

Low Market Penetration of *Takāful* Among Malaysians: Non-*Takāful* Customers' Perspective

Dr. Omaima Eltahir Babikir Mohamed¹

Prof. Datuk Dr. Syed Othman Alhabshi²

Abstract

*The Malaysian Takāful industry has experienced encouraging growth since its commencement in 1985. Annual growth rate of the industry has been estimated at 20%. Despite this rapid rate of growth the rate of penetration is still not impressive. This paper seeks to find the reasons for this relatively low penetration rate of the Takāful industry among Malaysians from the perspective of Malaysians who do not participate in the Takāful industry. The method employed to achieve the objective of this paper was the survey method; Data analysed using Logistic Regression Model (LR). This research finds that **marketing**, is a robust predictor of Takāful demand, as 50% of the respondents have not been approached by any Takāful agents, while **religion** has a significant relationship with Takāful consumption as majority of the respondents do not plan to have Takāful policies as they opine that Takāful is not permissible being similar to conventional insurance (Haram). Also **age** was a significant factor among the young respondents not planning to participate in Takāful policies.*

Key words—Customer, Takāful, Penetration, Malaysia

1 Assistant Professor , Programme Director, Bachelor of Business Administration (Islamic Banking and Finance) (Hons) Lecturer at Universiti Abdul Razak (UNIRAZAK) Ph.D. in Islamic Finance, INCEIF, Malaysia
omaima@unirazak.edu.my/omymakh@gmail.com, +60163430273

2 Chief Academic Officer INCEIF Ph.D. in Econometrics, University of Birmingham, U.K. soalhabshi@inceif.org

1. Introduction

Throughout the development of the *Takāful* industry in Malaysia, the government and regulatory authorities have been very vigilant maintaining the fundamental Islamic principles on which the *Takāful* business is established. With the commitment of regulators and support of practitioners, *Takāful* operators in Malaysia are progressively developing technical knowledge and expertise to support the development of *Takāful* domestically.

Despite the impressive growth rate of *Takāful*, market penetration rate is still considered relatively low although there has been a double digit growth of *Takāful*. Market penetration in 1990 and 1995 was 0.1% and 0.3% respectively which increased after five years to 2.5% then doubled to 5.1% in 2004. Subsequently, the growth of penetration rate from 2004 to 2005 was rather small, as the increase was only a meagre 0.5%, from 5.1% in 2004 to only 5.6% in 2005 (AbdulRahman, 2009). A recent report stated that the *Takāful* penetration in 2010 was slightly around 10% percent in Malaysia compared to conventional insurance which was 40 percent (Razak et al., 2013). To sum up, after 23 years from the commencement of the first *Takāful* operator, the penetration rate is still rather low in Malaysia.

Malaysia is a multi-racial society; *Takāful* products have attracted even the non-Muslim communities, despite the obvious religious and cultural differences. The corporate sector and multinationals also subscribe to *Takāful* products. Nonetheless, the interest shown by non-Muslims and the support of Muslims are not enough to promote the awareness and the growth of *Takāful* and what it has to offer.

2. Problem Statement and Objectives of the Study

The *Takāful* market faces several significant challenges. There are many impediments to the market penetration and expansion of the *Takāful* industry that need to be addressed. This paper is expected to answer the following question:

- ❑ What are the factors that influence market penetration of *Takāful* in Malaysia?
- ❑ What are the reasons that some Malaysians do not participate in *Takāful* industry?

The current research has been embarked to identify the factors influencing market penetration of *Takāful* industry and to recognise the reasons why the *Takāful* industry has not been effective to penetrate the Malaysian market. Therefore, this research would provide significant contributions for further enhancement in the *Takāful* industry as well as provide suggestions on how to improve the level of understanding concerning *Takāful* among Malaysians in order to generate a positive response towards *Takāful* as an effective means of protection and investment. *Takāful* operators also could use the findings of this research to expand *Takāful* market. The next section is a review of literature, methods used is presented in Section 3 and Section 4 the finding of the research is elaborated, finally, Section 5 concludes this paper.

3. Literature Review

The theories on the factors affecting life insurance demand discussed in this paper will shape the basis for the theoretical framework of this research. Most empirical work on the demand for life insurance considers Yaari's work (Yaari, 1965). Yaari indicated that a demand function for life insurance derived from the maximisation of utility function of the consumer would depend on wealth, income stream, product prices including insurance premium and interest rates. (Wasow and Hill, 1991) considered religion and life expectancy as influencing factors of demand for insurance while (Truett and Truett, 1990) and (Hwang and Greenford, 2005) add more variables as age and educational levels.

