

Shariah Scholars' View Point on the Practice of Underwriting and Risk Rating for Family Takaful Model

Sheila Nu Nu Htay¹, Mohammad Khalid Jawahir² & Syed Ahmed Salman¹

¹ IIUM Institute of Islamic Banking and Finance, Kuala Lumpur, Malaysia

² BAI Co (Mtius) Ltd, Mauritius

Correspondence: Syed Ahmed Salman, No.11, JALAN Bullion Mewah 12, Taman Bullion Mewah Batu Caves, Selangor, 68100, Malaysia. E-mail: salmaniium@gmail.com

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Abstract

The practice of underwriting and risk rating for individual participants in family *takaful* stems from the underwriting practice in life insurance, and thus could contain elements which contravene the essence of the *Shari'ah*. A review of literature on *takaful* indicates that there are very few materials which look at the underwriting practice from a *Shari'ah* perspective. The objective of this study is to find out the *Shari'ah* viewpoint on the underwriting and risk rating practice for individual participants in family *takaful*. The study sample consists of five purposefully selected *Shari'ah* experts on *takaful*. The research method uses is based on the Delphi technique. This study found that most of the *Shari'ah* scholars interviewed did not seem to have a deep exposure to the underwriting and risk rating practice in family *takaful*. They however declare that underwriting and risk rating is permissible, although they had some concerns regarding some of the factors use in the underwriting process. The findings of this study will be of interest to the *Shari'ah* scholars, *takaful* operators, regulatory bodies, academicians, and other stakeholders.

Keywords: risk, Takaful, underwriting practices and Malaysia

1. Introduction

This paper seeks to explore the *Shari'ah* viewpoint on the practice of underwriting and risk rating for individual participants in family *takaful*. The purpose is to gauge the level of understanding and exposure that *Shari'ah* scholars have pertaining to the underwriting and risk rating practices in family *takaful* and to get their views and opinions on the underwriting process and the factors which underwriters use to select and assign risk ratings to participants. It is anticipate that the knowledge generated from this study would offer us new insights on how *Shari'ah* scholars deal with areas which are not in their immediate fields of expertise. It is also expect that this inquiry would inform us on the seriousness of *takaful* operators in ensuring the *Shari'ah* compliance of their operations. This study employs the Delphi technique to gather the opinions of the scholars. Participants of this research included a purposefully selected panel of *Shari'ah* experts who sit on *Shari'ah* advisory boards within the *takaful* industry in Malaysia.

In conventional insurance, underwriting represents the initial phase in the process of insurance premium determination. The process involves a series of assessment and examination among others to determine individuals' risk rating and their subsequent risk class or policy group determination as well as policy content. The process also is part of the steps to determine the insurance premium. The *takaful* operator has similar underwriting and risk rating practices as the insurance company (Frenz & Soualhi, 2010).

Thus, unfairness issues raised in the conventional underwriting process need to be revisited in order to ensure that the practices of *Takaful* operators are in line with Islamic principles focusing on fairness and justice. Some of the unfair issues are related to the use of factors such as age, family history, gender, health status and others, in the selection and classification of risks (Palmer, 2007; Daud, 2009). Therefore, this should have warranted the attention of *Shari'ah* scholars.

The rest of this paper is organized as follows: the next section provides reviews on related past literature regarding insurance and *takaful* underwriting and highlights issues of concern on the current practice in the *takaful* industry. The following section is on research methodology. Section four, presents the analysis results,

interprets the findings and section five discuss about concludes by summarizing the major findings and providing recommendation.

