

FIRMS' CHARACTERISTICS: A PRELIMINARY STUDY OF FAMILY TAKAFUL DEMAND IN MALAYSIA

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Abstract: *This paper aims to examine the impact of firms' characteristics namely income, age, size and agents on Family Takaful demand in Malaysia. Secondary data are used to conduct the hypotheses testing on 25 Takaful operators which offer Family Takaful protection in Malaysia from the year 2008-2016. The regression model pooled OLS, random-effect model and fixed-effect model were conducted. The Hausman test results showed that the random-effect model is better than the fixed-effect model. The results showed that the size of the firms (lSize) and agents' performance (lFees) were positive and they significantly affected family Takaful demand in Malaysia. Firms' income (lInc) and firms' age (Age) were negative and insignificant in explaining the Family Takaful demand in Malaysia. Hence, these findings suggest that the size of the business and promoting a good agents' performance within firms is important in order to uphold the industry sustainability.*

Keywords: *Takaful, Firms' Characteristics, Takaful, Demand, Agents' Performance*

Introduction

Recognized as a growing and fast-developing industry and offering insurance policy that complies with Shariah (Islamic law), Takaful is highly recommended by many Muslim scholars because it reveals the real meaning of brotherhood in protecting people against loss or hazards to themselves and their properties (Alnemer, 2013). According to Mohd Fauzi et al., (2016) the penetration and growth rates of Takaful in Malaysia are relatively small as compared to the conventional insurance; thus the Takaful industry needs to immediately pay attention to the factors that could leveraged to spur the demand growth and penetration rates and become a reliable alternative to its peer competitors.

Malaysian Takaful Association (2014), has underlined that the evolving regulations, addressing competition and business transformation are the main concerns need to be observed. Accordingly, it was believed that the implementation of Islamic Financial Services Act (IFSA) 2013 would further enhance the efficiency and performance of the Islamic Finance industry.

As the global economy improved considerably in 2017, the falling of life premiums in advanced markets causes a weak global premium growth. Since the global financial crisis, the life segment among advanced markets continues to underperform; thus industry profitability remains under pressure (Swiss Re, 2018). In comparisons, there are salient differences between developing economies where insurance premiums remain low as compared to the developed countries at current state (Lee, Lee, & Chiu, 2013). According to RAM Ratings, a rating agency, Malaysian emerging insurance market has favourable growth prospects and a stable stance (Jordan Lynn, 2017). Further, the ratings agency observed that due to consumer sentiment and inflationary pressures, life insurance gross premiums growth may be slower, but the family Takaful sector will support both conventional and Takaful growth.

Regionally, Malaysia is a fast internationally recognized country of the Islamic finance market. As an emerging market, Malaysia is to uphold the industry performance intensely, thus in June 2013, the IFSA was enforced. It was intended to enhance the development of an end-to-end Shariah compliant regulatory framework of the Islamic financial operation conduct in Malaysia (Miskam, 2013). Under IFSA, general and family Takaful business require separate license to operate in the market. In line with the stipulation, the incumbent operators are given five years to rearrange and conclude their option to operate either one or both businesses. Divergent of license and management are believed to result in stronger and sharper business focus, thus promote industry growth in the long run. This new policy regulation is in line with global insurance laws.

The latest financial crisis has shot a remarkable signal for the Takaful sector to focus on and examine the factors that can affect the demand for its products in this region (Akhter & Khan, 2015). Considered the infancy stage of development in most markets, Takaful has the potential to replace conventional insurance in leading untapped Islamic finance markets. Providing regulatory enhancements in rapid growth Takaful markets will present new opportunities in tapping underlying latent demand, thus will propel the Takaful industry forward. As such, the industry can realize its optimum growth potential. As the world's largest emerging family Takaful market, Malaysia, however, in 2015, has shown that the Family Takaful new business decreased by 2.9% (2013-2014). Penetration rate for 2014 is 14.5% which has increased only 0.5% from 14.0% in 2013. The product mix of family Takaful dominated mainly with mortgage participation. In other words, the participation is a one-off type of policy whereby will expire according to the mortgage period and will not have any renewal or continuity of coverage after the period.

Notwithstanding the recent performance, the future growth and prospect remained bullish. With a proven past model and regulatory clarity, the country is set to further build on this market leadership position (Ernst & Young, 2013). Going forward, with Shariah advocacy as the fundamental foundation, business development should emphasize on the underserved sectors and segments with growth potential – mainly family Takaful, medical Takaful, Micro Takaful and Takaful for the large and specialized risks (Ismail Mahbob, 2010). Marrouche

(2012) emphasized that Takaful Operators must meaningfully engage with the larger community by educating them on the concept as an advanced and ethical way to invest for their future. Supported by the fundamental notion of fairness, honesty, and justice, Takaful not only will be placed in the same position as conventional insurance in Malaysia, but also can be made more attractive and marketable from traditional insurance market in Malaysia as well as from other countries in this region (Thanasegaran, 2008).