(Pissarides, 1980) in extending on (Yaari, 1965) asserted that life insurance was theoretically capable of absorbing all fluctuations in lifetime income. (Lewis, 1989) found more variables, namely, number of dependents has an influence on the demand for life insurance.

(Ward and Zurbruegg, 2002) studied the effect of the political environment in Organisation for Economic Co-operation and Development (OECD) countries on life insurance demand and found a positive significant relationship between political stability and the demand for insurance. They added that banking development is also crucial to the development of the life insurance industry. This is in tandem with the findings of (Outreville, 1996) that showed a positive correlation between financial development and life insurance penetration. An efficient and effective bank service increases consumers' confidence in financial institutions.

Religion from a historical perspective according to (Zelizer, 1979) has provided a strong source of cultural opposition to life insurance. Many religious people believe that a dependence on life insurance comes as a result of disbelief in God's protecting care. (Wasow and Hill, 1991) tested the effects of Islam on life insurance consumption and found that consumers in Islamic nations purchase less life insurance than those in non-Islamic nations.

(Simonson and Nowlis, 2000) asserted that there are several difficulties in identifying people's perceptions towards deciding options as it relates to a number of considerations and potential perceptions from a marketing point of view. Normally, people have different underlying intentions while considering their choices. As the underlying factors for buying behaviour are quite similar to the concept of perception in the process of choosing a product, consumer values can be taken into account in identifying people's perceptions towards *Takāful*.

According to (Aris et al., 2009) although Malays are aware of *Takāful*, they are not convinced that it is what they require for financial planning compared to other wealth planning instruments such as unit trusts. They added, that in the future, *Takāful* operators may need to look at creative products for protection, education and investment purposes. They listed in their paper the factors influencing the Malays' purchasing decision of *Takāful* which include scope of policy, claims paying ability, customer service, convenience and product pricing.

They emphasised that sales of insurance policies are highly dependent on the services provided by the insurance agents, as the agents are the vanguards of the insurance companies they represent.

(Abdi, 2007) stated that there are many factors limiting *Takāful* growth including the demographic characteristics of the Muslim population in terms of education and awareness of *Takāful* and how it differs from its conventional counterpart. He added that educational level, product understanding and the role of social and family welfare systems are some of the factors that influence the demand for *Takāful* as well as life insurance.

(Mohamed et al., 2013) examined various variables in order to find the factors influencing *Takāful* market penetration in Malaysia, the focus was on customers who are participating in *Takāful*. Results indicated that age, gender, marital status, education, religion, income, *Takāful* awareness, product varieties and staff and *Takāful* agents' knowledge show a significant relationship with the decision to participate in *Takāful* plans or otherwise. Other variables examined were found insignificant relationship to respondents' decision on participating in *Takāful* such as product prices, services and *mudharabah* return, although various prior studies indicated that the relationship between demand for life insurance and insurance price and services rendered is highly significant.

The above studies highlighted a multitude of factors which have effects on the demand for life insurance, such as income, political stability, financial development and life insurance penetration, successful economic development, education, creative products for protection, as well as demographic characteristics such as age, education and awareness.

4. Data and Methodology

Data collection method used for the purpose of this paper was a structured questionnaire containing a list of questions seeking the reasons behind abstaining from *Takāful* products. In essence, the objective of the questionnaires was to extract information from Malaysians to unearth the factors influencing *Takāful market* penetration in Malaysia. A total of 500 sets of questionnaire were distributed to the respondents, response rate 51.6%.

The questionnaire was a brief survey consisting of two sections (see Appendix A). The first section covers socio-demographic characteristics of the respondents which included age, gender, race, religion, monthly income, marital status, educational levels and occupation. The second section consisted of 11 questions of various types. Investment is part and parcel of family *Takāful* plans. Therefore, respondents were asked whether they were engaged in any form of investment. In order to know whether respondents will plan to participate in *Takāful* or otherwise, the researcher measured their level of understanding of the *Takāful* concept and their capability in differentiating between insurance and *Takāful*. In the second section, variables such as income, awareness of *Takāful* existence, awareness of *Mudhārabah* return and marketing strategies are included.

The initial questionnaire was first pre-tested with eighteen (18) officers and executives from different fields where their comments were considered. The amended version of the survey was sent to the mentioned groups for their feedback as the survey was prepared in a Google document in a web page. The same set was also emailed to the members of ibfnet@yahoo.com as well as International Center for Education in Islamic Finance (INCEIF) staff members. The Response rate was 51.6% or 258 out of 500 questionnaires were completed and returned.