2. Underwriting and Risk Rating

2.1 Underwriting and Risk Rating in Life Insurance

Underwriting is the process an insurer uses to determine if and on what basis it will accept applicants (Teale, 2008; Mehr & Gustavson, 1987). It basically involves the selection and classification of insured's into groups or classes. According to Mehr and Gustavson (1987), risk classification and underwriting help insurance companies place applicants into groups or classes. Each class consists of individuals who pose the same or comparable levels of risk. All members of a class pay the same premium. In this way, insurers assure that premiums are appropriate to risks and that all those with the same level of risk pay the same premiums (Treischmann, Hoyt, & Sommer, 2005). Indeed, life expectancy varies by age, gender, medical and family histories, occupation and lifestyle. Applicants for life insurance have different medical histories and risk factors for future disease that affect life expectancy.

Treischmann et al. (2005) state that the purpose of any risk-selection or underwriting process is to place applicants into distinct groups that have similar expectations of life or risk of death at any time interval. They further mention that each group is charged a premium sufficient to cover costs associated with its expected rate of death. Insured's in each group have the same expectation of life (risk of death), pay equally, and are self-supporting (Teale, 2008). He further states that no group or person unfairly subsidizes any other group.

The underwriting element is of utmost importance to the insurer. To fulfill its promise to pay future claims, an insurer must remain financially viable. An insurer's financial viability depends on administrative efficiency, sound investment strategy, continued marketplace competitiveness, and premiums corresponding to the claims that can be expected from the insurer's policyholders. It is indeed in this regard that the business of insurance is dependent upon accurate risk classification and differentiation, founded on the idea that the premiums should be more or less in proportion to the estimated risk level of policy holders. If an insurer did not apply rigid underwriting standards but instead insured all applicants at standard rates, applicants who might be rated up or rejected by other insurers may join the insurer with less rigid underwriting process (Dorfman, 2005). This is what is known as adverse selection (Dorfman, 2005; Harrington & Niehaus, 2004; Mehr & Gustavson, 1987).

This will basically lead to higher loss expectancy for the insurer and will result in higher premiums being charged to compensate for the higher loss expectancy.

2.2 Underwriting and Risk Rating in Family Takaful

The underwriting process in family *takaful* is similar to the underwriting process in life insurance (Frenz & Soualhi, 2010; CIFP Course Materials, 2009; Abu Bakar, 1996). The only difference is in the screening of risks to ensure *Shari'ah* compliance. Frenz and Soualhi (2010) state that the *Shari'ah* compliance screening differs across companies since a permissible risk by one operator might not be approved by another. There is thus the need to have an underwriting framework which can help standardise the *Shari'ah* screening process for risks in *takaful* companies. As regards to the other aspects of underwriting, the mode of operation is very much similar to life insurance. The underwriters gather information on the applicant through the application form, the agent's report and other information sources such doctors' statements and medical records (CIFP Course Materials, 2009). They then process the application and decide if and on what conditions to accept the application based on the risk rating process. The applicant is informed about the contribution or *tabarru'* to be made in order to enter the pool. It should be noted that the contribution is determined by underwriters through the risk rating process and that the factors which are used in the risk rating process in family *takaful* are similar to the factors used in risk rating in life insurance. Similarly the classes into which the participants are grouped are very much similar to life insurance.

2.3 The Important Role of Underwriting and Risk Rating

Underwriting is the procedure an insurer utilizes to decide if and on what base it will accept applicants (Teale, 2008; Mehr & Gustavson, 1987; Iqbal, 2005). This process is of utmost importance to the *takaful* operators. To fulfill its promise to pay future claims, *takaful* operators must remain financially viable. *Takaful* operators' financial viability depends on administrative efficiency, sound investment strategy, continued marketplace competitiveness, and premiums corresponding to the claims that can be expected from the insurer's policyholders. It is indeed in this regard that the business of insurance is dependent upon accurate risk classification and differentiation, founded on the idea that the premiums should be more or less in proportion to the estimated risk level of policy holders. Over-pricing risk may lead to fewer participants joining the insurer for

insurance cover and the under-pricing the real risk may result loss of (Mehr & Gustavson, 1987; Harrington & Niehaus, 2004; Dorfman, 2005; Teale, 2008).

