

THE GROWTH OF MALAYSIAN TAKAFUL INDUSTRY – FROM 2009 THROUGH 2019

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ABSTRACT:

This study aims at examining the landscape of Malaysian takaful industry over the past 11 years with a specific focus on investigating strength of relationship between the performance of takaful products and the level of national income. Within the framework of sales theory, this paper employs Ordinary Least Squares (OLS) regression as an estimation tool to model the yearly secondary data from 2009 through 2019. The empirical results from the study show that the income level exerts some significant influence only on the performance of family takaful. From Pearson correlation analysis, we only observe a strong positive correlation between the performance of family takaful and income level. As such, a steady increase in income is an important prerequisite for future consumption, particularly on spending over merit goods. It is rather unexpected to find that the level of income has no bearing at all on the performance of general takaful.

Keywords:

Family takaful, General takaful, Takaful operators, Per capita gross national income (GNI), Takaful fund.

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INTRODUCTION

Malaysia's financial system has been transformed since early 1980s from one based primarily on the conventional banking system to one that is inspired by the need of Muslim community at large. As a result, an alternative financial system is developed encompassing both Islamic banking and Islamic finance services. Takaful is one of the new products in the insurance industry. Takaful is an Islamic insurance which is offered to the general public under the auspices of Takaful Act 1984 and it serves two main objectives. First, takaful is an alternative insurance scheme, specially designed for Muslim public and it is completely Shariah compliant. Secondly, takaful products are developed to complement the business operations of the Islamic bank which was established much earlier in 1983. Syarikat Takaful Malaysia SdnBhd (STMB) is the first takaful operator in Malaysia and this Islamic insurance company was established in November 1984. However, this company started its takaful businesses only in August 1985 after Takaful Act was gazetted in December 1984.

Basically, a takaful fund is a pool of money that contributors or participants create among themselves to help each other. Such a fund, however, will not survive in the absence of regulations that protect the mutual interest of these participants. An entity with paid-up capital must be allowed to exist within a financial system to manage this fund professionally and efficiently. For this good reason, a takaful operator (which is usually a limited liability company or preferably an Islamic bank) comes into existence to manage this type of fund. The takaful operator's shareholder funds will support the takaful start-up and its ongoing administrative expenses. Each takaful operator or Islamic insurance company must keep its participants' contributions separate from its shareholder funds. In short, the two sources of funds must not be mixed and utilization of each fund is also different from one another.

At the onset, the takaful industry was under the purview of Ministry of Finance until 1988. Since then, the Malaysia's Central Bank (or Bank Negara Malaysia) has taken over the role as a governing body making sure that business operations of a takaful operator are in compliance

with Shariah principles at all times. The central bank has put up great effort in nurturing Malaysian takaful industry to become one of the preferred insurance segments in the financial services sector. At present, there are 15 licensed takaful operators in Malaysia and four of them are foreign-owned (see Table 1). The number of takaful operators has increased considerably following to the enactment of Islamic Financial Services Act (IFSA) in 2013. This is a special takaful act that requires all composite licensed takaful operators to convert their businesses into single licenses. In other words, these takaful operators must split their family and general takaful businesses into two separate business entities with effect from 1 July 2018. The main objective of IFSA is to drive takaful operators towards adopting a focused strategy in managing their core business where expertise and resources are limited. This new requirement is considered timely as family takaful and general takaful are completely distinct in terms of risk characteristics and nature of businesses.

