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Takaful – An Alternate Insurance Model

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(Subject Code 05 - Subject Group: General Topics)

1. Back ground and Scope of Paper

1.1 The Takaful Insurance model is an alternative (to conventional) system of insurance. The word "Takaful" means Joint Guarantee and is meant to provide pooling of risks individuals face, with the mindset of helping each other in the event of any defined losses.

1.2 The system has been originally developed to target the Muslims in jurisdictions where some Muslims do not consider conventional Insurance to be acceptable. However the system of Takaful insurance does not by itself limits it to muslim customers.

1.3 The success of the system also lies in the product design aspects, which are seen as different to the conventional system. For this reason, one finds that a lot of non-muslims (both in Malaysia and Middle East) actually take Takaful policies.

1.4 The concept of Takaful started some 28 years back in Sudan. For the past 18 years or so, Malaysia has developed the concept and has shown rapid growth in this system. In the Middle East as well a number of small companies exist in many countries. In recent years, the Takaful system has been gaining popularity in many countries and the interest and opportunities are gaining momentum. In the Far East (Malaysia being a leader) and many Middle Eastern countries the annualized growth for this business is over 20% as opposed to just about 6% for the conventional business. The overall market (Life and General) was approximated to be over US$ 2.1 billion of premiums for 2002 and estimated to increase to premiums of US$ 12.5 billion by 2015 with over US$ 30 billion in funds. This involves about 40 or so Takaful operators worldwide with another 10 or so in formation as the potential is increasing.

1.5 Life Takaful business has been growing more rapidly at over 70% in countries such as Malaysia, Indonesia, Iran. Even Australia and USA had at least one Takaful based operator but the business aspects are not known. In Pakistan some promotors are in the process of setting up Takaful based companies or possibly products within conventional companies. In the case of India, products within conventional companies (with separate statutory funds) may be the route to follow initially.

1.6 The global scope for Takaful clearly shows the need for more technical people such as Actuaries to study this system more carefully in order to prepare for the demand that this is likely to give rise to in many countries of the world including INDIA. Also as mentioned above, though the system originated in muslim context,the product has its advantages due to which non-Muslims have also opted for it and therefore it is worthwhile for Insurers to study and consider developing.

1.7 Product design is a function of consumer needs. Internationally large financial Institutions have developed extensive Shariah compliant banking products range to cater to certain segments of the population. Islamic Banking products now have a very large market, which is estimated to be over $200 billion. On the Insurance side

banks such as HSBC have already taken the initiative to introduce Takaful based Insurance products in many countries. India may be on the list of some of these large institutions for such specialized products.

1.8 **The scope of this paper is to broadly review the product design elements of Takaful system both for General as well as Life insurance.**

1.9 **There are some variations within the different Takaful models being used in different countries. The variations relate to the different Shariah approved approaches permissible by different scholars. It is however not the intent of this paper to get into these variations as most of the target audience is likely to be new to the Takaful system.**

1.10 **I have had the opportunity to discuss the various models with Shariah scholars of the sub-continent and Middle East in a gathering in Pakistan for this purpose. Some refinements to the typical Wakalah model were suggested by Shariah scholars during these gatherings and it is likely that these would be equally applicable in the case of India as the scholars belong to similar school of thought.**

2. Takaful Business Models

2.1 The key elements of product design under a Takaful system are in principle very similar to those under a conventional Insurance system. In order to differentiate from the conventional system it is important to identify briefly the view points which are held against conventional insurance and which have been addressed to under a Takaful system/product design. **The three key elements are:**

2.1.1 **Riba or Interest: Interest** is forbidden for Muslims and since traditional insurance contracts invest in interest bearing instruments these are therefore considered as forbidden.

2.1.2 **Uncertainty or Gharar**: Under a conventional Insurance contract, there is an element of uncertainty in that the benefit amount or timing is not certain whereas the premium payment is certain.

