Wakala model is that the element of Gharar (uncertainty) is not fully eliminated because the contribution (treated as a 'donation') remains in the participant's ownership and is effectively a 'conditional' donation. Hence the participant can expect to receive the surplus back, which therefore becomes a conditional gift. However, there is uncertainty about the level and timing of the surplus it will receive. Secondly, there is a relationship between the participant and operator and another amongst participants (exchange of gift for a gift). This creates doubts on the Wakala contract as a contract of compensation. The relationship of the Takaful operator with the participants is ambiguous because none of the participants are liable for the repayment of the outstanding loan. To overcome these concerns, Pakistani scholars developed the idea of a hybrid Wakala-Waqf model to remedy some of these inherent disadvantages.

  This model requires the setting up of a Waqf (endowment-trust or independent pool) that becomes the nucleus for the relationship between the participant (donor) and the operator (i.e., both have obligations towards this trust). A Waqf is a well recognised Shariah entity which has the ability of accepting ownership or appointing ownership of asset. The objective of the Waqf is to provide relief to participants against defined losses as per the rules of the Waqf fund. By setting up a Waqf, the following advantages are derived:

— The relationship of participant and operator is with the Waqf fund (i.e., ambiguity removed)

— Donation of participant to the Waqf is unconditional (Gharar removed)

— Operator can be a Mudharib (or manager) of the investments of Waqf and can share in the investment profits

— Contingency reserves within the fund may be set up

— Cross-subsidy of various generations of policyholders is permissible

— Surplus distribution can be predefined on a variety of criteria with the primary condition that the operator does not get any share as a Wakeel (or representative) to the Waqf fund

Currently this model is widely used in Pakistan and South Africa, and has also been adopted by the Swiss Re Retakaful branch in Malaysia.

Which Model to Choose

An operator can choose any of the above-stated models but the choice depends on many factors, such as the target population, regional acceptance, Shariah board views, regulatory framework, product design, marketing, and pricing. As outlined above, the most common models are the Wakala and Mudarabah model or a hybrid of both:

- Mudarabah model is less acceptable globally but perhaps more attractive as profit is shared with the policyholders. However, there is a strong opinion of scholars from especially the Middle East that underwriting profit cannot be shared with the operator as it stems from donations.

- The Wakala model is by far the most recognised and has the positive effect of providing a fixed and steady income stream. However, in its purest form it has limited upside potential as the only source of income is the Wakala fee. This could harm competitiveness as a high up-front Wakala fee might look unattractive to participants and have adverse effects to new entrants because of the high initial costs.

- There has been an increasing trend towards the hybrid model which is based on the application of the Wakala model for the underwriting portion and the application of the Mudarabah model for the investment part. Considering that investment income usually makes up the bulk of the profits, this model is viewed by many Takaful operators to be commercially viable. This is widely practiced in the Middle East and Malaysia and accepted by virtually all scholars across the world.

- The AAOIFI has also endorsed hybrid versions of Wakala models.

In all models, although not mandated by Shariah, the Takaful operator is commonly expected to provide an interest-free loan in case of a deficit in the underwriting pool.

In all models, although not mandated by Shariah, the Takaful operator is commonly expected to provide an interest-free loan in case of a deficit in the underwriting pool. This expectation requires careful risk management techniques as there is uncertainty in terms of the amount and timing of the loan to be repaid from future surplus arising.

ISSUES AND CHALLENGES FACING THE TAKAFUL INDUSTRY

The issues and challenges facing the Takaful industry are considered separately under the following sections:

- I. Key Issues and Challenges
- II. Technical Issues and Challenges
- III. Other Issues and Challenges

I. Key Issues and Challenges

Some of the key issues and challenges facing the Takaful industry are:

a. Lack of consumer awareness
b. Scarcity of human resources with both insurance and Shariah expertise
c. The shortage of Shariah scholars with appropriate experience
d. Lack of standardisation in the industry that is due to Shariah interpretations
e. Diverging regulatory approaches and the lack of centralised regulations
f. Solvency and capital requirements
g. Corporate governance
h. Shortage of suitable assets

These are discussed in further detail below.

a. Lack of consumer awareness

Despite the introduction of Takaful, the increase in the level of penetration anticipated has yet to be realised. Many consumers are still unaware of Takaful as an alternative, and some view Takaful as commercialisation of conventional insurance into the Islamic world and reject the notion that it is a Shariah-compliant instrument. In addition, many individuals tend to downplay the importance of security and retirement planning and many are also heavily dependent on the social security systems—this is particularly evident in the Middle East. Similar to conventional insurance, Takaful coverage is typically a proposition that needs to be sold to consumers (instead of one that is bought by consumers). There is a need to fundamentally address educational issues surrounding Takaful and individual risk management amongst the Muslim societies, to develop consumer awareness. Most of the current education on Takaful is among interested or related practitioners and investors, and very few awareness campaigns are aimed at or designed for the target population.