Based on theoretical aspects, this research hypothesises that varying factors influence demand for *Takāful* products. The factors that influence penetration rate of *Takāful* industry can be explained by independent variables including socio-demographic factors and other factors namely income, awareness, marketing strategies and religion of participants.

The theoretical framework for this research can be described using the Logistic Regression (LR) Model which is a type of predictive model that can be used when the target variable is a categorical variable with two categories – for example ‘Yes’/No planning / not planning to participate in *Takāful* schemes. The model is used to examine hypothesised independent variables, to test each variable independently, to find if there is any relationship between the variables, and if these factors affect the penetration of *Takāful* industry in Malaysia. The logistic model formula computes the probability of the selected response as a function of the values of the predictor variables.

LR model is designed to test the relationships between binary data: plan/not plan to participate in *Takāful* schemes as the dependent variable for those who are not participating during the survey period. The independent variables are age, gender, marital status, religion, education, income, awareness and marketing. The regression model is expressed as follows:

$$\ln P/(1-P) = B_0 + b_1 X_1 + b_2 X_2 + b_3 X_3 + b_4 X_4 + b_5 X_5 + b_6 X_6 + b_7 X_7 + b_8 X_8 + b_9 X_9 + b_{10} X_{10} + b_{11} X_{11} + b_{12} X_{12}$$

Where:

$\ln P/(1-P)$ is the log odds of the dependent variable:

Holding *Takāful* policy =1 and Not holding *Takāful* policy =0

The "b" terms are the logistic regression coefficients,

b_0 is the constant, b_1 coefficients for x_1 = Age;

b_2 coefficients for x_2 = Gender;

b_3 coefficients for x_3 = Marital;

b_4 coefficients for x_4 = Religion;

b_5 coefficients for x_5 = Education;

- b_6 coefficients for x_6 = Income;
 b_7 coefficients for x_7 = Awareness on *Takāful*;
 b_8 coefficients for x_8 = Awareness on *Mudhārabah*;
 b_9 coefficients for x_9 = Services;
 b_{10} coefficients for x_{10} = Products;
 b_{11} coefficients for x_{11} = Prices; and
 b_{12} coefficients for x_{12} = Knowledge Score.

The first step was to assess the overall fit of the model to the data. A number of statistical tests will be presented in Table 1. The statistical tests are Chi-Square test, Nagelkerke R-Square, Cox & Snell R-Square, Hosmer and Lemeshow test and Overall Percentage Prediction (%).

Table 1: Test of Model Coefficient

Test	Value
P-value of Chi-Square test (Model)	0.000
Nagelkerke R-Square	0.291
Cox & Snell R- Square	0.217
Hosmer and Lemeshow Test	0.409
Overall Percentage Prediction (%)	71.30

Table 1 presents the Chi-Square statistics with p-value less than 0.05 which indicates that the model is significant. Cox & Snell R-Square and Nagelkerke R-Square indicate the proportion of variation in the dependent variable which is explained by the independent variables. Both values must vary from 0 to 1. The Cox & Snell R-Square and Nagelkerke R-Square are 0.291 and 0.217 respectively. Usually Nagelkerke R-Square value is higher than Cox & Snell R Square.

To assess the goodness-fit of the model, Hosmer and Lemeshow test is calculated whose Chi-Square value is 0.409 higher than the p-value 0.05 and thus it can be concluded that this LR model fits the data. The predictive accuracy of the model is 71.30% and the error rate is merely 28.7%. From these results, a conclusion can be drawn that the LR model can possibly

predict the reasons why non-participants do not plan to participate in the *Takāful* industry in Malaysia.

5. Findings

The Logistic Model formula computes the probability of the selected response as a function of the values of the predictor variables

The Logistic Model is then expressed as follows:

$$\ln P/I-P = \beta_0 + b_1 \text{age}_1 + b_2 \text{gender}_2 + b_3 \text{marital}_3 + b_4 \text{religion}_4 + b_5 \text{education}_5 + b_6 \text{income}_6 + b_7 \text{existence awareness}_7 + b_8 \text{marketing}_8 + b_9 \text{aware of mudarabah}_9$$

Where:

$\ln P/I-P$: is the dependent variable for plan/not plan to participate in *Takāful* policies.

β_0 : is an intercept,

The partial regression coefficients $\beta_1, \beta_2, \beta_3, \beta_4, \beta_5$, are unknown parameters.

The independent variables: $X_1 =$ age, $X_2 =$ gender, $X_3 =$ marital status, $X_4 =$ religion, $X_5 =$ education, $X_6 =$ income, $X_7 =$ *takāful* awareness, $X_8 =$ marketing, $X_9 =$ awareness of *Mudhārabah* profit.