Table 1. Licensed Takaful Operators in Malaysia

No	Name	Ownership
1	AmMetLife Takaful Berhad	Local
2	Etiqa Family Takaful Berhad Maybank	Local
3	Etiqa General Takaful Berhad Maybank	Local
4	FWD Takaful Berhad	Local
5	Hong Leong MSIG Takaful Berhad	Local
6	Prudential BSN Takaful Berhad	Local
7	Sun Life Malaysia Takaful Berhad	Local
8	Syarikat Takaful Malaysia Am Berhad	Local
9	Syarikat Takaful Malaysia Keluarga Berhad	Local
10	Takaful Ikhlas Family Berhad	Local
11	Takaful Ikhlas General Berhad	Local
12	AIA PUBLIC Takaful Bhd	Foreign
13	Great Eastern Takaful Berhad	Foreign
14	Zurich General Takaful Malaysia Berhad	Foreign
15	Zurich Takaful Malaysia Berhad	Foreign

The primary objective of this study is to investigate the growth of Malaysian takaful industry over the past ten years with a specific focus on examining the strength of relationship between income growth and performance of takaful products. Economic growth is important for every nation because it ensures its workforce will enjoy growth in their disposable income and deserve better quality of living. For this reason,

financial services that offer financial products that are highly demanded by the general public would contribute significantly towards long-term economic prosperity. A financial system not only involves the role of government in regulating the financial markets but also facilitating the market players in achieving the desirable economic outcomes. All in all, the issue of informational and allocative efficiency requires serious consideration from policy makers since it would garner a country's long-term competitive advantage.

LITERATURE REVIEW

In principle, the takaful system is based on mutual cooperation, responsibility, assurance, protection and assistance between groups of participants (or policyholders), which represents a form of mutual insurance (Mohamed & Nor, 2013). Takaful rests upon Islamic principles which prohibits the element of riba (usury), gharar (uncertainty) and maisir (gambling) (Gustina & Nurdianawati, 2012; Fithriah & Hanudin, 2011). Interpretively, riba means any increase, addition, expansion or growth (Al-Zubaydi, 1306). In Shariah perspective, riba or the additional increase is created from money lending process or investment activities in return for money borrowed or capital used.

According to Olson and Zoubi (2008), Islam prohibits elements of riba because it leads inequality in transactions. In contrast, Takaful embraces the concept of profit sharing (mudharabah) among the participants (Billah, 1998). The principle of mudharabah thus, enables takaful participants to share profits generated from investment activities, based on an agreeable predetermined profits ratio between the parties. The operation of takaful also prohibits the element of riba by investing only in Shariah-approved financial instruments (Billah, 1998).

There are numerous studies that best explain the motivation and objectives of takaful's participants. The theory of reasoned action (TRA), theory of planned behaviour (TPB) and decomposed theory of planned behaviour (DTPB)

are some of the underpinning theories widely discussed in similar studies.

Developed by Fishbein and Ajzen (1975), TRA explains that human behaviour is influenced by the individual's will and disposition. Simply means, people are more likely to follow their intentions. This theory posits that intentions are determined by two constructs, namely, attitudes and subjective norms (Fishbein and Ajzen, 1975). Attitude is defined as a person's positive or negative evaluation of a relevant behaviour, while subjective norms (SN) represent a person's perception of whether significant referents approve or disapprove of behaviour (Ajzen & Fishbein, 1980).

TPB was developed as an extension to TRA (Ajzen, 1991). The difference between TRA and TPB is the inclusion of perceived behavioural control, to take into account the 'intention' and 'non-intention' aspects of performing behaviour (Ajzen, 1991). Both TRA and TPB have been used in many studies to explain consumer intentions to purchase financial products and services (Hanudin, 2013; Dzuljastri & Muhamad, 2012; Syed *et al.*, 2012; Siang & Weng, 2011). Deploying TRA, Hanudin (2013) explores the factors influencing Malaysian bank customers to choose Islamic credit cards. His study has found that both attitude and SN influence customer intention significantly.

Similarly, Dzuljastri and Muhamad (2012) employs TRA as a measure to identify the relevant factors that might influence customers' intention on subscribing the diminishing partnership home financing programme promoted by many Malaysian banks. Their study indicates that both attitude and SN greatly influence customers' intention to use diminishing partnership home financing programme. In a study by Siang and Weng (2011), the intention to subscribe to Islamic banking products and services among non-Muslim consumers in Malaysia is examined by using TPB. The study concludes that attitude, SN and perceived

behavioural control influence non-Muslims consumer's intention of using Islamic banking products and services significantly.