Similar to conventional insurance, Takaful coverage is typically a proposition that needs to be sold to consumers (instead of one that is bought by consumers).

b. Scarcity of human resources with both insurance and Shariah expertise

Future growth may also be hampered by the currently narrow pool of professionals with sufficient Takaful knowledge in areas such as law, sales, and actuarial services. Most operators would typically employ human resources, such as legal advisors and actuaries, with conventional insurance experience. These resources would typically tend to learn the Shariah aspects of Takaful and adapt their previous experience to incorporate Shariah compliance rules in their new role. Hence the mindset of most operators tends to be driven by conventional thoughts and solutions and, as a result, there has been limited original thinking in the industry. Recently, there have been various Takaful courses offered, including one offered by the Chartered Insurance Institute (CII), which will assist in the development and creation of human resources with both insurance and Shariah expertise.

c. The shortage of Shariah scholars with appropriate experience

Every Takaful operator requires a Shariah Supervisory Board, which is typically comprised of three or more Shariah scholars. For a Takaful operator with regional ambitions, the need to build credibility in the target market means there are preferences for the board members to originate from the target markets or at least have experience in the target market. Scholars would ideally have experience and knowledge not only in Islamic jurisdictions but also in Takaful. This is essential as board members are responsible for certifying the Shariah compliancy of the business operations. However, the number of Shariah scholars with experience in both Islamic jurisdiction and insurance is limited; inevitably, these scholars are currently sitting on multiple boards, which may create conflicts of interest and compromise the quality of advice. The shortage in scholars remains a short-term barrier on new entrants and drives up the cost of setting up a Shariah board.

As the Takaful industry has only recently been established, there is a wide range of issues currently being debated amongst Shariah scholars and technocrats, particularly those surrounding the definitions and practices that are deemed to be acceptable and Shariah-compliant.

d. Lack of standardisation in the industry that is due to Shariah interpretations

As the Takaful industry has only recently been established, there is a wide range of issues currently being debated amongst Shariah scholars and technocrats, particularly those surrounding the definitions and practices that are deemed to be acceptable and Shariah-compliant. For example, the inconsistency of Shariah interpretations can be seen in the following issues:

- **Issues that are due to regional differences**: There are significant regional differences in consumer attitudes and the extent of tolerance and innovation in the Takaful industry. For example, Malaysia is perceived to be more liberal and willing to embrace modern conventional concepts within the Takaful framework. In contrast, the approach in the Middle East countries is more conservative, with less willingness to embrace modern conventions. This creates challenges in transferring solutions across regions.

- **Issues in the choice of Takaful models**: There is a variety of models that may be adopted by the Takaful operator in the industry, as discussed in Section 3. There is a wide variation in practices and model preferences in various countries, which is due to the varying interpretation by scholars. For example, in Saudi Arabia, the regulators–Saudi Arabian Monetary Agency (SAMA)–approve a cooperative model in which only 10% of the surplus is mandatory for distribution to policyholders. Some scholars would argue that this model does not meet the requirements of Shariah compliance. For instance, there are no specific Shariah compliance requirements for assets. Yet Takaful operations are still possible, and some have been approved, within the broader cooperative model framework. Similarly in Iran (where the entire legal system is Islamic-based), Takaful remains an unknown concept as the Shia Islamic school of thought (as practiced in Iran) does not view conventional insurance to be non-Shariah-compliant.

  However, despite these regional variations, there is a global trend elsewhere towards a Wakala-based model without any sharing of the underwriting profits. This approach has also been formally approved by the AAOIFI, which is a step towards standardisation. However, a global standard for Takaful models remains to be seen, which is due to the varying opinions and interpretations of Shariah scholars around the world.

- **Issues about the source of capital**: There is a wide variety of issues that are subject to Shariah interpretations. One of the debates amongst scholars is whether it is necessary for the original capital in a start-up Takaful provider to be Shariah-compliant. In practice some scholars typically do not question the initial source of capital as this would impede the operation of global players. Instead, the scholars would usually only insist on the usage of capital to be fully Shariah-compliant.

- **Issues surrounding the type of risk deemed acceptable in Takaful**: Another topic of debate amongst scholars is the type of risks that are deemed to be acceptable within Takaful, and this issue mainly relates to General Takaful. As the concept of Takaful is to mutually guarantee all participants, there is an argument that for large risks where the number of participants is limited, those risks may not fall within the concept of Takaful. For example, Takaful coverage for government-owned projects where all the participants within the pool are government agencies may not essentially achieve the concept of mutual guarantee (as arguably there is only one participant in the pool, the government). There is a debate on whether there should be a distinction between Halal (lawful) and Haram (unlawful) risk, and if prior screening of risks is necessary for acceptance within the Takaful pool.

  Related to the lack of standardisation in types of acceptable risks is the lack of uniformity in the definitions of insured events and exclusions. For instance, in Family Takaful treatment of suicide, AIDS, and contestability is non-uniform. This complicates the applicability of pricing assumptions based on experience statistics drawn from conventional business and complicates pooling of experience among Takaful operations with differing underwriting and contract definitions.