From the LR output, the first table to be considered is the classification Table 2 which presents the results without including the independent variables into the equation this is compared to output where all the independent variables are included into the equation in Table 3 to determine whether the latter is appropriate for the data set.

Table 2 presents the classification table for variables not in the model. 100% refers to those who are planning to have a *Takāful* policy while 0% for those who are not planning to have *Takāful* policy. The overall percentage of predictions was 56.3% accurate.

When explanatory variables were included in the model, Table 3 shows the columns with the two predicted values of the dependent variables, while the rows are the two actual values of the dependent variables. In a perfect model, all cases will be on the diagonal and the overall percent correct will be 100%.

In this research, 77% were correctly classified for planning to participate in *Takāful* and 63.9% not planning to participate in *Takāful*. Overall 71.3% were correctly classified. This is a considerable improvement on the 56.3% correct classification with the constant model, so we know that the model with the independent variables is significantly a better model. The classification error rate has changed from the original 56.3% by adding the variables which could then predict with 71.3% accuracy. The model appears good after evaluating with the tests presented earlier.

The Variables in the equation (see Table 4) have important elements to be analysed. The Wald statistic and associated probabilities provide an index of the significance of each predictor in the equation. The Wald statistic has a Chi-Square distribution.

The simplest way to assess Wald is to take the significant values and if the value is less than 0.05, then the variable does make a significant contribution. In this case, it is clear that age ($p=0.045$), religion ($p=0.000$), and marketing ($p=0.005$) contributed significantly to the prediction of the respondents not planning to participate in *Takāful* plans. While the other variables namely marital status, gender, education, income, awareness of existence of *Takāful*, awareness of *Mudhārabah* profits were insignificant variables with p-value more than 0.05 in relation to the decision of “planning to have a *Takāful* policy”.

Table 2 Classification Table When Variables are not in the Model

		Predicted		
		Planning to have a <i>Takāful</i> policy	Not Planning to have a <i>Takāful</i> policy	Percentage Correct
Dependent Variable	Planning to have a <i>Takāful</i> policy	0	139	0
	Not Planning to have any <i>Takāful</i> policy	0	108	100
Overall Percentage				56.3

Table 3 Classification Table When Variables are in the Model

		Predicted		
		Planning to have a <i>Takāful</i> policy	Not Planning to have a <i>Takāful</i> policy	Percentage Correct
Dependent Variable	Planning to have a <i>Takāful</i> policy	107	32	77.0
	Not Planning to have any	39	69	63.9

	<i>Takāful</i> policy			
	Overall Percentage			71.3

Table 4 Logistic Regression for non-Participants' Survey

	B	S.E.	Sig. P<0.05	Wald	df	Exp(B)	95.0% C.I. for OR	
							Lower	Upper
Age			7.377	5	.194			
Age (1)	1.882	1.329	2.006	1	.157	6.568	.485	88.856
Age (2)	.880	.817	1.162	1	.281	2.412	.487	11.954
Age* (3)	1.591	.794	4.012	1	.045	4.909	1.035	23.292
Age (4)	.525	.740	.504	1	.478	1.690	.397	7.206
Age (5)	.743	.784	.898	1	.343	2.102	.452	9.762
Gender (1)	-.299	.312	.922	1	.337	.741	.402	1.366
Race			2.473	3	.523			
Race (1)	.634	.762	.701	1	.411	1.896	.425	8.484
Race (2)	.578	.652	.697	1	.378	.983	.346	6.984
Race (3)	.215	.301	.546	1	.126	.783	.154	4.956
Marital (1)	.061	.391	.024	1	.877	1.062	.494	2.284
Religion* (1)	-1.412	.353	15.965	1	.000	.244	.122	.487
Education			1.374	3	.712			
Education (1)	.243	.505	.232	1	.630	1.275	.474	3.433
Education (2)	.549	1.169	.221	1	.639	1.731	.175	17.110
Education (3)	.379	.336	1.269	1	.260	1.461	.755	2.825
Income			4.812	7	.683			
Income (1)	-.128	.878	.021	1	.884	.880	.157	4.921
Income (2)	.084	.614	.019	1	.891	1.088	.327	3.624
Income (3)	.262	.612	.184	1	.668	1.300	.392	4.310
Income (4)	.058	.598	.009	1	.923	1.060	.328	3.418
Income (5)	.476	.708	.453	1	.501	1.610	.402	6.443
Income (6)	-2.041	1.177	3.006	1	.083	.130	.013	1.305
Income (7)	.024	1.105	.000	1	.982	1.025	.117	8.944
<i>Takāful</i> Existence Awareness	-.711	.526	1.822	1	.177	.491	.175	1.379