Palmer (2007) who approaches the issue from an ethical and philosophical perspective puts forward that the determination of the premium and availability of insurance for an individual is made in relation to one's inclusion in certain statistical groups and this by itself gives rise to a fairness issue. This is the most damning criticism against current risk rating practices and this is what Maitzen (1991) terms as statistical discrimination. His argument is that the statistical correlations and actuarial tables which underwriters use in the selection of participants and classification of risks are imperfect in the way they classify risks into classes.

Palmer (2007) states that there is truth in the claim that there will be individuals who will be assigned into classes which do not truly reflect the risks they bring in and this in itself is unfair. Maitzen (1991) notes that unfairness is bound to happen when statistics is involved since the statistical models being used must rely on correlations that do not necessarily indicate causation.

Similarly, Brockett and Tankersley (1997) mentioned that the link between certain genetic factors and specific diseases is overestimated. They state that there is correlation but it is not a perfect correlation and does not show causality. Some of the unfair and unjust correlation is between the young men and bad driving habits. Sometimes, the occupation such as firemen and divers are used to discriminate the risk and it is totally unfair from the *Shari'ah* point of view.

Nevertheless, palmer (2007) states that the insurers owe a duty of care to ensure that individuals are placed in classes that best match their true risks, and that insurers should take a greater burden in avoiding unfairness that results from statistical discrimination when individuals have no potential to modify the characteristics which are used to put them into certain classes or categories. It cannot be denied that there are shortcomings in the underwriting and risk rating practice and that the risk of having situations of unfairness by using statistical models is very much alive. Since the underwriting and risk rating practice in family *takaful* is similar to that of life insurance (Sadfer jaffar, et al., 2009), it is likely that the above shortcomings and unfairness issues would also manifest themselves in family *takaful* underwriting.

Since the underwriting and risk rating process is similar in both insurance and *takaful*, the underwriters use similar factors in the risk rating process. The information below is derived from literature on both insurance and *takaful*, from personal communications with underwriters and from prior researchers such as Abu Bakar (1996), Teale (2008), Dorfman (2005), Treischmann, Hoyt and Sommer (2005) and Mehr and Gustavson (1987). The factors are as follows:

Age: It is expected that mortality is positively and highly correlated with age.

Gender: It is generally believed that probabilities of death of females are less compared with the probabilities of death of similarly situated males. Therefore, men will tend to pay a higher premium than women at the same age.

Physical Build: This is determined by a number of parameters amongst which are the relation between height and weight. Underwriters normally base themselves on weight charts that indicate the average weights for various heights and ages. Being underweight at lower ages may be seen as being prone problems like anemia, Tuberculosis and lack of resistance to infections. Being overweight at older ages may signal to the underwriter that the patient is prone to cardiovascular diseases, high blood pressure and kidney problems.

Medical History: The physical condition of a proposer is of basic significance in underwriting. The underwriter will look at an applicant's current medical condition as well as past medical history, medical tests conducted and any risk of serious impairments. Some diseases may render a person uninsurable.

Personal History: The lifestyle, habits, hobbies, travels; places of residence and previous amount of insurance cover also affect one's risk rating. The underwriters also look at substance abuse, smoking and tobacco use as well as excessive consumption of alcohol. These will definitely increase the participant's risk rating.

Family History: The impact of family history has been assessed from three angles. The first one is heredity, which is basically the transmission of cell characteristics from one generation to another. The second one is average longevity of the family, which is a pointer to life expectancy of current members. The third one is the impact of family environment which includes exposure to infection and other risks. The underwriter may give a higher risk rating if the both parents have died before age 50, or if the family discloses two cases of diabetes or heart disease before age 60. The underwriters are more likely to give a better rating if both parents reach age 70.

Financial Status: The underwriter normally assesses the relation between an applicant's income and the amount of insurance being applied for. If the applicant seeks more life insurance than they need or can pay for, it raises

the question whether they would adhere to the contract.