- **Issues surrounding Wakala fees and the cost of capital**: Another issue that is constantly debated is the extent of expenses that can be charged by the operator as Wakala fees and whether the cost of capital can be included. Some Shariah scholars have argued that the operator cannot charge participants for the cost of capital, which raises the question of the commercial viability of Takaful operators. Some Takaful operators would also choose to allow for a profit margin to be embedded within the Wakala fees, and there is further debate on the extent that this is tolerable within the bounds of Shariah.

The opposing views of Shariah interpretation in different regions make Takaful standardisation even more difficult to achieve, particularly for global companies wishing to provide similar product bases across various regions. This lack of standardisation in Takaful may undermine the credibility of the industry, and may have a subsequent negative impact towards consumer protection, transparency, disclosure, and the overall ethics of insurance.

The opposing views of Shariah interpretation in different regions make Takaful standardisation even more difficult to achieve, particularly for global companies wishing to provide similar product bases across various regions.

e. Diverging regulatory approaches and the lack of centralised regulations
In the absence of standardisation of a global Takaful regulatory regime, the industry is relying heavily on the opinion of the Shariah boards of the Takaful companies, subject to any local regulatory constraints. Local regulators have adopted a variety of approaches when it comes to dealing with Takaful. There are three key categories of regimes:

1. **A level playing field approach**, such as the Financial Services Association (FSA) in the UK. This is the most common approach by regulators in predominantly non-Muslim countries. The FSA has adopted a 'no obstacles, but no special favours' approach in handling Takaful business and will regulate Takaful operators within its current regulatory framework.

2. **A pragmatic middle ground**, such as the Bank Negara Malaysia (BNM), in Malaysia, where the regulators have adopted a comprehensive Islamic financial system running parallel with the conventional system, with an evolving attitude to regulations over time.

3. **A more specific 'tailor-made' approach**, such as the Central Bank of Bahrain (CBB). The CBB has taken the lead in considering the unique characteristics of Takaful companies and aligns the regulations of Islamic insurance as far as reasonably possible.

It is useful to note that based on a 'level playing field' regulatory approach, the FSA has outlined in its November 2007 publication entitled 'Islamic Finance in the UK : Regulation and Challenges,' three potential challenges in regulating the Takaful industry:

- Whilst Takaful products may appear similar to conventional products, the structure of the Takaful offerings and operations are fundamentally different compared to conventional products

- The role and responsibility of the Shariah Supervisory Board should be purely advisory (i.e., not executive roles)

- The marketing and promotion of Takaful products must be fair, transparent, and not misleading, in the spirit of the 'treating customers fairly' principle

Due to the variety of regulatory approaches, there is an incentive to develop a centralised global regulator for the Takaful industry. There have been talks within the industry particularly expressed by practitioners at various conferences and seminars for the need to standardise the Islamic finance industry, with aims to develop standards and guidelines for Islamic financial institutions and regulators. These are mainly driven by four organisations (details of each of the following are provided in Appendix III):

Due to the variety of regulatory approaches, there is an incentive to develop a centralised global regulator for the Takaful industry.

- Rulings of the Islamic Fiqh Academy of the Organisation of Islamic Conference (OIC)
- Accounting and Auditing Organisation for Islamic Financial Institutions (AAOIFI)
- Islamic Financial Services Board (IFSB)
- Global Takaful Group (GTG)

The IFSB has focused its efforts on developing a prudential regulation and in December 2009 published two guidance notes on the solvency of Takaful undertakings and on Takaful governance standards, namely 'ED 11 - Exposure Draft on Solvency Requirements for Takaful Undertakings' and 'IFSB-8 Guiding Principles on Governance for Takaful (Islamic Insurance) Undertakings.' The objectives of these guidance notes are to:

- Provide benchmarks for use by Takaful supervisors in adapting and improving regulatory regimes or, where necessary, establishing new ones
- Address regulatory issues, such as risk management and financial stability, for the Takaful industry
- Provide appropriate levels of consumer protection in terms of both risk and disclosure
- Support the orderly development of the Takaful industry in terms of acceptable business and operational models, and the design and marketing of Takaful products

Efforts by the IFSB and the AAOIFI remain largely academic and have yet to be adopted globally. The likelihood of convergence and standardisation of the industry in the near future remains to be seen. The goal of convergence could be realised by a uniform Takaful code of practices harmonising the various regulatory regimes and scholastic forums such as the Saudi Arabian Fiqh Academy for Shariah issues. Another potential solution is to establish two separate global regulatory authorities–one dealing with the traditional insurance regulatory issues and one focused on Shariah advisory issues.

The development of a standardised regulation for the Takaful industry requires a considerable amount of time and effort; regulators worldwide are likely to require assistance in developing suitable and appropriate regulatory guidelines for Takaful operators.