Marketing*	.964	.347	7.732	1	.005	2.621	1.329	5.171
Constant	-.695	1.450	.230	1	.632	.499	.187	1.524

The coefficient estimate from the LR model:

$$\begin{aligned} \ln P/1-P = & -.695 + 1.882 [\text{Age (1)}] + 0.880 [\text{Age (2)}] + 1.591 [\text{Age (3)}] + 0.525 [\text{Age (4)}] \\ & + 0.743 [\text{Age (5)}] - 0.299 [\text{Gender (1)}] + .634 [\text{Race (1)}] + .578 [\text{Race (2)}] + .215 [\text{Race (3)}] \\ & + 0.061 [\text{marital (1)}] - 1.412 [\text{Religion (1)}] + 0.243 [\text{Education (1)}] + 0.549 [\text{Education (2)}] + \\ & 0.379 [\text{Education (3)}] - 0.128 [\text{Income (1)}] + 0.084 [\text{Income (2)}] + 0.262 [\text{Income (3)}] + 0.058 \\ & [\text{Income (4)}] + 0.476 [\text{Income (5)}] - 2.041 [\text{Income (6)}] + 0.024 [\text{Income (7)}] - 0.711 [\text{Takāful} \\ & \text{awareness}] + 0.964 [\text{Marketing}] - 0.628 [\text{Awareness of Mudhārabah profit}] \end{aligned}$$

The estimated parameters of the regression equation are reported in Table 4 using binary data plan/not plan to participate in *Takāful* industry as the dependent variable. Other than socio-demographic factors, marketing, religion, education levels, awareness as well as income variable were included to measure the effects of affordability to participate in *Takāful* plans.

Summary statistics of the variables used in this research included three independent variables namely **age, religion and marketing strategies** which were statistically significant at p-value less than 0.05. While the other variables; marital status, gender, education, income, awareness of existence of *Takāful*, awareness of *Mudhārabah* Return were insignificant with p-value more than 0.05 in relation to the decision of planning to have a *Takāful* policy. The insignificant independent variables from the model with positive coefficients were marital status, education and awareness of *Mudhārabah* profit. Variables with negative coefficients were gender, awareness of *Takāful* existence and income which showed inconsistent results, having both negative and positive values for the different levels of income.

In general, the **age** variable is positively related to the dependent variable but has p-value more than 0.05 hence it is insignificant; but sub-group (3) shows p-value 0.45 which is <0.05. Therefore, age may be considered to be a significant factor that influences the public to participate in *Takāful*. There are contradictory conclusions concerning the effect of age on the demand for life insurance. (Showers and Shotick, 1994, Baek and DeVaney, 2005) found that the effect of age was positive and significant, but (Ferber and Lee, 1980, Chen et al., 2001) found a negative significant relationship between age and life insurance demand.

Religion is a significant variable (showing negative sign) related to planning to have a *Takāful* policy, based on the coding of variables where (1) is for Muslim respondents. This means that Muslims are more likely to participate in *Takāful* policies in comparison to non-Muslims. The finding of religion is in tandem with prior studies on demand for life insurance. According to (Chui and Kwok, 2009, Browne and Kim, 1993, Beck and Webb, 2003) historically, religion has provided a strong source of cultural opposition to life insurance in Europe before the 19th century, and nowadays in several Muslim countries. The belief

generally is that reliance on a life policy implies distrust in God's protective care (Zelizer, 1979). The religion variable is the percentage of individuals with Christian and Islamic beliefs; a negative relationship is expected. From the finding of the current research, a large portion of the respondents are not able to differentiate between insurance and *Takāful* and believe both are the same. Some of the respondents believe both are in contradiction with Shariah rules.

Marketing strategies shows statistically significant and positively related to plan to have *Takāful* policy. Good marketing strategies and better marketing skills of staff and agents of *Takāful* operators will attract more people to plan to have *Takāful* policies. The more the *Takāful* staff and *Takāful* agents approach and provide information on *Takāful* products, the more people will plan to have *Takāful* policies. This is in tandem with a recent study by (Aris et al., 2009) who revealed ignorance of *Takāful*, its products, benefits and operations were attributed to the poor marketing strategies that were carried out by the *Takāful* operators over the years.

Awareness of *Takāful* unexpectedly shows negatively insignificant influence on planning to have *Takāful* policies. According to the data collected majority of non-*Takāful* participants are aware of the existence of *Takāful*. But to what level they understand and are able to differentiate between insurance and *Takāful* concepts is questionable. According to (Aris et al., 2009) non-*Takāful* consumers are aware of existence of *Takāful* products offered by *Takāful* operators but not necessarily in detail about *Takāful* benefits.