2.1.3 **Gambling or Maisir**: This is similar to uncertainty defined above. Some people may get a large benefit while others may not get any benefit. The insurance company is in the business of Risk taking and earning profits from this activity.

2.2 These elements are addressed in a Takaful system by:

2.2.1 Investing in non-interest bearing investments as permissible by Shariah scholars.

2.2.2 The contract being that of donation for mutual help rather than a conventional contract where the risk pool is underwritten by the shareholders who bear the risk and return from underwriting.

2.2.3 The distribution of surplus from underwriting to participants with shareholders having no share in underwriting profits.

2.2.4 The relation between the Insured and the Insurer is of "Risk Manager" (Agent or Trustee) with a well defined fee structure as opposed to that of a "Risk Taker" in conventional insurance contracts.

3. Basic Principles of Takaful

3.1 The takaful system is based on the concept of 'Tabarru" or "donation" with the objective being to participate in a risk pool created for mutual help amongst the participants. The relationship between the Insurer and Insured changes from that of a underwriter taking on the RISK and return on itself to that of a Risk Manager acting as a Trustee on behalf of the participants. For its services, the professional Risk Manager is entitled to a defined fee. The insurer (Operator) is not entitled to any underwriting Surplus from the insurance activities. Profit for shareholders, therefore, should be from "Risk Management" and NOT "Risk Taking" activities.

3.2 In a pure sense, deficit in the pool should be shared by the participants by making further contributions if required. However there are practical limitations in being able to do so and solutions have been offered to ensure that participants would have the comfort of being able to get their benefits without undue risks and the Shariah compliance aspect is also fulfilled.

3.3 Underwriting and Actuarial techniques apply in a similar manner as under conventional business as these are essential to protect the pool from undue risks.

3.4 Reinsurance should ideally be done in a similar manner based on the takaful pooling concept where the reinsurer should also act as a risk manager (Retakaful Operator) and should not profit from the underwriting results, which belong to the participants. However, due to practical difficulties relating to availability of retakaful from large reputed reinsurers, reinsurance may be permitted with the approval of Shariah scholars with some specified conditions and limitations. Effort should be made to increase the retention of the pool itself and to minimize any conventional reinsurance.

4. Takaful Models

4.1 The most accepted model for Takaful contracts is referred to as the "Wakalah or Agency" model. Variations within the model do exist but the scope of this paper has been limited to the key conceptual model and to highlight the differences between Takaful and conventional system of insurance.

4.2 Any Insurance arrangement may be divided into two parts. First is the RISK sharing and the second is the INVESTMENT of Funds.

