## An Analysis of Islamic Takaful Insurance – A Cooperative Insurance Mechanism<sup>+</sup>

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#### **Abstract**

Starting the 1970s and increasingly in the 1990s, Islamic countries and other countries with a significant Muslim population have encouraged the provision of financial services, including insurance, under Islamic principles. As a result, a number of Islamic insurance companies, called *takaful* insurers, have been established to provide Muslim individuals and businesses with insurance coverage both in the life and non-life sectors. These insurers are found not only in Islamic countries and other countries with a significant Muslim population. They also operate in North America, Australia and selected European countries. This type of modified cooperative insurance mechanism is expected to further influence the supply of and demand for insurance in the Muslim community. Nevertheless, no thorough studies have been conducted yet regarding the application of Islamic principles into insurance and how this type of insurance arrangement works. Accordingly, this paper examines: (1) Islamic socioeconomic principles applied to insurance, especially regarding the concepts of uncertainty, interest and investment arrangements; (2) describes the basic structures of *takaful* life insurance, non-life insurance and reinsurance; (3) investigates *takaful* insurer operations in selected countries; and (4) discusses existing regulations as well as suggestions for better *takaful* insurance operations.

## Introduction

Islam is a global phenomenon and its influence on society and economy is ubiquitous. In Africa, Islam is the second most dominant religion after Christianity and over 40 percent of the population are Muslim. In Asia, where Islam is again the second most popular religion after Hinduism, over 20 percent of population abide by Islamic principles. Muslims also comprise approximately 4 percent of the European population. In the US, the number of Muslims has grown from mere 10,000 in 1900 to over 4.8 million in 1997. All in all, 1.12 billion Muslims live in 184 different countries, comprising about 19.4 percent of world population in 1996.

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<sup>&</sup>lt;sup>1</sup> As of 1996, Christians, including Roman Catholics, comprised 67.4 percent of world population, followed by Muslims of 19.4 percent, Hindus of 13.7 percent and those without any religions of 15.3 percent. In the US, the

For long, Muslims have managed their lives and Islamic companies have operated businesses under the stringent guidelines of Islamic principles that emphasize, among others, equality in wealth distribution and shared responsibility among participants in business transactions. Muslim individuals, communities and even states have been discouraged from engaging in business activities if one faces uncertain outcomes and yet expects predetermined gains from financial transactions. As Islamic principles are quite different from those prevailing in Western society, those who are unfamiliar with these principles may falsely conclude that Islam does not promote profit-oriented business transactions. In fact, Islamic principles do encourage people to engage in business transactions as long as they do not expect a predetermined return even when the outcomes of such transactions is uncertain. This encouragement became even stronger along with the rapid developments in industrial infrastructure in Islamic countries beginning in the early 1970s. As a result, numerous financial services companies were incorporated locally in those countries and currently conduct business at home and abroad. A number of Western financial services companies have already entered, or plan to enter, the Islamic market.

Insurance business, which deals with the uncertainties of loss and does not conform well to Islamic principles, was long discouraged, if not prohibited, in Islamic society. In recent decades, however, many Islamic countries have found that insurance plays a crucial role in furthering their economic developments and, even in some of those countries, Western (non-Islamic) insurers are allowed to underwrite risks. A few local insurance companies were also incorporated in selected countries. Yet, it seems somewhat remote that Muslim communities would accept broadly the Western concept of insurance because it does not conform well to several Islamic principles. They instead have developed a new concept of insurance that complies with Islamic principles, called *takaful* insurance. This is a type of joint guarantee insurance mechanism based on the law of large numbers in which a group of societal

members pool their financial resources together against certain loss exposures. *Takaful* insurance is now popular in many, yet not all, Islamic countries as well as in other countries with a significant Muslim population, e.g., Brunei, Indonesia, Malaysia and Singapore. Interestingly, *takaful* arrangements are also found in Luxembourg and Switzerland and, recently, in the US and Australia. Growth is forecast to be especially rapid after the turn of the century.

As *takaful* insurance has grown not only as an innovative financial instrument but also on religious principles, it possesses unique characteristics that warrant examination. The structure of this paper is as follows. After this introductory section, Islamic socio-economic principles related to insurance are discussed, followed by an analysis of *takaful* insurance by line. The next section describes *takaful* insurer operations in selected countries. The paper concludes with a summary and a discussion of future prospects of *takaful* insurance operations and supervision.

# Islamic Socio-economic Principles and Insurance

In Islam, all that happens in this world is by the will of Allah and all activities of Muslims must conform to the Quran, the Muslim Holy book.<sup>2</sup> The Quran exhorts Muslims to accept all misfortunes as predestined but not to passively endure their fortunes. They must take necessary steps to minimize losses from unfortunate events. Muslims are also taught to abide by the Shariah – the code of social conduct that Islamic scholars built based on the Quran.<sup>3</sup> For example, the Shariah applies the concept of *zakat* under which all members of society should share equally in the benefits afforded by that society and all

(mostly Afro-Americans) have increased on average by 16,700 per year (Encyclopedia Britanica, 1998).

<sup>&</sup>lt;sup>2</sup> For more studies about Islam and the Quran, refer to Donohue, John, J. and John L. Esposito, 1982. *Islam in Transition*, New York: Oxford University Press; Gauhar, Altaf, 1978, *The Challenge of Islam*, "London: Islamic Council of Europe, London; Hamidullah, Mohammad, 1969. *Introduction to Islam*, Paris: Centre Culturel Islamique; Lippman, Thomas W., 1995. *Understanding Islam: An Introduction to the Muslim World*, 2nd Edition, Washington D.C.: Meridian Books; and Rahman, Fazlur, *Islam*, 2nd edition, Chicago: University of Chicago Press. Besides, the Harvard Islamic Finance Information Program Database [http://www.hifip.harvard.edu] provides some references including the Shari'ah database, Country info Database, and publications database.

are to help others who suffer from a misfortune (Hasanuzzaman, 1971). It exhorts that all resources must be put to optimum use and no individual has the right to wanton his or her resources away.<sup>4</sup> Of course, neither an individual nor a state can gain from the misfortune of others'.