Education Level shows a positive relationship with planning to have *Takāful* but insignificant p-value of 0.05 which is unexpected since more well educated people are expected to be well-versed with the advantages of insurance as well as *Takāful*. However this was not indicated in the data of this research. Several studies in demand for insurance such as, and (Baek and DeVaney, 2005, Burnett and Palmer, 1984, Ferber and Lee, 1980, Gandolfi and Miners, 1996, Hammond et al., 1967) showed that there is a positive relationship between education and life insurance demand. They recognised that those who have better education will purchase more life insurance, potentially due to the fact that households with greater education can expect their income to continue to increase at a faster rate and for a longer period of time.

Gender showed a negative sign for β coefficient and also showed an insignificant p-value of 0.05. While **marital status** shows positive relation with married respondents in comparison to singles but statistically is insignificant at p-value of 0.05. The results are in concurrence with (Hammond et al., 1967); (Mantis and Farmer, 1968) were among the first to examine how marital status influences life insurance demand of households, whereby demand for life insurance and marital status have been found to strongly affect both household and individual life insurance demand.

Income shows an insignificant relationship with the dependent variable at p-value 0.05 level and coefficient shows inconsistent results that have both negative and positive signs for the

different levels of income. Perhaps the type of data collected has an impact on this result as the data does not distinguish between family and general *Takāful*. Many other studies confirmed there is a positive relationship between demand for life insurance and income, such as (Beck and Webb, 2003, Beenstock et al., 1986, Browne and Kim, 1993, Burnett and Palmer, 1984, Chui and Kwok, 2009, Li et al., 2007, Outreville, 1996) which affirmed that increasing in income makes insurance more affordable and creates a greater demand for life insurance to safeguard the potential income of the insured and the well-being of dependents. This is also confirmed by a large number of respondents who participated in the current research when asked for the reasons why they do not plan to participate in *Takāful* industry. It was found that (39%) although they are willing they do not have sufficient income (see Table 5).

Table 5: The Reasons for not Planning to have a *Takāful* Policy

Reason	Frequency	Percent
Beliefs	26	16.9
Insufficient income	60	39.0
Not aware of <i>Takāful</i>	12	7.8
Depend on social security/Government support	10	6.5
Others	46	29.9

Other independent variables were statistically insignificant but positively related to planning to have a *Takāful* policy. These were awareness of *Mudhārabah* profit, belief and social security. Many studies reached conflicting conclusions. The contradictory conclusions may result from different data sets, variable measurement and methodology used. Thus, the relationships between comprehensive list of factors and the demand for *Takāful* still needs to be examined further to find the most important factors influencing non-*Takāful* participants' decision on planning to participate on *Takāful*.

LR coefficients can also be reported as Exp (B) which is also known as Odd Ratio (OR). OR is the difference in the log of odds of the dependent variables for one value of categorical variable (plan to have a *Takāful* policy) vs. group (Not plan to have a *Takāful* policy), after controlling the confounding effects of the covariates in the model.

The odd ratio for religion was 0.244; which indicated that around 24% of Muslims more interested to have *Takāful* policies than the non-Muslims. Marketing odd ratio was 2.621, thus

with increased marketing activities by staff and agents of *Takāful* it will influence the people planning to have *Takāful* policies by two times.

In sum, the following variables were found to be significant: Age, religion and marketing. This means the mentioned variables are important variables to be considered by *Takāful* operators in approaching non-participants in order to participate in *Takāful* plans. Besides age, gender, education, income, marital status, knowing about the existence of *Takāful*, awareness of *Mudhārabah* profits, were found not to be significant.

The objective of this research was to investigate the reasons why some Malaysians did not plan to participate in the *Takāful* industry. From the results in the LR (see Table 4) among the variables that measured the reasons why the respondents do not plan to have any *Takāful* policies are age, religion and marketing, which were the significant variables compared to other variables.

The other variables were not significant and some had negative values. More detailed information on why the respondents do not plan to participate in *Takāful* industry is presented in Table 5. 17% of respondents stated that the reasons they did not participate in the *Takāful* was that they suspect *Takāful* funds are not invested in *Shariah* compliant investments. According to (Othman and Abdul Hamid, 2009) people still misunderstand and some of them do not have any trust in *Takāful* funds that are invested according to *Shariah* principles.