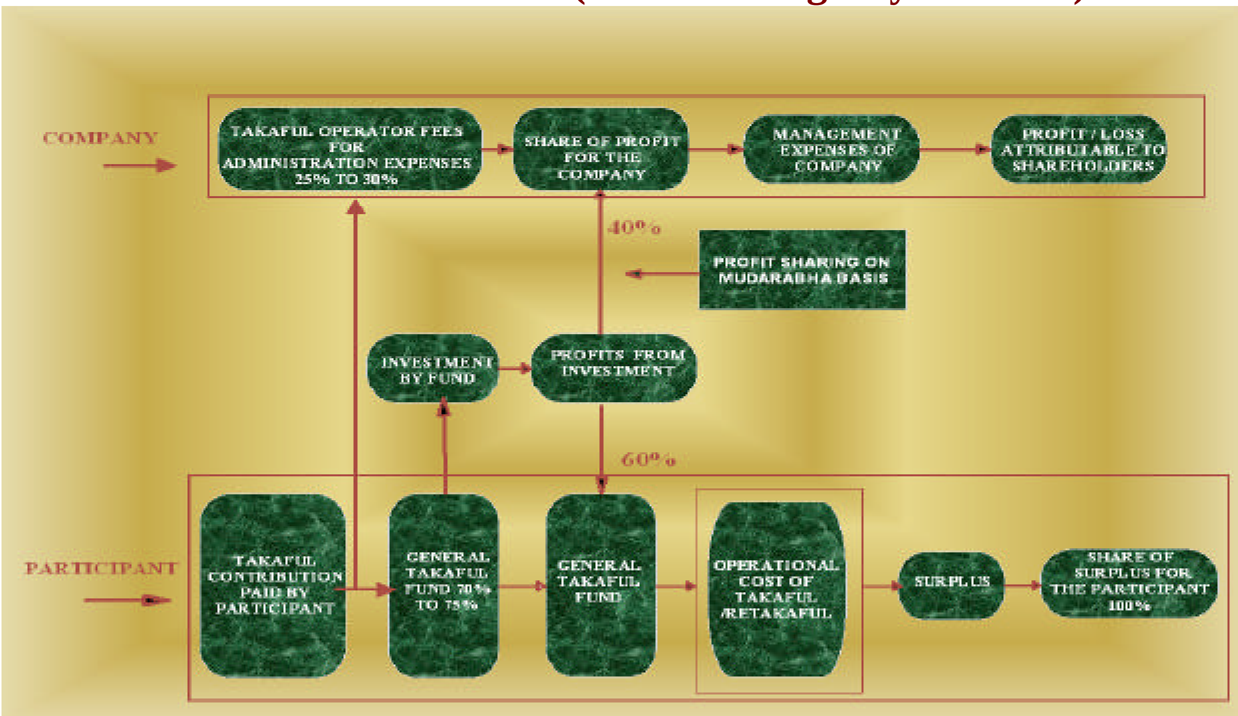
4.3 The investments of funds is usually done under a "Mudarabah" or "profit sharing" arrangement where the Takaful Operator may manage the assets of the fund and have a defined portion of the profits as the Investment manager. In the event that the fund makes a loss the takaful operator would not receive any remuneration for the investment management activities. Alternatively investment management may be done for a defined management fee under a "Wakalah" or "agency" contract. Here a percentage of the assets may be charged as a fee, which is similar to what is typically done under conventional unbundled products such as Unit linked life insurance plans.

4.4 As for the RISK portion is concerned, the mechanism that may typically be followed is briefly explained below:

Wakalah Model

4.4.1 The basic concept here is that the takaful operator acts as a Wakeel "Agent or Trustee" for the participants. The operators role being to manage the affairs of the pool for a defined fee. The flow chart is given below for ready reference in understanding the mechanism:

WAKALAH MODEL (Fee based Agency contract)



4.4.2 The Wakala fee may be defined upfront (generally in the range of 15 to 30% of the contributions) which may be transferred to the Shareholders account. The remaining portion of the contributions may be transferred to the Takaful account which is used to pay claims, retakaful costs etc. The surplus which remains may than be allocated 100% for the benefit of the participants after setting aside appropriate technical reserves. Generally a portion of the surplus may be retained as a contingency reserve and the balance may be distributed to participants in proportion to their contributions.

4.4.3 In case of a deficit, the shareholders would be required to give a Qard Hasnah to the participants to pay for the deficit (as recovery from participants may not be practical), which may be returned from future surpluses (should these arise). The shareholders would be responsible for all expenses of management and marketing etc (although variations exist) and their earnings would come from expenses being less than the fee and the investment income share as a Mudarib for the takaful fund and investment income on the Shareholders funds.

4.4.4 Under a conventional insurance contract, the Mortality/Other contingencies, Investment and Expense risks typically belong to the insurer accept in the case of investment-linked contracts where even the investment risk is passed on to the policyholders. Under a Takaful contract, the expense risk remains with the takaful operator. The mortality/Other contingencies risk is in a way shared with policyholders although the risk of giving a interest free loan remains with the operator. Investment risk again is with the policyholders as no investment guarantees can apply due to Shariah requirements.