Hence, the industry will be subject to rapidly evolving regulations, corporate governance, and accounting standards. The development and harmonisation of a suitable regulatory regime is essential for the protection of consumers and the stability of the industry. The development of a standardised regulation for the Takaful industry requires a considerable amount of time and effort; regulators worldwide are likely to require assistance in developing suitable and appropriate regulatory guidelines for Takaful operators.

f. Solvency and capital requirements

In most regulatory frameworks, and particularly those that have adopted a 'level playing field', the capital and solvency requirements of a Takaful operator are similar to those underlying conventional insurance. However, the following challenges, which are specific to Takaful operators, need to be addressed:

- Current regulatory regimes may not have given adequate consideration to the treatment of the interest-free loan or Qard in determining the solvency requirements for Takaful companies (i.e., the Qard may be a potential additional capital base for the Takaful fund)
- Consideration to whether the 'level playing field' is sustainable in the long term for Takaful
- Consideration to the surplus distribution and contingency reserve approaches, which may result in a lower capital requirement for Takaful entities

- Consideration to the treatment of mutuals under Solvency II and whether a similar approach would be applicable for Takaful companies

- Consideration to the treatment and approach of rating agencies towards Takaful entities

The IFSB has recently published a Research Draft, 'Standards on Solvency Requirements for Takaful (Islamic Insurance) Undertakings,'[3] which highlights the issues above. Although there is the required practicality of implementing uniform principles in the derivation of solvency and capital requirements to both conventional and Takaful players, there are key differences in the underlying operations and Takaful players need to take these differences into account to avoid holding unnecessary capital.

g. Corporate governance

The current relationship between the Shariah Supervisory Board and the board of directors of the Takaful operator is typically one of deep trust and integrity. However it is still necessary to set clear, written guidelines on the scope and the responsibilities of the Shariah board. Compliancy should cover all aspects of the operation, including the Takaful model adopted, product offerings, surplus sharing and fee structures, Islamic investments, contract wording, and marketing material. At present, the industry does not have compliance manuals and standard terms of reference for Shariah boards, and there are additional issues around the role of the Shariah board and the potential conflicts of interest between Shariah scholars. There is a risk that the Shariah board may focus on Shariah-related issues at the expense of key technical issues such as actuarial, underwriting, and wider risk management. On the other hand, it is in the management's interest to maximise shareholders' value, which would create further potential conflicts from a Shariah-compliance aspect. There is also the conflict of interest and risk management issues around the concentration of assets invested in related companies.

At present, the industry does not have compliance manuals and standard terms of reference for Shariah boards, and there are additional issues around the role of the Shariah board and the potential conflicts of interest between Shariah scholars.

h. Shortage of Shariah-compliant assets

In spite of the growth of Islamic finance, Takaful, and the global Sukuk markets, there is still a shortage of tradable Shariah-compliant assets in the market. The key challenges faced by operators with respect to investment strategy can be summarised as follows:

- The lack of suitable (Shariah-compliant) investment vehicles, particularly those with longer-term duration. There are a number of hurdles related to the Shariah-compliant assets in which companies must invest the contributions made by Takaful participants. In the short term, owing to the relative size of the Islamic banking industry over the Takaful market, an adequate supply of compliant assets such as Sukuk is available. However, there is competition with Islamic banks in terms of purchasing short-term Sukuk in the primary market, whereas the secondary Sukuk market is currently illiquid and expensive. Availability of assets may further tighten as the rapid growth of Takaful continues and Shariah scholars increase their focus on the compliance of new asset issues, particularly in regard to their perceived similarity to more conventional debt issues.

- The limited range of Shariah-compliant assets would naturally result in a concentration of asset risk. Any regulatory admissibility limits and the resulting need to control exposure to particular asset types and counterparties (such as those that exist in the UK) may place a restriction on the level of investment in these instruments.

- Asset-liability management (ALM) for Takaful operators would be more challenging because of the limited availability of Islamic investment vehicles of appropriate duration and liquidity. For example, the lack of longer-term Sukuk presents a potential reinvestment risk for those companies offering Family Takaful. As a result of the lack of suitable assets, Takaful companies have been forced to invest in highly volatile regional equity or real estate markets, which creates a mismatch between its assets and liability profile and subsequently may result in higher capital requirements under the risk-based capital (RBC) framework compared to a typical conventional insurance company. It is not uncommon for Family Takaful operators to maintain a high proportion of assets in cash or bank deposits.

3 http://www.ifsb.org/docs/ED11_Solvency_of_takaful_undertakings.pdf

- For the equity investment to meet Shariah compliance, one of the rules relates to the ratio of debt held to market capitalisation by that company and this ratio needs to be below a certain level. However, as a result of the recent volatility in the capital market this permitted debt ratio is often breached, thus rendering the equity stocks non-Shariah-compliant. As a result, many operators had unintentionally switched their positions from having Halal to Haram equity investments.

- Takaful operators may be forced to invest in assets not denominated in the same currency as the liabilities, hence giving rise to potentially significant currency exchange risk.

- The lack of Shariah-compliant assets restricts product innovation because of the liquidity and mismatching risk as well as potentially lower returns. Introducing pension-related products and variable annuity types of products would be challenging in the absence of long-term investment vehicles.