6. Conclusion

In this research, dependent variable planning/not planning to participate in *Takāful* industry was used as binary data via binary LR model. Results of this research indicated that 140 (56.2%) were planning to participate in the *Takāful* industry while 109 (43.8%) did not plan to participate based on the reasons stated in Table 5. 60 (39%) who do not have sufficient income, 26 (16.9%) stated that their religious belief being the reason for their non-participation and 12 (7.8%) are not aware of the existence of *Takāful*. **Age, religion and marketing strategies** show a significant relationship with planning to participate in *Takāful* plans. Marital status, educational levels and awareness of *Mudhārabah* returns show a positive relationship, while income shows an insignificant relationship statistically as well due to the inconsistency in the positive and negative values of income levels, although various prior studies indicated that the relationship between demand for life insurance and people with high levels of income is highly significant. In sum, better marketing strategies, more awareness of the advantages of *Takāful* and better understanding of *Takāful* products may increase the demand for *Takāful* and these aspects will consequently improve the *Takāful* penetration rate among Malaysians in general.

References

- ABDI, S. 2007. Taking Takaful to the next level: how the industry can create demand for the services. *Islamic insurance trends, opportunities, and the future of Takaful*, Euromoney Books, London.
- ABDULRAHMAN, Z. 2009. Takaful: potential demand and growth. *Islamic Economics*, 22.
- ARIS, Y. B. W., SAHAK, S. Z. & SHAADAN, N. 2009. A Relook into Awareness, Perceptions, Barriers and Future Insurance Needs: A Case Study of Takaful and the Malays. *International Journal of Arts and*, 10-21.
- BAEK, E. & DEVANEY, S. A. 2005. Human capital, bequest motives, risk, and the purchase of life insurance. *Journal of Personal Finance*, 4, 62-84.
- BECK, T. & WEBB, I. 2003. Economic, demographic, and institutional determinants of life insurance consumption across countries. *The World Bank Economic Review*, 17, 51-88.
- BEENSTOCK, M., DICKINSON, G. & KHAJURIA, S. 1986. The determination of life premiums: An international cross-section analysis 1970–1981. *Insurance: Mathematics and Economics*, 5, 261-270.
- BROWNE, M. J. & KIM, K. 1993. An international analysis of life insurance demand. *Journal of Risk and Insurance*, 616-634.
- BURNETT, J. J. & PALMER, B. A. 1984. Examining life insurance ownership through demographic and psychographic characteristics. *Journal of Risk and Insurance*, 453-467.
- CHEN, R., WONG, K. A. & LEE, H. C. 2001. Age, period, and cohort effects on life insurance purchases in the US. *Journal of Risk and Insurance*, 303-327.
- CHUI, A. C. & KWOK, C. C. 2009. Cultural practices and life insurance consumption: An international analysis using GLOBE scores. *Journal of Multinational Financial Management*, 19, 273-290.
- FERBER, R. & LEE, L. C. 1980. Acquisition and accumulation of life insurance in early married life. *Journal of Risk and Insurance*, 713-734.
- GANDOLFI, A. S. & MINERS, L. 1996. Gender-based differences in life insurance ownership. *Journal of Risk and Insurance*, 683-693.
- HAMMOND, J., HOUSTON, D. B. & MELANDER, E. R. 1967. Determinants of household life insurance premium expenditures: An empirical investigation. *Journal of Risk and Insurance*, 397-408.