The Shariah classifies all matters into either *halal* (those permitted) or *haram* (those prohibited). For example, it permits *takaful* (shared responsibility) and strongly encourages such practice among Muslims. It also permits *zakat*, which obliges the rich to help the destitute and weaker members of society. In contrast, the Shariah prohibits exploitation and risky investments because Muslim jurists generally view that these activities are *ghara* (contracts in which results are unknown, hidden or speculative in nature) (Ismail, 1997) and the market must be a place for exchange of products and services where all parties in each contract explicitly know the prices. *Riba* (charging predetermined interest) is also forbidden in Islam regardless of the purpose for which such a loan is made and the rates at which interest is charged.<sup>5</sup> As a result, Islamic financial transactions are, at least in principle, interest-free (Ahmad, 1967).

The application of *riba* principle, however, does not mean that capital is costless (Ariff, 1988). Islam permits making a predetermined claim on the surplus from using capital for production. Therefore, a profit-sharing arrangement where the profit-sharing ratio is predetermined, not the rate of return, is allowed in Islam. This arrangement can technically replace its Western counterpart interest rate and allow capital to flow into the arrangement that offers the highest profit-sharing ratio to investors, *ceteris* 

<sup>&</sup>lt;sup>3</sup> The Shariah is the supreme law of several Islamic countries (e.g., Afghanistan, Saudi Arabia) or applies to settle disputes between Muslims (e.g., Malaysia, Singapore). The Shariah's view of economic activities may be examined in Siddiqi (1971) and Ahmad (1972).

<sup>&</sup>lt;sup>4</sup> This interpretation is based on the Quran verse, "We have subjugated to you all that is in the heavens and the earth." [45:13].

<sup>&</sup>lt;sup>5</sup> It is said in the Quran that interest is wrongful appropriation of property that belongs to others, i.e., "Those who swallow *riba* cannot rise up save as he ariseth whom the devil hath prostrated by his touch." and 'trade is just like *riba*,' whereas Allah permitteth trading and forbiddeth *riba*." [2: 275].

*peribus*. The Shariah also permits shareholding as Islam encourages movements of capital for the benefit of individuals and society as a whole.

Understanding the Islamic *mudaraba* and *musharaka* modes of financing is also important. Under the *mudaraba* principal, an owner of capital may let an entrepreneur use his or her capital within Islamic guidelines and share in the profits with the entrepreneur. Both the owner and the entrepreneur are free to determine the extent of their profit-sharing ratio. However, only the owner of the capital will be responsible for all losses as a related principle (*sharakah*) rules that losses are to be shared strictly in proportion to their capital contributions (Maysami, 1997). The *musharaka* mode of financing, in contrast, refers to an agreement in which two or more partners use their capitals jointly for investment and share in both profits and losses in proportion to their capital contribution or any other ratio they have agreed. In practice, these two concepts can be applied to Islamic insurance such that an insured (acting as an owner of capital) enters into a *mudaraba* contract with an insurer (acting as an investor of the capital). The insurer may then enter into a *musharaka* reinsurance arrangement on a profit/loss-sharing basis.

Whether or not conventional (non-takaful) insurance concept is permitted is still debated. Strictly applying the Shariah, Muslim jurists argue that there is a prohibited element whenever a difference exists in time, quantity or amount of exchange in a contract (Ismail, 1997 and 1998). When a conventional insurance contract is created, neither the insurer nor the insured knows with certainty the outcome of each contract. In term life insurance, the insurer does not know, ex ante, the outcome of the insurance exchange because the total premiums paid by an insured varies according to the time of the death of that insured. In whole life insurance, the protection period is known only ex post.

They also argue that conventional insurers either loan their funds for interest income (*riba*) or invest the funds for uncertain returns (*ghara*). Conventional life insurance is also considered haram because life insurance pays for a loss of human life that cannot be valued (Ali, 1989). Further, others (e.g., the Faisal Islamic Bank of Sudan) contend that conventional insurers, especially stock insurance companies, are in business to generate maximum profits not for their insureds but for their other stakeholders. For this, conventional insurers would engage in investments where the level of risk is higher than the default risk assumed in the market. Muslim jurists claim that these types of activities even contain the element of gambling or *maisir* (Ismail, 1997).

Others Muslim jurists view conventional insurance differently. For example, the Council of the Academy of Canonists of Muslims World League elaborates that the original legal position on any matter is permitted until there is evidence that it should be prohibited. Insurance is then allowed because there is no specific injunction in the Shariah against it and a mere presumption is insufficient to declare insurance as unlawful.<sup>6</sup> They further suggest that insurance benefits society as it helps alleviate the losses of the unfortunate through pooling individual contributions, which is consistent with the Shariah. Accordingly, they view that insurance is accepted as long as it is intended for a good cause.<sup>7</sup>

In conventional insurance, no new risk is created and, at least in theory, there is no gain for the insured from having insurance coverage. Employment of principles of indemnity, subrogation and utmost good faith in conventional insurance minimizes the problems of moral hazard and clearly separates it from gambling. Nevertheless, due to the presence of uncertainty and other forbidden characteristics, Muslim jurists have not yet resolved their differences in opinions regarding conventional insurance.