Taylor and Todd (1995b) conceive the decomposed theory of planned behaviour (DTPB). This is a complex theory which decomposes attitude, SN and perceived behavioural control into several dimensions in order to understand better the antecedents of behaviour. Taylor and Todd (1995a) decompose 'attitude' into three determinants which are relative advantage, complexity and compatibility. While SN is decomposed into two determinants - peer influence and superior influence. And finally, perceived behavioural control is segmented into three determinants namely, self-efficacy, resource facilitating condition and technology facilitating condition.

There is a myriad of studies that argue that SN is an important predictor of consumers' intentions to purchase financial service products, such as credit cards, life insurance and other financing facilities including Islamic home financing (Hanudin & Rosita, 2011; Dzuljastri & Muhamad, 2012; Omar & Frimpong, 2007). Omar and Frimpong (2007) examine Nigerian consumers' buying behaviour on life insurance products and they discover that SN is the most significant determinant in consumer's decision making. Hanudin and Rosita (2011) examine the influence of SN among customers of conventional pawnshops in Kota Kinabalu, Malaysia, towards intention to use Ar-Rahnu services. They also find that SN significantly influences buying intention. In relation to purchasing a family takaful scheme, an individual who receives positive social pressure will hold a positive SN, and will most likely perform that behaviour.

Within the framework of TRA and TPB, behaviour is affected by SN. As an original construct, SN deals with the influence of social pressure on individuals and thus on buying intention (BI). Various studies have found that the SN concept interfaces into several other relevant reference groups such as peer influence and

superior influence (Taylor & Todd, 1995a; Ho *et al.*, 2011), friends, family members, colleagues (Khalil, 2005), external partners (Zainol & Kamil, 2009), spouse and neighbours (Shimp & Kavas, 1984).

As the focus of this study coalescing around marketing aspects of the takaful products, the element of “word of mouth” and “mass media” become more relevant. The rational thinking is that a consumer may rely more on parents and friends as a source of personal reference to make the purchase decision on suitable takaful products against media propagation through television, radio and advertisements. Mass media includes all methods of transmitting messages through newspapers, radio, television and the internet (Paseket *et al.*, 2006). According to Aggarwal *et al.* (1998), mass media communication is “informational” in nature and exerts profound ability to reach a much large audience rapidly, create knowledge and spread information (Rogers, 1995). The significant influence of mass media on SN has been supported by various studies (Zolait & Ainin, 2009; Conner *et al.*, 2001; Limayemet *et al.*, 2000). Zolait and Ainin (2009) investigate the influence of mass media on intention to use internet banking among Yemenis. Their study reveals that mass media does have significant influence on internet banking. In another study by Battacherjee (2000), a similar construct is used and his study also supports the earlier contention that mass media is undoubtedly a significant determinant of SN. Ayinde and Echchabi (2012) and Gerrard and Cunningham (1997) look into the effectiveness of mass media on consumer’s buying intention on takaful products in Malaysia and their studies consistently show that customers concur to the role of the mass media on their subjective norms.

DATA AND METHODOLOGY

This study makes use of yearly secondary data from 2009 through 2019. All economic data and financial data of general and family takaful are obtained from Bank Negara Malaysia (BNM) Statistical Bulletin. Gross domestic product

(GDP) and per capita gross national income (GNI) are used as statistical indicators of national development over the study period. Ordinary Least Square (OLS) Regression and Pearson correlation functions are deployed to investigate the relationship between growth of national income and performance of takaful operators in Malaysia. The OLS regression is chosen as an estimation method because it is the most common method for analysing a linear model.

3.1 Dependent and Independent Variables

In performing the regression analysis, the performance of each takaful product is designated as the dependent variable or the variable of interest, while the national income represents the explanatory variable. As part of the statistical processes, the descriptive statistics and the diagnostic analysis for each model is also reported and scrutinised.