- There is potentially a higher operational cost to maintain a Shariah-compliant investment strategy as the assets would need to be certified by Shariah scholars on a regular and ongoing basis. In addition, Takaful operators would typically outsource this function to professional fund management companies.

The continued success of the Takaful industry is linked to sound Shariah-compliant asset management capabilities. Both the shareholders' fund and the policyholders' pool need to be invested in a Shariah-compliant and profitable manner.

The continued success of the Takaful industry is linked to sound Shariah-compliant asset management capabilities. Both the shareholders' fund and the policyholders' pool need to be invested in a Shariah-compliant and profitable manner. The development of a strong asset management capability will enable a stronger Takaful proposition. The lack of suitable assets with sufficient liquidity remains a big challenge in the Takaful industry.

II. Technical Issues and Challenges

In addition, there are various technical issues within the Takaful industry, which may be relevant in the valuation and risk management of Takaful business. Some of the key technical issues considered are:

a. Treatment of the interest-free loan (Qard Hasan)
b. Approach to underwriting and claim management
c. Determination and distribution of surplus
d. Treatment of contingency reserves
e. Treatment of participants' pools
f. Issues around Retakaful and retrocession
g. Treatment of transfers of in-force business from conventional reinsurer to Retakaful

a. Treatment of the interest-free loan (Qard Hasan)

Qard Hasan or 'benevolent loan' is an interest-free loan provided by the operator in the event of a deficit in the Takaful fund. Shariah does not explicitly mandate this provision but there is an expectation that the operator will inject the funds in the event of a deficit. The loan or Qard would then be repaid out of future emerging surpluses. However, there is great uncertainty as well as lack of clarity on the mechanism and dynamics of the loan (and its subsequent repayments). Some of the areas or issues requiring clarity or answers are:

- It is unclear whether Shariah sanctions such a loan or whether this is an expectation created within the industry.

- There is uncertainty in both the timing and amount of the repayment of the loan out of future surpluses.

- At what level should the need for loans be determined? Should this level correspond to the level at which surplus is determined?

- Different regulators have adopted different approaches on the issue of Qard. For example, the CBB (the insurance regulator in Bahrain) allows cross-subsidy between various pools (i.e., individual pool can cross-subsidise the group life pool and vice versa). Details are provided in the CBB Rulebook under the Insurance Section dealing with Takaful/Retakaful (in CBB Volume 3).

- In addition, there is uncertainty on the extent of cross-subsidy between generations of policyholders or product groups. The operator may not be able to recoup the deficit from exiting participants except possibly through surrender penalties. Where inter-cellular loans are permitted, should there be a charge for such loans?

- In adverse cases, such as when the pool generates continuous losses, there is uncertainty if the Qard can be written off. There may be compounding issues for the operator if future participants no longer choose to put their money with operators whose pools are in deficit and a strategy to write off the loan may be a better option.

- There is uncertainty as to whether the Qard can be treated as a notional debt/asset for solvency purposes.

The treatment of Qard varies between regions but understanding its mechanism and dynamics is essential for effective management of Takaful operations.

b. Treatment of underwriting and claims management

Although most underwriting and claim-related issues are similar to conventional practices, there are some subtle key differences and issues that are being debated and need to be addressed in the Takaful industry. These are summarised below:

Most underwriting practices are in line with conventional methodologies but different Shariah opinions exist in dealing with selection issues and discrimination based on gender and medical evidence.

- Most underwriting practices are in line with conventional methodologies but different Shariah opinions exist in dealing with selection issues and discrimination based on gender and medical evidence. Takaful operators would typically use the same underwriting approach as conventional insurers by pricing the contributions based on the key risk factors such as age and gender, and charging fully for substandard risks.

- Occupational classification may be an issue in underwriting. For example, participants or industries under group life policies dealing exclusively in alcohol, pornography, tobacco, or gambling-related activities may be declined as these activities are deemed to be forbidden in Islam.

- For Family Takaful, most policy exclusions that typically exist in a conventional insurance policy have been adopted by Takaful operators. This includes a suicide clause (usually in the first year), self-inflicted injuries, AIDS or HIV exclusions, breaching civil law or criminal activities, influence of drugs or alcohol, etc. The most debated item is the suicide clause as a cause of death. Whilst suicide is permissible under Shariah in some regions, in others it is unrecognised. In general, the adoption of most underwriting items from conventional practice is expected to be challenged as Takaful approaches maturity. The question of whether underwriting is for risk selection or risk classification will become an issue. In other words, can an application be rejected based on underwriting? For example, can an HIV-positive applicant be denied coverage? These questions will touch on the concepts of mutuality and cooperativeness of Takaful. Likewise, the issue of propriety of exclusions in Takaful contracts will be questioned as the concept seeks purity and distinction from conventional insurance. The varying levels of religious conservatism by region will make these questions more relevant in certain regions over others.