<sup>&</sup>lt;sup>6</sup> This legal maxim is based on the Quran verses, "He has explained to you that which is forbidden to you, unless you are compelled thereto" and "Who has forbidden the adornment of Allah which He has brought forth for His bondsmen, and the good things of His providing?" [7.32]

### **Takaful Insurance**

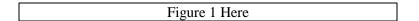
Takaful insurance refers to an Islamic way of joint guarantee in which a group of societal members pool their financial resources together against certain loss exposures. In particular, takaful life insurance works both as (1) a savings instrument where participants set their own target amount to accumulate over a certain period, and as (2) a protection mechanism in which all participants guarantee each other against certain events that would alter their financial status. In contrast, takaful non-life insurance works more like a joint guarantee in which all participants contribute their own shares of premiums into a pool and mutually agree to indemnify those participants who suffer from an insured peril. Muslim jurists generally agree that takaful insurance is accordant with the Shariah, as halal concepts of tabarru (meaning "donation" or "contribution") and takaful (meaning "joint venture" or "shared responsibility") are deeply embedded in it (Syarikat Takaful Malaysia, 1999). This section further describes takaful life and non-life insurance operations.

**Takaful Life Insurance**. In this type of *takaful* insurance policy that has a defined period of maturity, insureds commonly make periodic level premium contributions that will be used primarily for meeting their individual savings target and in part for assisting financially the bereaved family of the decreased insured. The premium amounts vary from insured to insured depending primarily on the sum (face amount) that each insured targets to accumulate at the end of the coverage period and on the age, gender and health condition of that insured. The insurer may set the minimum face amount for this purpose. It may also set the minimum and maximum age limits for participating in this type of policy, accept standard risks only and maintain separate classes of insureds of the same age but with different year of entry to the plan (Ali, 1988).

<sup>&</sup>lt;sup>7</sup> "...Help Ye One another in righteousness and piety, but help Ye not one another in sin and rancor...." [Surah Al-Maidah Verse 2]

<sup>&</sup>lt;sup>8</sup> This is also known as known as family *takaful*, or social *takaful*.

Takaful life insurance is also used for other purposes, including generating a fund for children's education, securing a fund in case of mortgagor's premature death and protecting business interest against key-employee's death. Several takaful policies now come with hospitalization and disability benefit riders. In fact, there is virtually a counterpart takaful life insurance policy for each major type of conventional life insurance policy, while difference lies in how premiums are allocated.



As illustrated in Figure 1, a *takaful* insurer credits installment premiums to two separate accounts – the individual account and the special account of each insured. The individual account, to which the major portion of the premium is allocated, is purely for savings and investment. The special account, where the balance of the premium goes, is to build up a reserve for death benefits to the heir(s) of any insureds who die prematurely. The insurer, therefore, applies the concept of *tabarru* (donation and contribution) in the special account. *Takaful* insurers may also use funds from this account to cover premiums unpaid by members under certain qualified circumstances, e.g., total disability.

Takaful insurers invest those funds in the individual and special accounts in the form of mutual funds consisting primarily of stocks of Islamic financial institutions and manufacturers. They may also invest part of these funds in stocks of non-Islamic companies (e.g., utilities companies, government investment companies) as long as their goods and services are halal (permitted). They often make takaful investment portfolios transparent in order for their insureds to be certain that neither insurance benefits nor investment returns come from unacceptable means. This can be done by giving insureds the right to inspect their book of business, how surrender values are computed and how profits are shared. Further, a

<sup>&</sup>lt;sup>9</sup> The beneficiaries, in turn, must not seek any gains from the insurance compensation or indulge in any activities which can be detrimental to the interests of existing insureds (Ali, 1988).

<sup>&</sup>lt;sup>10</sup> The special account is also called "participants' special accounts" or "collective accounts."

*takaful* insurer regularly appoints several insureds to its own Shariah supervisory board that is responsible for overseeing that insurer's operations in the light of Islamic principles.

In sharing profits with insureds, *takaful* life insurers often use a modified *mudaraba* mode of financing under which the insurer and the insured share only direct investment income, leaving the original premium contributions intact in both individual and special accounts. Accordingly, the insurer does not have the right or priority to claim the investment income as its own, but investment losses are born only by the insured. Deduction of operating expenses of the insurer is usually postponed until the investment income is ready for distribution, except for an administration fee that the insurer can charge from the first year premium. It is worth noting that, to market their products, *takaful* insurers usually employ exclusive agents who receive a salary comprising their share of the profits from the investment of the funds, dividends and bonus payments made by the insurer (Billah, 1996). In this *mudaraba* approach, the insurer brings expertise, the agent bridges clients with the insurer and the insured contributes capital.

 Table 1 Here

Some rules regarding death and other benefit distributions are unique in *takaful* insurance. As illustrated in Table 1, upon the death of an insured, the insurer compensates the beneficiary the total amount of premiums paid by the deceased to the individual account and his or her share of surplus from the investment of installment premiums that have been credited into that account. From the special account, the insurer pays the beneficiary the outstanding *takaful* installments that would have been paid by the deceased if he or she had survived until maturity of the plan. The net surplus allocated to the deceased that can be found from the most current valuation of his or her special account is also made to

<sup>&</sup>lt;sup>11</sup> In addition to designating a beneficiary(s), a Muslim insured also appoints a nominee/assignee. Upon the death of the insured, the nominee acts as a trustee, receives investment returns and death benefits from the insurance company, and distributes them among the beneficiaries of the deceased according to the principles of *mirath* (inheritance) and *wasiyah* (bequest).

the beneficiary. Surplus in this context refers to the insurer's net investment profit from the insureds' premium contributions but after deducting benefit payments, operating expenses and reserves for future claims. *Takaful* insurers may provide similar benefits if an insured becomes totally and permanently disabled.