Occupation: Underwriters normally have a list of occupations which are considered hazardous. The risk levels vary depending on the nature of the occupation. There are occupations which make an individual prone to accidents such as scaffolding workers. Other occupations may possibly cause health related problems and give rise to medical impairment, for instance, factory workers exposed to chemicals.

The above factors are the most common factors used by underwriters in the selection and classification of risks. This process is very important in order to achieve equity among policyholders (Teale, 2008; Mehr & Cammack, 1980; Mehr & Gustavson, 1987; Bakar, 1996)

3. Methodology

A purposeful sampling method selected very prominent *Shari'ah* scholars based on certain specific criteria as set by the researcher. A purposeful sampling procedure was used to select the panel of experts for this study. This sampling method is used when there is a need for subjects who are in the best position to provide the info required or when a limited number or category of people have the info that is sought (Cavana, Delahaye, & Sekaran, 2001). In purposive sampling, the subjects normally conform to some criteria set by the researcher (Dey, 1993). In this study, the criteria for selection of participants were:

- 1) All participants were experts in *shariah* and held academic qualifications in *shariah* related fields.
- 2) All participants were *shariah* advisors in the *takaful* industry and were registered as such by the Bank Negara Malaysia.
- 3) All participants have published papers on *takaful* related issues.

The participants included five individuals who are members of the *Shari'ah* advisory boards of Great Eastern Takaful Sdn Bhd, Munich Re Retakaful, MNRB Retakaful, HSBC Amanah Takaful and the *Shari'ah* Advisory Council of Bank Negara Malaysia. Invitations to participate in this study were sent to seven *Shari'ah* scholars, but only five responded. In this research, the Delphi technique is used since it was the most appropriate technique to find out about issues where there is little or no evidence at hand. This is acceptable since according to Thangaratinam & Redman (2005), panel sizes have ranged from 4 to 3000. They further state that "representation is assessed by the qualities of the expert panel rather than its numbers".

To investigate the above stated research gaps, the following research questions are formulated:

- 1) To what extent are *shariah* experts advising the *takaful* industry exposed to and knowledgeable about the underwriting and risk rating process in family *takaful*?
- 2) What issues have these *shariah* experts come across as regards to the underwriting and risk rating process for individual participants in family *takaful*?
- 3) What is the *shariah* viewpoint on factors which underwriters use in the selection and classification of risks for individual participants in family *takaful*?

4. Analysis Results and Interpretation

The purpose of this research is to find out the *Shari'ah* viewpoint on the practice of underwriting and risk rating for individual participants in family *takaful*, and more exclusively on the factors which underwriters use in the selection and classification of risks. The researchers' believe that a better understanding of the *Shari'ah* viewpoint and of potential issues on this practice would likely help the *takaful* industry move closer to the true spirit of mutual cooperation and brotherhood. The findings of this research are based on the interviews of five *Shari'ah* scholars, comprising of three female and two male. In this research, the interview was done in two successive rounds to gauge their understanding of the underwriting and risk rating process and to gather their opinions on the factors underwriters use in the selection and risk classification process. No further interview is needed beyond the second round since there is not much divergence in the opinions gathered. The information obtained from the interviews formed the basis for the overall findings of this study.

4.1 Research Findings Pertaining to Research Question 1

The first major finding which the researcher came across is that some of the *Shari'ah* scholars interviewed, did not seem very well exposed to the underwriting and risk rating practices in family *takaful*. This is evidenced by excerpts from the interviews conducted:

Scholar B: "In all fairness, the *takaful* operator I am advising did not expose us to the underwriting practice"

Scholar C: "What do you mean by underwriting? Can you explain to me how it is performed?"

Scholar E: "I have not really researched this area..."