- Ex-gratia claims can theoretically only occur under Takaful with the consent of all the pool participants as this directly affects the surplus distribution of the pool. However, as is common in conventional insurance, a pragmatic approach is usually adopted and a payment is made if the Shariah board permits it.

c. Determination and distribution of surplus

As insuring risk by a third party (transfer of risk) is prohibited in Islam, any surplus or profits earned out of the risk element are by default prohibited. There is divergence of opinion with regards to the nature and treatment of the underwriting surplus in Takaful, some of which are outlined below:

- **Opinion 1**: As the transfer of insurance risk is prohibited, the Takaful operator cannot benefit from any emerging underwriting surpluses. Hence, these need to be distributed back to the participants who mutually insure each other.

- **Opinion 2**: The surplus arising is the result of the Takaful operator's sound risk management. Hence a proportion of the surplus should be distributed to the operator as a reward.

- **Opinion 3**: Neither the Takaful operator nor the participants should benefit from the underwriting surplus as favourable underwriting experience is deemed to be made possible by Allah. Therefore all emerging surpluses should be donated to charity in the true spirit of Takaful.

In practice, Takaful and Retakaful operators apply a range of solutions as follows:

- The operator distributes all the surpluses to the participants.

- The operator shares in the surpluses through an 'incentive fee' structure of hybrid Takaful models.

- The operator partially distributes the surpluses to the participants and holds the remainder as 'contingency reserves' or 'stabilisation reserves' to manage the volatility in future claims. This is discussed further in the next section.

- The operator does not distribute any surpluses to the participants on the basis that a donation is unconditional as under the Waqf model and hence the surplus is donated to charity.

From a risk management perspective, the input of actuaries will be required to manage effectively the underwriting surpluses within the Takaful operations.

With such a divergence of practice within the market, there is a great danger that the currently unaware consumer will, over time, lose confidence in Shariah-based products. Regardless, from a risk management perspective, the input of actuaries will be required to manage effectively the underwriting surpluses within the Takaful operations.

The principles of surplus determination and distribution to ensure equitable and timely treatment of generations of participants are yet to be articulated in many Takaful schemes. Many will distribute surplus to maturing policies or at time of death of covered persons. No surplus is distributed to terminating policies. Note that surrender penalties on terminating policies are often treated as belonging to the operator (to augment acquisition cost) and so are not included in surplus. Also, underlying measures (such as contribution size, reserve, death benefit amount, etc., in the case of Family Takaful) that could guide the distribution of surplus among policies are currently ignored.

d. Treatment of the contingency reserve

Instead of distributing all the underwriting surpluses as described previously, it is often raised as a question whether Takaful operators can retain a proportion of the underwriting surplus in the form of a contingency or claim stabilisation reserves. Such reserves might be critical during the early years of a Takaful pool for the following reasons:

- As a buffer against potential adverse claim experiences in the future.

- To allow the pool to build self-sustaining capital in the future. This in-built capital can be a vehicle through which participants could eventually buy out the operators (shareholders), thus moving closer towards the true objective of Takaful (i.e., mutuality).

Note how contingency reserves would serve as relief to the Takaful operator's loans otherwise required to cover deficits resulting from underwriting losses. This link creates another conflict of interest between the operator and participants, particularly exiting ones. Hence, there are generational equity issues that the accumulation of contingency reserves will trigger, but not unlike mutual insurance or participating business.

Currently there are no agreed standards on the proportion of surplus that can be allocated as contingency reserves. Arguably, the entire surplus can be held as contingency reserves within the pool if it meets policyholders' reasonable expectations (PRE), as the primary objective of Takaful is to meet claims when the risk events occur. The role of the actuary is critical to the management of the expectations of participants. Actuarial methods and simulations can be used to determine the appropriate and prudent amount of contingency reserves.

e. Treatment of participants' pools

Shariah scholars have no specific ruling around the parameters governing pools. In the strictest sense of the spirit of Takaful, the Takaful operator should endeavour to have as large a pool as possible that provides coverage to participants against the risk event. In reality, this is difficult to implement as insurance risks are generally heterogeneous in nature. There are two broad classes– General and Family (Life) Takaful. Furthermore, there is heterogeneity in the duration of liabilities (e.g., short-tail and long-tail risks) as well as other risk factors such as age, gender, country of residence, and currencies. At a minimum, many operators tend to maintain separate participants' pool for General and Family Takaful. The choice of the number of participants' pools is therefore driven by the need to have as much homogeneity as possible within each pool without significantly compromising the size of the pool–this is essentially a statistical dilemma with which actuaries are familiar.

The Takaful operator should endeavour to have as large a pool as possible that provides coverage to participants against the risk event. In reality, this is difficult to implement as insurance risks are generally heterogeneous in nature.

In general, the level at which pools are created will be driven by a balance between equity considerations and mutuality considerations of Takaful.

f. Issues surrounding Retakaful and retrocession

Takaful operators need to exercise caution when deciding on the Retakaful provider. Although the Retakaful contract wordings may reflect Shariah, a Retakaful provider may actually be applying conventional reinsurance methods and/or retroceding to a conventional reinsurer, both of which might not be acceptable to the Shariah board of the ceding Takaful company.