To claim death benefits, only proof of death needs to be submitted to the insurer. The cause of death, whether natural, accidental or unlawful, matters little in *takaful* insurance as the death is deemed to be the will of Allah. Even in the event of suicide, the rights and claims of the surviving family members may not be ignored. In fact, some *takaful* insurers do not include a suicide clause in the contract or shorten the probationary period to one year instead of the two-year period that other non-*takaful* insurers frequently impose.

If an insured survives to meet the target amount of savings that he or she determined at policy inception, the insured gets the refund of all the premiums that he or she has paid for the individual account plus his or her share of investment income from that account. In addition, his or her share of surplus will be assessed from the special account. *Takaful* insurers also permit their insureds to surrender policies prematurely. When an insured exercises this option, he or she will get a refund of all the premiums paid for plus his or her share of surplus from the individual account (minus administrative expenses) until the date of surrender. However, no refund is usually given from the special account in case of policy surrenders. In a typical *takaful* insurance plan, it matters little whether or not an insured surrenders in a manner prescribed in his or her policy since all insureds are, in principle, partners of the insurance plan.

**Takaful Non-life Insurance**. In non-life insurance, *takaful* insurers offer coverages, commonly on an annual renewal basis, for fire insurance and allied lines, automobile insurance, liability insurance, marine insurance, workers' compensation, fidelity and even crop insurance. As in *takaful* life insurance, the

mudaraba mode of financing is employed in takaful non-life insurance. As depicted in Figure 2, premiums are pooled into a takaful fund managed by each insurer. The insurer acts as trustee, invests the fund in Islamic ways and channels the investment income, less investment expenses, back to the fund. The insurer then settles all outstanding claims, deducts its operating expenses and transfers part of the fund to relevant reserves. If there is any balance in the fund after all these adjustments, the balance will be shared by the insurer and its insureds in accordance with an agreed ratio basis, e.g., 50 percent each. This surplus is normally distributed on expiry of each insured's insurance policy. If, however, the sum of the premiums and investment income is insufficient to meet these adjustments, those affected insureds could be assessed for additional contributions. Accordingly, takaful non-life insurance works similarly, albeit not exactly, to assessable mutual insurance arrangements in the conventional insurance context.

Figure 2 Here

Takaful and conventional non-life insurance is also similar in that they both adopt several key legal principles in insurance. Particularly, both types of insurance employ the principle of insurable interest to minimize the problems of moral hazard, i.e., to separate insurance from gambling. Using the principle of uberrima fides, both takaful and conventional insurers can make a contract voidable if there is material misrepresentation, concealment or a breach of warranty made by the insured. Regarding innocent misrepresentation or breaches of warranty, conventional insurers are either unlikely to void or not allowed by statute or code law to void the contract. Similarly, takaful insurers may not void such a contract. Further, those insureds who serve the Shariah supervisory board may object their insurer from exercising this option as they represent other insureds of the company.

Differences, however, exist. In conventional insurance, insurers use a "valued policy" for certain types of properties where the insurer agrees, for total loss, to indemnify the value agreed upon at policy inception. For partial loss, the insurer may pay more (less) than the strict indemnity if the actual value of

the property at the time of loss falls below (increases above) the coverage limit. This arrangement is not permitted in *takaful* insurance (Ali, 1988). Neither accepted in Islam are actual cash value methods, i.e., no depreciation of the property value is permitted. Takaful insurers are thus willing to extend coverage only after having proper valuation of the property to be insured. Further, they conduct a periodic valuation of the insured property to eliminate any discrepancy between the existing insurance coverage and the current market value of the property insured, and adjust premiums accordingly (Ali, 1988). These valuation restrictions compel that property insurance be placed on a replacement cost basis to suit Islamic principles.

**Takaful Reinsurance**. For risk-sharing and pricing purposes, reinsurance transfers are commonly classified into proportional and non-proportional arrangements. In *takaful* reinsurance (also known as *retakaful*), non-proportional arrangements such as excess of loss or stop-loss arrangements may not be suitable because there exists uncertainty with respect to the assessment of losses in those arrangements, whereas Islamic principles demand for clearly defined joint responsibility throughout the coverage period. Hence, *takaful* reinsurance is likely to be arranged on a pro-rata basis, e.g., quota share or surplus reinsurance, where the reinsurer becomes technically a coinsurer of the original risks. If, however, a non-proportional reinsurance arrangement is selected, it could be based on a strict profit commission plan or on a reciprocal basis. In this regard, it matters little whether the reinsurance transfer is on a facultative or treaty basis.

As only a few *takaful* reinsurers currently operate, the capacity of the *takaful* reinsurance market would not be large enough to accommodate all the demands from *takaful* insurers. As such, *takaful* insurers can create and operate a pool in pursuant to Islamic principles in order to minimize their exposures to certain catastrophic risks. They can also be allowed to enter into contractual agreements with conventional reinsurers. In fact, a number of conventional reinsurers have been providing reinsurance protection to

insurers, *takaful* or not, in several Islamic countries. However, Muslim jurists advise, albeit it may not be strictly followed by insureds, that *takaful* insurers cease purchasing coverage from conventional reinsurers when a *takaful* reinsurer becomes available.<sup>12</sup>

## A Survey of Takaful Insurance Operations

With the increase in complexity and variety of products, *takaful* insurance has become popular among Muslims in many countries. As depicted in Table 2, the world's pioneer *takaful* insurer, the Islamic Insurance Company of Sudan, was established in 1979, followed by Islamic Insurance Company of Saudi Arabia in the same year. *Takaful* insurance is also popular in Asian countries with a sizable Muslim population. Syarikat Takaful Malaysia was established by Islamic Bank of Malaysia in 1984. This was followed by the establishment of Takaful IBB Berhad and Takaful Taib Serndirian in Brunei in 1993, PT Syarikat Takaful Keluarga (life) and PT Syarikat Takaful (non-life) in Indonesia both in 1994, and Syarikat Takaful Singapore in 1995. Surprisingly, *takaful* insurance began to operate in Switzerland and Belgium as early as in 1983. Table 3 presents demographic and insurance information in selected Islamic countries.