As can be seen, the *Shari'ah* experts in certain cases did not seem to have a good grasp about the underwriting practices and some admitted that they did not have exposure to the process. Thus, in a couple of instances, the researcher had to explain to the scholar how underwriting and risk rating is carried out in *takaful*. This lack of knowledge and exposure to *takaful* processes would raise pertinent questions pertaining to their ability to ensure the *Shari'ah* compliance of *takaful* operations. Out of the five scholars interviewed, only one scholar claimed to have been introduced to the underwriting and risk rating practice by actuaries at the company the scholar is advising.

4.2 Research Findings Pertaining to Research Question 2

The second major finding is that only two out of the five *Shari'ah* scholars interviewed were aware of potential issues and had some concerns regarding the underwriting and risk rating practice in family *takaful*. Two of the scholars expressed concerns on the factors being used in the underwriting process. They both expressed their discomfort pertaining to the use of some of the factors. One of them stated that the issue was raised in the *Shari'ah* board meeting in which the scholar is a member and was put forward to the *takaful* operator. The scholar declined to offer more details pertaining to the outcome of the discussion which they had. The fact that only two scholars found issues can be explained in that most of the experts interviewed did not seem to have a deep grasp of the underwriting process and hence did not have the opportunity to spot potential issues which might pose a *Shari'ah* problem.

4.3 Research Findings Pertaining to Research Question 3

The third major finding is that all of the *Shari'ah* scholars said that the practice of underwriting and risk rating is permissible. Some of the scholars state that this practice is of prime importance to maintain the solvency of the pool and this is a practice made permissible based on the acceptability of *urf* (custom) in Islamic jurisprudence, which basically means the recognition of prevailing local customs which do not contravene Islamic principles (Ramadan, 2006). Most of the scholars also put forward the concept of *maslahah*, or the greater public good, as basis for the acceptability of the underwriting and risk rating process in family *takaful*. One scholar declared that it is permissible based on the ruling of its permissibility by AAOIFI. Thus, the general consensus among the experts interviewed is that underwriting and risk rating is permissible from a *Shari'ah* perspective.

The fourth major finding is the collective view from the *Shari'ah* scholars that most of the underwriting factors are allow to be used in the risk rating process. However, most of them expressed concerns regarding gender, family history, financial status, occupation and physical build. As regards to the use of gender, they state that the *takaful* operator has to ascertain whether this poses a genuine concern in terms of risks brought in to the *takaful* pool. Most of them opine that charging a different contribution rate based on gender is not in line with the *takaful* spirit. As regards to family history, three out of five scholars are of the opinion that family history should ideally not be included among the underwriting factors.

They agree that risks based on family history are speculative and that in *Shari'ah*, pricing should be done on a subject matter which exists or is very likely to exist. They also state that if this were to be taken as a factor, it should be medically proven that a family member's illness or early death will have a negative incidence on the life of the participant. Pertaining to the use of financial status as an underwriting factor, most of the scholars agree that *takaful* operators should not ignore or penalize those applicants with low income in order to better reflect the *takaful* spirit of brotherhood. As regards to the use of physical build as an underwriting factor, most of the *Shari'ah* scholars agree that there must be clear medical proof that this may negatively affect the health and life of the applicant and that ignoring this factor will affect the riskiness in the pool.

Pertaining to the use of occupation as a factor, most of the *Shari'ah* scholars are of the opinion that the *takaful* operator should consider providing coverage to applicants who are deemed to have risky occupations but who provide *halal* services to the community. Most of them are also of the view that it is permissible to give *takaful* coverage to an individual working in a *haram* environment. However, most of them state that it is not permissible to give coverage to a person having a *haram* occupation. The views stated above reflect the general consensus among the scholars on the factors which underwriters use in the risk rating and selection process. However, it should be noted that there has been some minor differences in the juristic opinion on certain cases since the scholars derive these opinions based on their own mental efforts or on *ijtihad*, and thus juristic differences may arise.

The fifth major finding is that most of the *Shari'ah* scholars are of the opinion that there is room for improvement for *takaful* operators to reach the true spirit of *ta'awun*. Most of them agreed that *takaful* in its

current practice does not fully reflect the spirit of mutual cooperation, solidarity and brotherhood which are supposed to be the philosophical underpinning of the *takaful* arrangement.