In addition, whilst Retakaful capacity is widely available, retro-Takaful capacity has yet to exist. There exist different interpretations as to the permissible limits on retrocession, as summarised below:

- A large number of Retakaful companies are permitted to retrocede conventionally with their parent company and there are no Shariah constraints on the extent of retrocession allowable. In some cases, up to 99% is retroceded conventionally, which would raise the actual Shariah compliance.

- Retrocession between Retakaful operators has yet to materialise and Shariah issues around such an arrangement have yet to materialise.

- There has been talk of setting up a Retakaful syndicate at Lloyds of London but this has yet to materialise.

- Some Shariah scholars require Retakaful providers to explicitly state its Shariah capacity, and retrocession from a Retakaful pool is prohibited. In such cases, the Retakaful players would typically provide two treaties, which are considered to be an explicit arrangement: One treaty with a Retakaful solution up to a limit, and a second conventional surplus treaty.

In the absence of a common approach surrounding Retakaful and retrocession, such divergences can only lead to further undermining of the Takaful industry.

g. Treatment of transferring block of business and dissolution

In the past, many Takaful companies had operated on the basis of necessity ('Dharura'), and have therefore used conventional reinsurance. With the emergence of substantial Retakaful capacity, Takaful operators are currently moving their existing Takaful blocks of business from conventional reinsurers to Retakaful providers. This raises questions on the appropriate methodology for calculating the embedded value of the transferred block of business, such as:

- The treatment of underwriting surplus (which is different in Takaful compared to conventional insurance)
- Whether the new Retakaful provider should only pay for the present value of future Wakala fees
- The treatment of the change in embedded values during the negotiation stages
- The treatment of Qard Hasan during the transfer, given that the pool will generate future Wakala fees

In terms of dissolution of Takaful business, there are no clear instructions from either Shariah or regulatory bodies on the process for the dismantling of Takaful business either on a voluntary or involuntary basis. The IFSB does provide some regulation (see references in Appendix II) on these issues although the robustness of its Shariah views has not been tested.

III. Other Issues and Challenges

Since the development of the Takaful industry, there has been great excitement with regard to the future prospects of Takaful. This is mainly driven by the existence of a low penetration rate in large populations of many Muslim countries combined with favorable demographic characteristics (e.g., young population). However, there have been many highly inflated projections in the industry with many start-ups developing an overly ambitious business plan. Whilst there is no doubt about the potential of Takaful, given its recent growth trend, any future business projections should be realistic and caution should be exercised when analysing industry results, because of the lack of credible data, compounded by the uncertainty about future penetration rates in these countries.

As a further consequence to Takaful's projected growth the industry has seen many new entrants. Pure Takaful implies one large pool that caters to the needs of its members in order to achieve mutuality. However, the very presence of many players defeats such objectives, which may result in some consolidation within the industry and, therefore, the challenges of mergers and acquisitions (M&A) vis-à-vis Takaful will need to be addressed. A consolidation is unlikely to occur in the near future but actuaries should be prepared to deal with the M&A challenges that are specific to Takaful.

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CONCLUSION

The Takaful industry, with its rapidly evolving landscape, is currently facing numerous regulatory and technical challenges. The industry is constantly seeking improvements in its effort to improve competitiveness and to meet Shariah requirements as well as treating customers and Takaful operators fairly. It must also survive side-by-side with the conventional insurance industry. The lack of suitable human resources means that actuaries can add significant value to assist Takaful operators in tackling these current issues faced by the industry.

Mutuality is a concept that has existed for centuries in the insurance world. Actuarial expertise and knowledge in the management of mutual insurance business can be adopted within Takaful to enhance its success. The Takaful industry is continuously striving to develop best practices in the management and valuation of the business. Actuarial principles and practices in the conventional insurance context such as embedded value calculations, asset liability management, enterprise risk management, capital management, surplus determination, and distribution methodologies have direct application to the Takaful industry.

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In addition to technical challenges, there are also regulatory challenges within the industry. Due to the varying degrees of Shariah interpretation, there are difficulties in developing global Takaful standards or regulations, although the IFSB has issued Takaful consultation papers in an attempt to achieve some consistency in the industry. Actuaries can work closely with the regulators to develop a framework that is appropriate and relevant to Takaful. With the conventional insurance industry moving towards a risk-based capital assessment regime, and with the current changes in the global accounting standards, considerations need to be given to their application to Takaful.