The Arabian Peninsula and North Africa. The development of a co-operative form of insurance in this region probably dates to the pre-Islamic period when each tribe tried to protect the life and property of its members. For example, if a member killed another member, then the family of the perpetrator was expected to pay "blood money" to the surviving family of the deceased. It is also well known that rulers in Syria around BC 1500 accumulated funds from public taxation to pay for fire, flood or draught losses suffered by community members. At present, there are several Islamic insurers and three reinsurers

<sup>&</sup>lt;sup>12</sup> This kind of advice is also made to those Muslim individuals and businesses who have coverage from a conventional insurer. In the case of life insurance, for example, Muslim jurists advise that insureds continue the

domiciling in the Middle East and North Africa region. The biggest of these reinsurers is Jeddah-based Islamic Insurance and Reinsurance Company. The other two reinsurers are Islamic Takaful & Retakaful Company in Jeddah and Beit Ladat Ettarnine Saoudi Tounsi, better known as BEST Re., in Tunisia.

In Saudi Arabia, which generated total premiums of U\$755 million in 1996 (Swiss Re, 1998), the National Company for Co-operative Insurance (NCCI) remains the only known *takaful* insurance company in the country. As a joint venture established in 1986 by three government agencies, it underwrites risks in the oil industry worldwide and aviation fleet risks of Arab nations, and has secured approximately 25 percent domestic market share. NCCI redistributed SR29 million surplus to insureds in 1993 (Jamie, 1995).

In Kuwait, the Ministry of Commerce and Industry granted a license for the first *takaful* insurance company as recently as February 1998. This new company, capitalized at US\$98 million, has eight major shareholders including Kuwait Finance House, the International Investor and International Murabaha (the main Islamic financial institutions in the country). It is expected to offer a full range of *takaful* insurance products in the near future.

The insurance market in many other countries in the region has recently shown a considerable growth rate, although the insurance penetration ratio and the insurance density in those countries are relatively lower than those in more economically mature countries. For example, the Lebanese insurance market enjoys a high level of awareness among the general public, who tend to be well educated. Its non-life insurance accounts for nearly 80 percent of the total premiums.<sup>13</sup> In Egypt, legislation was passed in the early 1990s to allow the eventual establishment of a free market system, which then brought in the

coverage until they receive all the benefits and then purchase a new policy from a takaful insurer.

<sup>&</sup>lt;sup>13</sup> Much of the market growth in non-life line of insurance is due to the upsurge in medical insurance in the absence of a national health insurance program in Lebanon.

formation of Allied Investors Insurance Company and Pharaonic Insurance Company (Rigby, 1995).

Nevertheless, no *takaful* insurance companies are yet found in Lebanon and Egypt. Neither are they found in Morocco (which has one of the largest insurance markets in the region), Algeria, Iran, Iraq, Jordan, Libya, Tunisia and the Palestine, although some non-Islamic insurers operate in those countries.

Malaysia. Malaysia enacted the Takaful Act in the early 1980s to legitimize *takaful* operation and is probably the only country with such a law in the world. After the passage of the act, Bank Negara (the central bank of Malaysia) was appointed to regulate *takaful* insurance operations and to monitor the compliance of *takaful* insurers with the Shariah. Syarikat Takaful Malaysia, a subsidiary of Bank Islam Malaysia, was the first to obtain a *takaful* operation license under the act. It was incorporated in 1984 and commenced operation in 1985 both in life and non-life lines. In 1993, MNI Takaful was licensed and has since been operating in Malaysia. This latter insurer currently focuses on enhancing customer services technology and developing new marketing channels, e.g., policyholders' services through post offices. Malaysia National Insurance Company, the largest local insurance company, currently owns about 80 percent of the shares of MNI Takaful.

Malaysia is well known for its clear guidelines for *halal* (permitted) investment, as Bank Negara issues directives regularly on such investment. As a result, *takaful* insurers as well as other Islamic investors, in Malaysia and abroad, can now invest in approximately 480 securities from the companies listed on the Kuala Lumpur Stock Exchange. Besides, Malaysian *takaful* insurers have identified, with help from the government, other similar investments. For example, those insureds who have a life insurance policy with Syarikat Takaful Malaysia can the fund in their individual account to Bank Islam Malaysia for a period ranging from one month to over 60 months. This bank also helps this insurer lend its funds for special accounts to large corporations and individuals. Even the Malaysian government borrows money

<sup>&</sup>lt;sup>14</sup> For further discussion about the legal developments in Malaysia, see Maysami and Au (1998).

from the funds with a loan repayment guarantee using *qardhal-hosan* (Malaysian government investment certificates).