3.2 Pearson Correlation and Estimated Model

The Pearson correlation analysis is applied to investigate the degree of association between the performance of takaful product and national income. To determine the variation among the dataset and validity of the model, both ANOVA and diagnostics tests are carried out to ascertain if the model may experience any collinearity issues. Based on the OLS method and by deploying linear regression function, this study attempts to measure the causal-effect relationship between these two variables. We hypothesize that the performance of takaful product is a function of national income as the purchasing power of a policyholder is subject to his or her financial capability to service the premium of the insurance policy. It is important to note that an insurance policy will lapse when premium payments are not made over a given time period. Once this grace period has passed, the insurance company will no longer provide a coverage for the insured person. Mathematically, the estimated model is expressed as follows:

$$\text{Takaful's Performance}_t = \alpha + \text{Income}_t + \varepsilon_t \quad (t=1,2,\dots,N=T) \dots\dots\dots(1)$$

Where: α = Intercept of the regression model
 Takaful's Performance_t = Excess of Income over Outgo at time t
 Income_t = Per Capita Gross National Income at time t.

ε_t = Error term (assumed to be normally distributed)

EMPIRICAL RESULTS

This study employs econometric time series analysis involving yearly data from 2009 till 2019. This section provides detailed explanations on the descriptive statistics as well as the empirical results from both Pearson correlation function and OLS regression analysis. The diagnostics tests are also reported in this section.

4.1 Descriptive Statistics and Pearson Correlation Analysis

Figure 1 presents the trajectories of both family takaful income and GDP (at current market price) over a 11-year period from 2009 through 2019. It is clear that both variables are not moving in unison and family takaful income has been demonstrating high volatility since 2009. The sign of Malaysia's economic recovery from global financial crisis of 2008-2009 is noticeable from 2009 onwards but the growth of family takaful income seems slower. Observing these two line charts and their trend lines, we can see both GDP and family takaful income are growing steadily over time.

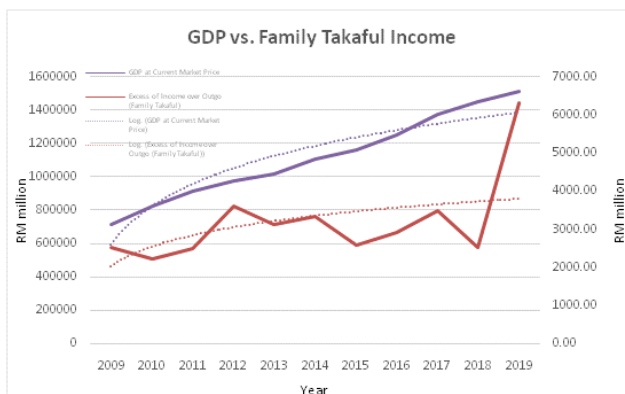


Figure 1. Growth in GDP and Family Takaful Income (2009-2019)

Figure 2 below shows the movements of GDP versus general takaful income from 2009 till 2019. It is obvious that general takaful income is very volatile with erratic movements. Looking at the trend lines on this same graph, we notice that there is a downtrend in general takaful income over the 11-year period. However, some significant declines in general takaful income were registered in 2017 and 2018. From the data presented in Figure 1 and Figure 2, we can clearly see that there is a contradiction between the performance of family takaful and general takaful over the sample period.