5. Discussion of Findings, Conclusion and Recommendation

This study gives an insight on the level of exposure of *Shari'ah* experts to the practice of underwriting and on their opinions regarding the underwriting process. The scholars concurred with AAOIFI regarding the permissibility of using actuarial practices to determine contribution rate. However, they expressed concerns regarding some of the factors used in the underwriting process such as gender, family history, financial status, physical build and occupation. The major findings can be summarised as follows:

- 1) Most of the *Shari'ah* experts interviewed did not seem to have a deep exposure to the underwriting and risk rating practice in family *takaful*.
- 2) Only two out of the five *Shari'ah* scholars interviewed are aware of potential issues and had some concerns regarding the underwriting and risk rating practice in family *takaful*.
- 3) All of the *Shari'ah* scholars said that the practice of underwriting and risk rating is permissible. The collective view from the *Shari'ah* scholars is that most of the underwriting factors were allow to be used in the risk rating process. However, most of them expressed concerns regarding the use of factors such as family history, financial status, gender, occupation and physical build in the underwriting process.
- 4) Most of the *Shari'ah* scholars are of the opinion that there is room for improvement for *takaful* operators to reach the true spirit of *ta'awun*.

By expressing these concerns, the scholars concur with Daud (2009) in that the current practice of underwriting does not reflect the true spirit of *takaful* and that there is room for improvement.

This study could lay the ground for further research on underwriting practices as adopted by *takaful* operators and could also lead to deeper discussions among *Shari'ah* scholars on a broader basis so that we have a definite opinion on these issues. Among the major findings, the researchers found interesting that some of the *Shari'ah* scholars did not seem to have a deep exposure to the underwriting and risk rating practices in family *takaful* and some of them even claimed that they were not invited to look at the underwriting and risk rating practices of the *takaful* companies which they advise. Based on this, one can seriously question the *Shari'ah* compliance audit of *takaful* operators. Perhaps this could be explained by the fact that underwriting is quite technical in nature and that this might have posed a barrier for *Shari'ah* scholars. The take away of this study however lies in the fact that the scholars collectively expressed their concerns on the current *takaful* practice and stated that there is room for improvement in terms of achieving mutual cooperation, solidarity and brotherhood.

It is expected that the findings of this research will be the interests of the various stakeholders:

For *Shari'ah* Advisors: They should make sure that they understand all the operations of the *takaful* operator before they declare it as being *Shari'ah* compliant.

For *Takaful* Operators and Actuaries: They have a duty to explain the *takaful* processes to their *Shari'ah* advisors, especially as regards to the technical aspects, and should adopt a transparent approach in their operations in order to ensure *Shari'ah* compliance of their offerings and practices. Failing that, they run the risk of legal, *Shari'ah* and reputation risks.

For *Regulatory Bodies:* They should make sure that *Shari'ah* board members are adequately trained before granting them *Shari'ah* advisory licenses and they should come up with regulations asking the *takaful* operators to be transparent to the *Shari'ah* advisors when it comes to the *takaful* operations.

It is however well noted that the findings have dispelled any potential doubt pertaining to the permissibility of underwriting from a *Shari'ah* perspective since all of the scholars have agreed to its permissibility. The researchers recommend that proper training should be given to *Shari'ah* scholars advising *takaful* operators pertaining to the underwriting practices. Thus, any doubt in the minds of *takaful* participants and other stakeholders in the industry as regards to the full *Shari'ah* compliance of *takaful* operations can be mitigated. The researchers hope that these findings will lead to better *Shari'ah* compliance practices and better awareness on the need for close scrutiny of *takaful* operations before they are declared as *Shari'ah* compliant.

In this paper, the researchers focus on family *takaful* underwriting for individual participants. This could be extended to include group participants. Other research might also look into the underwriting for general *takaful* and explore potential issues.

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