Furthermore, the Malaysian government currently gives a tax relief of up to RM 5,000 for residents for their *takaful* insurance premiums plus additional tax relief of RM 2,000 specifically for such premiums for medical and educational purposes. As a result, a total of 41,170 new life *takaful* policies were issued in 1996 for coverage totaling RM 1.92 billion (*The Star*, 1997). The total assets for life and non-life *takaful* insurers in 1997 were approximately RM 300 million and RM 170 million, respectively (Maysami, 1998). During the same period, life *takaful* insurance generated profits amounting to about RM 60 million and non-life *takaful* gained about RM 40 million from investment. *Takaful* fund performance for 1998 is not yet known, but is expected to be negative due to 1997 Asian economic crisis.

Singapore. In Singapore, *takaful* insurance, together with Islamic banking, has been viewed as a tool to promote the economic development of the Islamic community that comprises 15 percent of the population. Currently, two *takaful* insurers are in operation, both created in 1995. The Ampro-Income Takaful Company is a joint venture between Ampro Holdings of Singapore (mainly in manufacturing business) and NTUC-Income Insurance Co-operative (a local mutual insurance company dominating personal lines of insurance and with a relatively large number of Malay insurance agents). The *takaful* insurance plans of this company function more like a mutual fund in that all premiums are used to purchase a certain units of the *takaful* fund. For this, insureds need to make a minimum initial premium of S\$40,000. The insurer, in return, guarantees a minimum death benefit of a multiple of the initial

<sup>&</sup>lt;sup>15</sup> Unlike the US and Canada, Singapore maintains an individual account system for its social security program, i.e., the Central Provident Fund (CPF). Under this program, Singapore government allows CPF members, upon reaching the age of 55, to withdraw all balance (except for the money earmarked for old-age medical expenses) from their own individual CPF account to purchase an annuity. As a result, purchase of single premium life insurance is not unusual in Singapore. Malaysia manages a similar program known as the National Provident Fund.

premium and all subsequent premiums.<sup>16</sup> Upon the death of an insured, the insurer may pay either the total cash value of the investment or the guaranteed minimum death benefit, whichever is higher.<sup>17</sup> An insured may surrender the policy by selling his or her investment units to the insurer, subject to a buy-sell spread, which is commonly 5 percent. The Ampro-Income fund reached S\$15 million (including premium income of S\$9 million) for the year ending March 1998. It currently invests mainly in local and regional markets, leaving foreign equities comprising 13 percent of the fund (Ampro-Income Annual Report, 1998). This fund experienced investment returns of 18.6 percent and 8.5 percent for years ending 1996 and 1997, respectively. It, however, experienced a loss of 29 percent in 1998, mainly due to the recent economic turmoil in the region.

The other *takaful* insurer is Syarikat Takaful Singapura (STS), a joint venture business between Keppel Insurance Company and Singapore Malay Teachers' Multi-purpose Co-operative Society. Unlike Ampro-Income where NTUC-Income actually provides insurance protection, Keppel Insurance Company under the STS arrangement acts only as an underwriter for its partner. STS also requires a minimum initial premium of S\$40,000 for life *takaful* plan participation. It invests primarily in stocks of companies in Singapore and Malaysia. STS earned S\$17 million in premiums in 1995, and generated investment returns at an annual rate of 9.6 percent until recently (Keppel Insurance, 1997).

Indonesia. The Indonesian economy had been converted from an agrarian state to one of the fastest growing Asian economies until the onset of Asian economic crisis in 1997. For its 180 million Muslims, the Ministry of Finance of Indonesia permitted in 1994 the first Islamic life insurance program, PT Asuransi Takaful Keluarga to promote *takaful* principles. This insurer experienced an increase of 207 percent in life insurance and annuity premiums – from Rp 3.24 billion in 1995 to Rp 9.96 billion in 1996.

<sup>&</sup>lt;sup>16</sup> For example, its standard policy states that the insurer provides three times of the single premium if a member joins the fund before age 30, 2½ times between 31 and 40, two times between 41 and 45, 1½ times between 46 and 50 and 1¼ times between 51 and 60.

As a result, it became the 13th largest life insurer in the country. In terms of profits, however, this company did not perform well and showed a deficit of Rp 409 million in 1995 and Rp 923 million in 1996.

The Ministry also licensed, in 1995, PT Asuransi Takaful Umum to provide non-life insurance protection to Muslims. This non-life insurer has also grown fast. It generated premiums of Rp 3.19 billion in 1995 and Rp 4.30 billion in 1996, and recorded pretax profits of Rp 263 million in 1995 and Rp 758 million in 1996.

Indonesian *takaful* insurers have not only established strong ties with various Islamic organizations (e.g., Muliammadyah and NahdIatul Ulama of which combined member totals more than 40 million), but have also successfully penetrated oil and gas industries for non-life insurance. It was estimated that about 10 percent of the premiums were invested in shares traded in the Jakarta Stock Exchange (Husen, 1997). In 1996, PT Syarikat Takaful Indonesia was founded as a holding company of both *takaful* insurance companies.

Other Continents. Interestingly, *takaful* insurance is observed in the non-Islamic world, too. Takaful USA Management Services, LLC (Wayne, NJ) is just one of the several *takaful* insurers in the US. Established in 1996, it provides *takaful* life and non-life insurance coverages in both personal and commercial lines. Other US *takaful* insurers or financial institutions operating under the Shariah principles include: Failaka Investments (Chicago, IL), Samad Group (Dayton, OH), North American Islamic Trust (Indianapolis, IN), Baitul Mal., Inc. (Seacausus, NJ), Abar Investments, Inc. (Stamford, CT) and MSI Finance Corporation (Houston, TX). *Takaful* insurance is also found in Switzerland, Belgium and Australia.