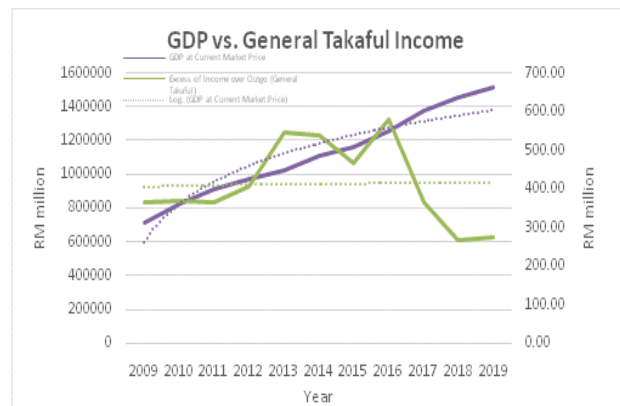


Figure 2. Percentage Change in Government Revenue vs. Government Debt

From Table 1 below, the mean performance of family takaful over the past 11 years appears higher at approximately RM3.2 billion in comparison with general takaful at RM411.68 million. The stellar performance of family takaful coincides with stable growth of GDP at mean value of approximately RM1.11 trillion. From the perspective of average income of Malaysian, the per capita GNI stands at RM35,185 which is relatively higher than the ASEAN average. As expected, the standard deviation of family takaful is much higher than the general takaful. This higher standard deviation implies that the income distribution is more spread out from the mean line. From CAGR analysis, the family takaful outperforms all its contenders registering 8.63% annual growth.

Measure:	Family Takaful (RM million)	General Takaful (RM million)	GDP at Current Price (RM million)	Per Capita GNI (RM)
Mean	3,197.85	411.68	1,116,229.08	35,184.92
Std Dev	1,127.27	106.48	259,193.31	6,424.61
Max	6,304.50	577.70	1,510,765.04	45,033.55
Min	2,232.40	266.20	712,857.00	24,878.64
CAGR	8.63%	-2.54%	7.07%	5.54%

Table 1. Descriptive Statistics of Takaful Products and National Income Indicators

*Significant at 10% level

Note: CAGR = Compound Annual Growth Rate

As explained earlier, family takaful and general takaful somehow exhibit some contrasting characteristics. In terms of performance, the two takaful products move in the opposite direction as indicated by the Pearson correlation coefficient (-0.2583) in Table 2. Interestingly, we also notice a strong significant positive correlation between family takaful and the two income indicators. On contrary, the general takaful and the two income indicators are found to be negatively correlated. However, their p-values indicate that the degree of association are statistically insignificant.

Table 2. Pearson Correlation Coefficients (N=11)

Ho: Rho = 0.00 (p-value)

Variable	Family Takaful	General Takaful	GDP Current Mkt Price	Per Capita Income
Family Takaful	1	-0.2583 (0.4432)	0.5665 (0.0692)*	0.5717 (0.0662)*
General Takaful	-0.2583 (0.4432)	1	-0.2186 (0.5183)	-0.2200 (0.5158)
GDP Current Price	0.5665 (0.0692)*	-0.2186 (0.5183)	1	0.9994 (<.0001)
Per Capita Income	0.5717 (0.0662)*	-0.2200 (0.5158)	0.9994 (<.0001)	1

4.2 OLS Regression Analysis

The OLS regression is the estimation method deployed to examine the validity of the two models presented in this study. Table 3 reveals the empirical results from the first model and the significant t value implies that the model is statistically credible. Nonetheless, the coefficient of determination or the adjusted R-squared is slightly low at 24% level suggesting that it is a fairly a weak model. By looking at the p-value, the anticipated positive relationship between performance of family takaful and GDP has been proven valid as there is a presence of statistical significance between them at 10 percent level. An increase in national income will inevitably trigger improved performance of family takaful over time.

Variable	DF	Parameter Estimate	Standard Error	t value	Pr > t
Intercept	1	447.463	1365.74	0.33	0.7507
GDP	1	0.0024	0.0011	2.06*	0.0692
R-Squared	0.321	Adj R-Square	0.245		

Table 3. Model 1 Parameter Estimates Dependent Variable: Performance of Family Takaful

*significant at 10% level

The empirical findings of the second model are shown in Table 4 below and some unexpected results are discovered. As indicated by the p-value of the GDP, we cannot reject the null hypothesis of absence of significant relationship between the performance of general takaful and national income. From the value of coefficient of determination, it is clear that only 5% of total

variation in the performance of general takaful is explained by the GDP. Such a low R-squared implies that the model’s independent variable has weak explanatory power. Suffice it to say that this second model is very simplistic in nature and it lacks of credible statistical properties. It is therefore an unacceptable predictive model. The GDP alone could not explain much on the performance of general takaful as there are other relevant factors that must be considered in the equation.