4.4.5 A Wakala based model is the most widely acceptable form for Risk Sharing contracts. Some differences in opinions do exist relating to charging of expenses (marketing versus administration) and also the fee structure/sharing basis to be used but the broad principles remain the same. Shariah scholars from the sub-continent have also suggested to have a WAQF Fund (similar to a Trust Fund) in between the Takaful Operator and the Participants. This resolves some of the Shariah related reservations under a typical Wakala model and is considered as a more refined approach.

Sources of Income

4.4.6 The sources of income under a typical Wakala model would be as follows:

(i) Operator Fees: For performing the services, company would be eligible for taking a defined remuneration, which would be paid from the WAQF fund. A deduction can be made from the WAQF fund for this purpose.

(ii) As Mudarib by sharing in the investment profits OR as Agent for Investment by taking service charges

(iii) By investing the money of the SH and earning profits

4.4.7 From this remuneration, Company would bear the expenses related to the salaries of its employees, rents and other administrative expenses as well as initial expenses related to setting up etc.

Sharing in Underwriting Profits

4.4.8 Some operators also share in the underwriting profits by way of an incentive fee under a Wakala contract. There are some differences in opinion between operators on this aspect. I believe that sharing in underwriting profits is something that does not appear to be in line with the concept of mutual assistance and hiring of professional expertise of "Risk Manager" although it may be argued that it is meant to provide an incentive to the operator to "better manage" the risk. One may argue that as a Wakeel and trustee the operator is responsible to ensure careful and fair management of the takaful fund for the fee that it is receiving. Moreover, better underwriting results through careful risk selection and management would ensure that higher surpluses arise in the takaful fund for distribution to participants. Higher surplus distribution in itself is an incentive for the operator as more clients may get attracted to it due to its better "Risk Management" capability. This would be an indirect benefit of better management and not a direct one which seems more acceptable given the principles of takaful.

"Risk Premium" (for claims) and Operator Fee

4.4.9 Another concern relates to the Wakala operator fee being charged to the Takaful fund which I understand from some operators is expressed as a fixed percentage of the total contributions. This is basically as the operator is the Wakeel of the whole fund on behalf of the participants so his fee is based on and recovered from the takaful fund.

4.4.10 My concern stems from the way commercial insurance contracts are generally priced and the effect that a fixed percentage fee might have on the takaful fund "Risk Pool" in relation to the Risk that the fund may bear.

4.4.11 The typical contract has a "Risk Premium" to which one may add Expense margins and profit margins for the operator. Both the expense and profit margin would need to be competitive based on the volume of premium for a single contract. Identification of these separately is not required in a conventional insurance contract as Expense surplus as well as Underwriting Risk surplus both belong to the Shareholders. However in the takaful system based on Wakala, the underwriting surplus belongs to the participants and therefore adequate risk premium needs to be identified separately.

4.4.12 As an example if CLIENT A has say one motor car to be insured and the risk premium rate is 4% of sum assured. Add to this a 30% of gross premium as margin for expenses and profits takes the gross rate to 5.71% [4% / (1-.30)]. NOW, take another corporate CLIENT B who has a fleet of 100 cars to be insured given to its different employees. The actuarial risk premium rate of 4% under the two contracts does not change. What changes is the expense and profit margin which should be much lower in a large contract due to greater competition as well as due to real reduction in expenses and profit objective. Suppose this was just 15% so the gross rate to be charged would be 4.71% [4% / (1-.15)].

4.4.13 IF, an operator fixes the fee as 30% and suppose Client A and B is the total portfolio (101 motor cars) of the operator. The total premium (assuming a unit of 1 for sum assured), would be:

CLIENT A:	5.71 x 1	= 5.71	
CLIENT B:	4.71 X 100	= 471.00	
TOTAL PREMIUM		= 476.71	
Less OPERATOR FEE 30%		= 143.01	
RISK PREMIUM FOR CLAIMS		= 333.70	(FOR 101 CARS)
RATE % PER CAR ACHIEVED		= 3.30%	
ACTUARIAL RISK PREM. RATE		= 4.0%	

4.4.14 WHEREAS, the risk premium rate for undertaking the risk for the takaful fund should have been 4%. What has happened is that while pricing and attracting clients, we gave a discount to be competitive but when charging the fee to the Fund, the fixed percentage fee being removed may imply that the takaful fund may be left with less to pay claims (3.30%) in relation to the risk being undertaken (4.0%).