- HWANG, T. & GREENFORD, B. 2005. A Cross-Section Analysis of the Determinants of Life Insurance Consumption in Mainland China, Hong Kong, and Taiwan. *Risk Management and Insurance Review*, 8, 103-125.
- LEWIS, F. D. 1989. Dependents and the demand for life insurance. *The American Economic Review*, 452-467.
- LI, D., MOSHIRIAN, F., NGUYEN, P. & WEE, T. 2007. The demand for life insurance in OECD countries. *Journal of Risk and Insurance*, 74, 637-652.
- MANTIS, G. & FARMER, R. N. 1968. Demand for life insurance. *Journal of Risk and Insurance*, 247-256.
- MOHAMED, O. E. T. B., ALHABSHI, S. O. & SHARIF, K. 2013. Factors Influencing Market Penetration of *Takāful* Industry in Malaysia:(1985-2008).
- OTHMAN, M. S. & ABDUL HAMID, M. 2009. A study on the level of knowledge and understanding among muslims towards the concepts, arabic and shariah terms in Islamic insurance (*Takaful*). *European Journal of social sciences*, 10, 468-478.
- OUTREVILLE, J. F. 1996. Life insurance markets in developing countries. *Journal of Risk and Insurance*, 263-278.
- PISSARIDES, C. A. 1980. The wealth-age relation with life insurance. *Economica*, 451-457.
- RAZAK, M. I. M., YUSOF, R. & ALI, W. 2013. Acceptance Determinants towards *Takaful* Products in Malaysia. *International Journal of Humanities and Social Science*, 243-252.
- SHOWERS, V. E. & SHOTICK, J. A. 1994. The effects of household characteristics on demand for insurance: A tobit analysis. *Journal of Risk and Insurance*, 492-502.
- SIMONSON, I. & NOWLIS, S. M. 2000. The role of explanations and need for uniqueness in consumer decision making: Unconventional choices based on reasons. *Journal of Consumer Research*, 27, 49-68.
- TRUETT, D. B. & TRUETT, L. J. 1990. The demand for life insurance in Mexico and the United States: A comparative study. *Journal of Risk and Insurance*, 321-328.
- WARD, D. & ZURBRUEGG, R. 2002. Law, politics and life insurance consumption in Asia. *Geneva Papers on Risk and Insurance. Issues and Practice*, 395-412.
- WASOW, B. & HILL, R. 1991. *The Insurance Industry in Economic Development*, New York University Press.
- YAARI, M. E. 1965. Uncertain lifetime, life insurance, and the theory of the consumer. *The Review of Economic Studies*, 137-150.

ZELIZER, V. A. R. 1979. *Morals and Markets: The Development of Life Insurance in the United States*, Columbia University Press.

Appendix A: Non- Participants Survey

Survey on “Factors Influencing the Market penetration of *Takāful* industry in Malaysia For the period 1985-2008”

Dear Respondent,

The purpose of this study is to identify the factors that influencing the market penetration of *Takāful* industry as compared to the conventional insurance in Malaysia. This research under the expert guidance of:

Prof. Datuk Dr. Syed Othman Alhabshi

E-mail: soalhabshi@inceif.org

Tel: +603-76514013

Please take 5-10 minutes of your time to fill up this survey questionnaire.

Thank You for your cooperation.

Yours sincerely

Omaima Eltahir BabikirMohamed (PhD candidate)

Email: omymakh@gmail.com

TEL: +60163430273

Instructions

The success of this study depends on your responses to the following questions. I hope you will give honest answers to ensure that the information provided truly reflect the reality.

Section 1: Socio- demographic characteristics:

Please tick (/) beside the suitable information about your background

Age	<input type="checkbox"/> Below 20	<input type="checkbox"/> 20-30
	<input type="checkbox"/> 31-40	<input type="checkbox"/> 41-50
	<input type="checkbox"/> 51-60	<input type="checkbox"/> Above 60
Gender	<input type="checkbox"/> Male	<input type="checkbox"/> Female
Marital Status	<input type="checkbox"/> Single	<input type="checkbox"/> Married

Religion Muslim Non-Muslim
Race Malay Chinese Indian Others.....

Level of Education
 Primary school STPM
 SPM Undergraduates
 Graduate Postgraduate

Monthly income
 below RM 2,000 RM 2,000 – RM 4,000
 RM 4,001 – RM 6,000 RM 6,001 – RM8, 000
 RM 8,001 – RM 10,000 RM 10,001 – RM 12,000
 RM 12,001 – RM 15,000 Above RM 15,000

Position
Occupation
Name (optional):
Contact (optional):
Address (optional):

Section 2: Respondent's awareness of *Takāful*

Please tick (/) beside the suitable answer

1. Do you have any investment?
 Yes No (skip to q5)
2. Your investment in:
 Unit trust Property Stocks and shares [] Insurance
 Others please specify.....
3. Do you have any insurance policy?
 Yes No (skip to q5)
4. What type of insurance do you have?
 Motor Insurance Fire Insurance Miscellaneous Insurance
 Endowment Insurance Whole life insurance Annuities
5. Do you know anything about the Islamic version of insurance i.e. "*Takāful*"?
 Yes No
6. Have you been approached by any *Takāful* agent to participate in *Takāful*?

Yes No

7. Do you know that there are differences between insurance and *Takāful* ?

Yes No

8. Do you plan to have any *Takāful* policy?

Yes No (skip to q10)

9. Which *Takāful* policy do you plan to have?

General insurance General *Takāful* Life insurance

Family *Takāful* Skip q10)

10. Why do you not plan to have *Takāful* policy?

Beliefs

Insufficient income

Not aware of the existence of insurance/*Takāful*

Depend on social security/Government support

Others please specify.....

11. If you have child/children, do you have any plan for your children's education?

Yes No

If yes, please specify

Your cooperation and time is highly appreciated

Thank you