Variable	DF	Parameter Estimate	Standard Error	t value	Pr > t
Intercept	1	511.94	152.76	3.35	0.0085
GDP	1	-0.000089	0.00013	-0.67	0.5183
R-Squared	0.047	Adj R-Square	-0.058		

From the diagnostic perspective, the estimated models do not seem to have heteroscedasticity issue. It is important to highlight that one of the main assumptions for the OLS regression is the constant variance of the residuals. If the model is well-fitted, there should be no pattern to the residual plotted against the predicted or fitted values. If the variance of the residuals is non-constant, then this residual variance is said to suffer from heteroscedasticity problem. Looking at the statistical method called the White test, the p-values as shown in Table 5 are greater than α of 5%. As such, we cannot reject the null hypothesis that the variance of the residuals is homogeneous for both models.

Table 5. Test of First and Second Moment Specification (White test)

Estimated Model	DF	Chi-Square	Prob > ChiSq
Model 1 (Family)	2	2.38	0.3046
Model 2 (General)	2	1.72	0.4241

Unlike the White test, the Durbin-Watson autocorrelation test on the residuals of both models are found to be unfavourable. The two coefficients on the first-order autocorrelation indicate that there are negative and

positive autocorrelations between successive residuals in the two models. Given this limitation, the model’s estimators are still considered consistent but they are not statistically efficient.

Table 6. Autocorrelation Test

Estimated Model	No. Observation	Durbin-Watson D	1 st Order Autocorrelation
Model 1 (Family)	11	1.961	-0.251
Model 2 (General)	11	0.848	0.494

The study presents an imperative case to the Malaysian takaful operators and market players in formulating or devising some effective sales strategies. Intense competition and product differentiation strategies are the market dynamics that must be taken into consideration. Takaful product might involve some niche market due to its unique needs. There is no doubt that income is an important factor but product features and characteristics are equally important in modelling sales performance.

CONCLUSION

This study puts its emphasis on examining the theoretical relationship between the performance of takaful products and an average income earned by Malaysian from 2019 till 2019. First, the study reveals a strong positive correlation and

significant relationship between the performance of family takaful and per capita income. The empirical findings could be substantiated by one possible explanation. A steady increase in income will infuse consumer's confidence in spending, particularly on merit goods. On the other hand, the study also finds an absence of significant relationship between the performance of general takaful and the level of national income. This is not a desirable result as general takaful is still struggling in sustaining its market share. The flaw could be attributed to the intense competition from the conventional general insurance and lack of product uniqueness. Perhaps, the 15% no-claim cash back offered by Takaful Malaysia's general takaful policy is the best-selling strategy.

To sum up, this study has shed some light that best business practices and an effective marketing strategy are of paramount importance in supporting the growth of Islamic financial services in Malaysia, particularly in the segment of Islamic insurance or takaful. The general takaful definitely requires new perspective and better strategies in market penetration as it has been predominantly supported by the two key product segments for too long - motor and fire insurance. Meanwhile, as advocated by Ayinde and Echchabi (2012), the family takaful has gained greater market acceptance due to the successful launching of its new products and its effective sales strategy. A part of it, the demand for medical and health insurance has increased significantly for the past five years due to higher group employee benefits offered by many Malaysian companies. The significant increase in premium contributions is also attributed to the *MySalam* program – a national health protection scheme initiated by Malaysian government.

The role of Bank Negara Malaysia (BNM) in supporting the development of takaful industry cannot be overlooked. BNM has adopted a pragmatic approach by introducing Financial Sector Masterplan (FSMP) in 2001 with the objectives of enhancing the capability of takaful operators as well as to strengthen the Shariah

regulatory frameworks of this takaful industry. FSMP has been providing a successful guidelines and frameworks towards materializing the aspiration of Malaysia in becoming an international centre for Islamic finance. No doubt that BNM has been the main force or the key enabler in offering conducive environment and set clear directions for continued growth of Malaysian takaful industry. It is hoped that future studies will look into the issue of service quality and product innovation in the takaful segment.

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