<sup>&</sup>lt;sup>17</sup> Starting March 1997, it also provides medical insurance protection for which members can make monthly

# **Conclusions and Future Prospects**

Takaful insurance has become increasingly available in many countries, especially those with a significant Muslim population. The growth of *takaful* insurance is expected to be on the rise over the next decade in line with the fast development of the Islamic investment and banking systems. Total premiums written by *takaful* insurers are expected to reach US \$2.1 billion by 2010, or approximately 9 percent of the world insurance market share (*Asian Insurance Review*, 1997).

Several issues, however, must be resolved before *takaful* insurance can advance globally. First, there are still needs for educating the general public about insurance. In a recent study conducted by Survey Research Malaysia, 45 percent of respondents were found to know little about life insurance (*Asia Insurance Review*, 1997). Among all respondents, slightly more than 33 percent indicated their need for insurance coverage but the other 45 percent even disliked discussing the subject. Similar findings are also observed in Singapore (Maysami and Low, 1998). Takaful insurers, therefore, need to plan strategies to increase the public awareness of the importance of insurance, both life and non-life.

Second, the majority *takaful* insurers currently operate only in their local market. They need to expose themselves to the international insurance market. They can serve Muslim individuals and businesses in other countries but without having the benefit of *takaful* insurance. Additionally, identification of *halal* investment sources both within Islamic countries and in other non-Islamic countries can help *takaful* insurers improve their competitiveness and investment results, which can also help them effectively spread their investment risks geographically. Contrary to this need, NCCI of Saudi Arabia decided recently to retrench all its resources from the international market to the Saudi domestic market.

Third, there is no general agreement as to the needs for takaful insurance. Some have doubts about the need for a separate insurance system based solely on religious dogma (Ali, 1989), while others question the competitiveness of *takaful* insurance. Given the profit-sharing plans as described in this paper, takaful insurance plans would require relatively higher premiums than conventional insurance plans. As halal service providers, takaful insurers must be conservative in investment. What then is the likelihood that many Muslim insureds are willing to accept lower returns for the sake of religion? How many Muslim businesses would use takaful insurance instruments when various and attractive non-Islamic insurance products are available in the market? The aforementioned Malaysian survey uncovered that, in reality, Muslim individuals purchased insurance for children's education, for retirement, for meeting unexpected medical expenses and for financial protection against death of the breadwinner. This finding clearly indicates the importance of investment performance in purchasing insurance coverage, which is not of the first priority under takaful insurance arrangements. In any economically mature market, price and quality competition determines the insurance market position of an insurer. Takaful insurers, therefore, need to keep focusing more on the development of a wide range of competitive products, both pricing- and quality-wise, before they recommend Muslim individuals and businesses to purchase their products.

Fourth, *takaful* insurance is, on one hand, a profit-sharing arrangement between an insurer and its insureds. *Takaful* insurers are expected to exercise prudence in making investment decisions and not to subject such funds to potentially high return and high risk situations. On the other hand, *takaful* insureds would prefer those *takaful* funds that generated higher return than other *takaful* funds, *ceteris peribus*. *Takaful* insurers would also desire to maximize higher investment income because their compensation is directly related to their own investment performance. Further, losses of the investment principal due to

poor investment is to be borne totally by insureds.<sup>18</sup> This indicates the presence of a classical principal-agent conflict. For example, some *takaful* insurers may invest their funds in the riskiest *halal* areas and some others may operate over their capacity. *Takaful* non-life insurers increasingly provide liability insurance coverages where underwriting performance can be highly volatile.

Finally, there must be a formal supervisory system that monitors *takaful* operations efficiently.<sup>19</sup> The mere existence of a Shariah supervisory board within a *takaful* insurer may not be effective in this regard. Further, it is highly desirable to set certain minimum capital standards and to limit the size of business, e.g., based on the insurer's own capital, expertise and the line(s) of business. It is also highly desirable for the market to employ some form of guaranty fund system in case of insolvency of a member *takaful* insurer. *Takaful* insurers must also strengthen their financial capabilities and improve other essential skills in providing insurance services. Focus on quality of coverage as well as price is also recommended for efficiency in operation and enhancing competitiveness with non-Islamic insurers.

<sup>&</sup>lt;sup>18</sup> For instance, it is roughly estimated that about five percent of Islamic firms may become bankrupt, merged or need to be re-capitalized in the near future (Al-Rifai, 1998).

<sup>&</sup>lt;sup>19</sup> Although not mainly for the Islamic banking industry, the Islamic Development Bank (IDB), established in 1973 and began to operate in 1975, fosters economic development and social progress in member countries of the Organization of the Islamic Conference (OIC). This bank finances projects and programs in both public and private sectors. It invests in economic and social infrastructure projects, provides technical assistance to member countries and assists in the promotion of foreign trade, especially capital goods. It also established the Islamic Corporation for the Insurance of Investment and Export Credit (ICIEC) to promote investment and trade flows between member countries through the provision of investment and export credit insurance against commercial and non-commercial risks. Separately, there are some local Islamic equity indices (e.g., RHB Islamic indices in Malaysia and Indonesia). There is also a movement to establish a global Islamic equity index, KMS-SAMI, initiated by Klein Maus & Shire.