APPENDIX I: GLOSSARY

Dharura	This concept is used to provide permission for an action that would be considered Haram under normal circumstances, borne of the necessity of the situation.
Fatwa	Juristic opinion, juridical decision in line with the Muslim faith.
Gharar	Uncertainty. A transaction under Islamic law should be held invalid if it involves the element of uncertainty or Gharar, which is otherwise preventable or avoidable.
Hadith	Words of the Prophet (SAW), traditions. The narrative of the sayings and actions of the Prophet Muhammad (PBUH).
Halal	Lawful, valid in Islam; one of the five major Shariah categorisations of human acts.
Haram	Unlawful, forbidden in Islam; one of the five major Shariah categorisations of human acts.
Kafalah	This is an agreement to pay the debt of another party who defaults, or to guarantee.
Maisir	Gambling. Maisir is one of the fundamental prohibitions in Islamic finance and is one of the reasons that led to the design of a specific business model for Islamic insurance.
Mudarabah	Co-partnership where at least two parties are involved in a commercial transaction, in which one party provides capital while the other offers skill in carrying out the business successfully, in view of sharing the subsequent profits or losses accordingly. This is a financing technique adopted by all the Islamic financial institutions and in commercial activities in the contemporary world as opposed to the Riba (interest)-based financing technique. Profits arising from the project are distributed according to a predetermined ratio, and financial losses are borne by the provider of capital.
Mudharib	An entrepreneurial partner in a Mudaraba partnership who provides the expertise and management.
Murabaha	A Shariah-compliant contract of sale where the seller declares cost and profit. The sale takes place on a mutually agreed profit.
Qard Hasan	Interest-free loan, identified in the Quran as a means of charity or helping others in need.
Quran	Text of God, the primary source for jurists. The Book of Divine Revelation that was delivered to humankind by the Prophet Muhammad (PBUH).
Retakaful	An alternative term for Islamic reinsurance.
Riba	Usury, interest which is unlawful in the Islamic Shariah. It is therefore unjustified or uncompensated excess in the exchange of counter values in the transaction of exchange when the excess revealed either through weight or measure or through benefit arising from delayed delivery. Today, most of the commercial transactions under conventional economy revolve around the elements of Riba.
Shariah	Islamic common law derived mainly from the Quran and the Hadith practice and traditions of the Prophet Muhammad (PBUH).

Shia Islam	One of the two main branches of orthodox Islam, the second largest after Sunni Islam.
Sukuk	Certificates of investment evidencing an undivided pro rata ownership of an underlying asset. Usually referred to as an Islamic bond.
Sunnah	The saying, the action, the teachings, and the approval of the Prophet Muhammad.
Sunni Islam	The largest of the two main branches of orthodox Islam.
Ta'awun	Cooperation. An Islamic insurance scheme is based upon cooperation for mutual protection of the members.
Tabarru'	Donation, charity, the purpose of which is not commercial.
Takaful	Mutual responsibility, an alternative term to Islamic insurance. It is an Arabic term derived from the root word 'Kafalah', meaning 'to guarantee.' To be more precise, it is derived from the verb 'takafala' meaning 'to mutually guarantee and protect one another.' Therefore, literally, it means mutual help and assistance. It can be noted that the contract of Takaful is based on the concept of helping one another, whereby each and every participant contributes to the common fund in order to provide financial assistance to any member who needs help, as defined in the mutual protection scheme. In principle, Takaful is very similar to conventional mutual insurance in terms of its philosophy and structure. However, it differs significantly from conventional mutual insurance as all its operations should be based on Islamic principles, including investment activities, the establishment of the Shariah board, and causes for legitimate claim, which exclude causes such as suicide and death under the influence of alcohol.
Wakala	Agency, i.e., a contract between an agent and principal. This contract enables the agent to render services and be paid a fee. Key principles of Wakala: • Involves an agency contract between an agent and principal • Used as a facility to enable transactions to take place • The agent earns a fee for services rendered
Waqf	A charitable donation.

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APPENDIX III: SELF-REGULATING BODIES AND TAKAFUL GROUPS

AAOIFI: Accounting and Auditing Organisation for Islamic Financial Institutions
This is based in Bahrain and is an autonomous nonprofit corporate body. It is responsible for developing accounting, auditing, ethics, governance, and Shariah standards for the international Islamic finance industry (i.e., Islamic banks and financial institutions). It is supported by over 160 institutional members from around 40 countries.

GTG: Global Takaful Group
This is a network of Takaful operators with over 40 members from Asia and the Middle East. It is a forum where operators exchange ideas and converge on solutions for the betterment of the industry. It is headquartered in Labuan, Malaysia. This group was formerly ASEAN Takaful Group.

International Islamic Fiqh Academy
This is a theological centre for studying Islamic jurisprudence and is based in Jeddah, Saudi Arabia. It is a subsidiary of OIC and its main objective is to study contemporary issues and provide guidance from a Shariah perspective.

IFSB: Islamic Financial Services Board
This is based in Kuala Lumpur, Malaysia, and was formed in 2002. It serves as an international standard-setting body of regulatory and supervisory agencies with interests in ensuring the soundness and stability of the Islamic financial services industry globally. There are over 185 members including 43 regulatory and supervisory authorities as well as IMF, World Bank, Asian Development Bank, Islamic Development Bank, and other market players.

OIC: Organisation of the Islamic Conference
This is an inter-governmental organisation representing the interests of all 57 Islamic countries. It is based in Jedda, Saudi Arabia, and has a permanent delegation to the United Nations.

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