4.4.15 FURTHER, there are situations where due to the importance of certain clients/businesses for the company, an operator may give an extra ordinary discount to get the business in. Here again an overall fee would mean what is left in the takaful pool for claims would get reduced. This would mean the equity amongst individuals in the "Risk pool" may get disturbed as more risk is passed into the pool by larger clients than the appropriate risk premium due to the removal of the fixed percentage of contribution as operator fee.

4.4.16 This aspect may be visited by practitioners who may very well have devised mechanisms to ensure that this may not happen. However, if this is not the case than there is a concern that depending on the portfolio mix of the operator, the underwriting results could fluctuate. In cases where the major portion of the portfolio is reinsured to a large extent, this risk may get transferred to the reinsurance pool (assuming at least similar levels of commissions are payable by the reinsurer as the operator fee) but nevertheless the risk premium issue remains which would ultimately get reflected in the takaful fund.

4.4.17 If this issue does exist, perhaps a solution may be to define at the stage of pricing the appropriate “Risk premium” for the particular risk. For the expense loadings, a operator may have a percentage fee table based on premium size etc possibly with different tables for different lines of business with the flexibility of taking business decisions to reduce fee levels as suitable to a particular case / client.

4.4.18 Discussion with Shariah scholars on the above two concerns needs to be with a full explanation of possible outcomes of different scenarios to get a clear response. It is important that the workings of such contracts are explained to Shariah scholars in a elaborate manner as failure to do so could mean getting the incorrect response due to mis-communication of the actual process.

5. Conclusion

5.1 Takaful System is still relatively very new compared to conventional system, which is centuries old. It is therefore in the process of evolution with a number of concerns and interpretations by various Shariah scholars. It is however necessary to encourage the process by discussions and alternative approaches that may come from any direction from around the world. The ultimate objective is to have a consensus model addressing as many concerns as possible – current as well as future concerns that may come out and to evolve a acceptable alternate system for Muslims who are averse to conventional insurance. This appears to be a logical way to move forward to ensure that the system at some stage offers a uniform consensus based system.

5.3 The Shariah concerns relating to the Wakala model being used in the Middle East are addressed by creating a separate WAQF entity in between the participants and the Company by scholars of the sub-continent. These refinements do not disturb the basic model whereas the result for the consumer does not change.

5.4 India would need to decide whether it is appropriate for some operators to prepare themselves for the untapped market constituting customers who may want to purchase such products. **In the case of India, products within conventional companies (with separate statutory funds) may be the route to follow initially or alternatively to set up separate companies doing just Takaful business may also be feasible.**

About the Author

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Abdul Rahim has been with the firm since 1992. Prior to that he had also worked in the Middle East with a total overall actuarial work experience of 17 years.

He was the project team leader for the preparation of a Business Plan for the First Takaful Company in Pakistan to be sponsored by Pakistan Kuwait Investment Company.

He has also worked extensively in Life and Health consulting, Employee Benefit plans and IT systems design for companies in Pakistan (Allianz Health, Commercial Union Life, EFU Life), Middle East (ARIG, Alliance, NGI) and Zimbabwe. Also worked on alternative designs and valuation of a Unit Linked Family Takaful product.

Abdul Rahim has a keen interest in understanding the takaful business models prevalent in different countries and wishes to remain actively involved in this area and hopes to contribute to its growth especially in Pakistan where it does not exist at present.

He had the opportunity to participate in discussions with Shariah scholars at Darool Uloom, Karachi relating to Takaful model that may be permissible. Ongoing discussions were held with Shariah scholars and a WAQF based model was evolved by the Institute as a acceptable model as per local Shariah requirements.