TABLE 1
Insurance and Investment Benefits from the Life Takaful Plan

	Amount receivable to the insured or his/her beneficiaries						
	From the Individual Account	From the Special Account					
Death before maturity	Total amount of installment premium payments	Outstanding installment premium payments which are payable if the deceased has survived to maturity					
	Share of investment profits credited to the account	Net surplus according to the most current valuation of the account					
At maturity	Total amount of installment premium payments	•					
	Share of investment profits up until maturity						
Cancellation/surrender of policy before maturity	<ul> <li>Installment premiums paid</li> <li>Share of investment profits until cancellation/surrender</li> </ul>	• None					

Source: Maysami and Au (1998)

TABLE 2 International Takaful Network

Islamic Insurance Co. Ltd.	Sudan	1979
Islamic Insurance Co. Ltd.	Saudi Arabia	1979
Dar Al Maal Al Islami, Geneva	Switzerland	1983
Takaful Islam Luxembourg	Belgium	1983
Takaful Islam Bahmas	Bahamas	1983
Syarikat Takaful Malaysia Sdn Bhd	Malaysia	1984
Takaful TAIB Sdn Bhd	Brunei	1993
Takaful IBB Bhd	Brunei	1993
MNI Takaful	Malaysia	1993
PT Syarikat Takaful Indonesia	Indonesia	1994
PT Asuransi Takaful Keluarga	Indonesia	1995
Syarikat Takaful Singapura Pte Ltd	Singapore	1995
PT Asuransi Takaful Umum	Indonesia	1996

TABLE 3
Comparison of Selected Islamic Countries

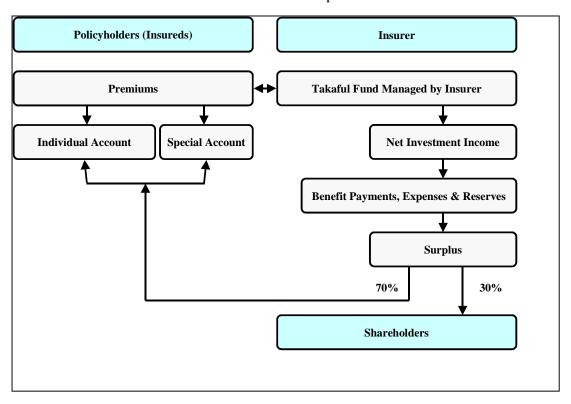
Country	Population	Per capita	Percentage	Insurance Density			e Penetration
	(million)	GDP	of Muslin	Non-life	Life	General	Life
Albania	3.39	\$1,260	70%				
Bahrain	0.60	\$13,000	100%	\$150	\$31	1.71	0.35
Bangladesh	125.3	\$1,260	88.3%	-	-	-	-
Brunei	0.30	\$15,800	63%	-	-	-	-
China	1,221.5	\$2,800	2-3%	\$5	\$3	0.72	0.50
Egypt	64.8	\$2,900	94%	\$9	\$2	0.64	0.15
Guinea	7.41	\$950	85%	-	-	-	-
India	966.7	\$1,600	14%	\$2	\$5	0.55	1.29
Indonesia	209.7	\$3,770	87%	\$8	\$6	0.68	0.51
Iran	67.54	\$5,200	99%	-	-	-	-
Iraq	22.2	\$2,000	97%	-	-	-	-
Jordan	4.32	\$5,000	92%	\$20	\$8	1.24	0.50
Kazakhstan	16.8	\$2,880	47%	-	-	-	-
Kuwait	1.83	\$16,700	85%	\$98	\$14	0.55	0.08
Lebanon	3.44	\$3,400	70%	\$94	\$21	2.61	0.59
Malaysia	20.49	\$10,750	58%	\$27	\$7	2.05	0.51
Morocco	30.39	\$3,260	99%	\$98	\$14	0.55	0.08
Nigeria	107.1	\$1,380	50%	\$7	\$1	3.22	0.35
Niger	9.34	\$640	80%	-	-	-	-
Oman	2.24	\$9,500	100%	\$53	\$10	0.77	0.15
Pakistan	132.2	\$2,300	97%	\$2	\$2	0.44	0.35
Qatar	0.67	\$21,300	95%	\$242	\$0	1.78	0.00
Saudi Arabia	20.1	\$10,600	100%	\$39	\$2	0.52	0.02
Singapore	3.44	\$21,200	15%	\$377	\$978	1.22	3.16
Senegal	9.40	\$1,700	92%	-	-	-	-
Sudan	32.59	\$860	70%	-	-	-	-
Tunisia	9.24	\$4,800	98%	\$32	\$2	1.51	0.12
Turkey	63.5	\$6,100	99.8%	\$21	\$4	0.75	0.14
UAE	2.26	\$23,800	96%	\$237	\$39	1.30	0.21
USA	267.9	\$28,600	2%	\$1,381	\$1,079	4.80	3.75
Uzbekistan	23.47	\$2,430	88%	-	-	-	-

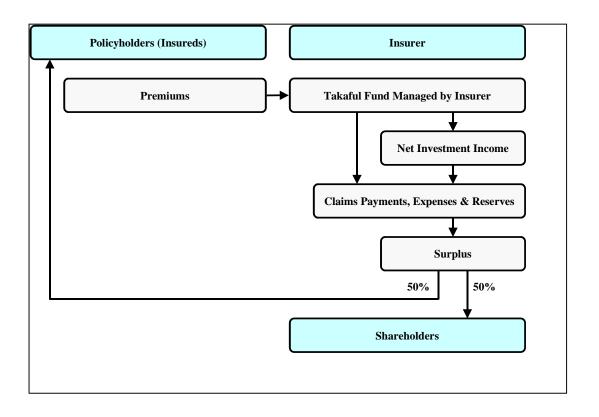
*Note*: Population is an estimate as of July 1997 and per capital GDP is 1n 1996 estimate. Information for insurance density and penetration is based of 1996 data

Source: Swiss Re, Sigma No. 4/1998; Central Intelligence Agency, 1997 World Factbook

[http://www.odci.gov/cia/publications/factbook]

FIGURE 1
Takaful Life Insurance Operation





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