Insurance penetration is one of the most important indicators of insurance's role in economic growth (as measured by GDP) of a country (Bhatia & Jain, 2013). For the past ten years, Malaysia has recorded a slim growth of market penetration of family Takaful. From 2005 until 2014, the rate are 5.7%, 6.6%, 7.7%, 7.9%, 9.2%, 11.1%, 12.6%, 13.1%, 14.0% and 14.5% respectively (Remli, Wan Daud, Zainol, & Muhammad, 2013; Malaysian Takaful Association, 2014). With a small scale increase between the year 2008 - 2010, Takaful did not present an impressive trend of growth. Although the increase was a bit higher from the year 2008 to 2010, it's clear that this has been contributed by the addition of new operators in the marketplace. In general, it can be concluded that, the increase in the number of players does not significantly influence the penetration rate and the market remained untapped to its fullest. This situation reflects that the performance of Takaful business in Malaysia is not much inspiring. Given the above, indeed, the question of what factors are contributing to the participation decision among the Muslim remains an interesting area to explore.

With more than 60% Muslims population that accounts to 18 million people, Malaysia opens a huge potential market for Takaful business. The unacceptability of conventional insurance among Muslims has led to the establishment of the Takaful operators to fulfil their insurance needs (Akhter & Khan, 2015). The market penetration for the Islamic insurance in Malaysia remains low even after the establishment of eight (8) Takaful operators in 2009. The overall insurance penetration rate of 43 percent with single digit penetration rate for Takaful indicated that a vast majority of insured opts for conventional insurance that are much more matured in the market (Nair, 2009).

Conventional demand theory stated that people purchase insurance in return of paying small premium to compensate a large claim amount. However, Nyman (2002) argued that consumers prefer risk with a large loss rather than a smaller risk with certainty, so that they buy insurance not because they desire to avoid risk but to transfer the burden of losses to the insurer. According to Outreville (1996), the life insurance demand is considered within the lifetime allocation process of an individual. Thus, external and internal factors are seen to influence the aggregate demand, and similarly this demand behaviour is expected of Takaful in Malaysia.

Researchers, among them Annuar, Rosly and Abdul Rashid, (2004), Annuar (2004), Yon Bahiah, Siti Zaleha and Norshahida (2009), Abdul Rahman, Mohd Yusof and Abu Bakar (2008) and Rahman (2009) discussed to a great extent on the growth, development potential and roles of Takaful market in Malaysia. Whereas, Ahmad, Almsafir and Siron (2013) discussed the impact of Arabic word on the untapped Malay market and Che Mohd Salleh, Abdullah and Razali (2013) discussed the role of the Takaful agents in Malaysia. Although Othman and Abdul Hamid (2009) have discussed the level of knowledge and understanding among Muslims towards the concepts, Arabic and Shariah terms in Islamic insurance (Takaful) and Ab. Rahim and Amin (2011) empirically discussed on the determinants of

Islamic insurance acceptance to date. As far as this study has discovered, very little attention has been directed to study on the internal factors influencing the family Takaful demand. The imbalance of literature coverage effectively permits ample space for theoretical and empirical research in the specific area of internal factors influencing family Takaful demand. Specifically, in the context of Malaysia, the gap left in the literature is further reinforced by the unavailability of research on the financial operation of Takaful operators (Nahar, 2015).

The previous studies such as Truett and Truett (1990), Lim and Haberman (2001), Redzuan, Rahman and Abdul Aidid (2009), Redzuan (2014), Abdou, Ali and Lister (2014), Gustina and Abdullah (2012), Akhter and Khan (2015) and a number of others have provided mixed results to the factors influencing both conventional and Takaful demand. Due to this fact, research on this issue remains inconclusive and further work is needed to fill the gap. Thus, this study aims to fill this research gap by identifying the internal factors of family Takaful demand in Malaysia and examining the relationships between the variables.

The objective of this paper is to examine the firms' internal factors, namely the income, age, size and agents towards family Takaful demand in Malaysia. There are two important questions, as follows:

1. What are the internal factors influencing family Takaful demand in Malaysia?
2. What are the relationships between the internal factors and family Takaful demand in Malaysia?

Review of Literature

Development of Takaful Industry in Malaysia

Began as a small cottage industry in some Arab countries in the 1970s, the Islamic finance differentiating itself from conventional finance in compliance with the principles of Islamic law or Shariah (Ahmed, 2010). The following table illustrates the development of modern Islamic financial services.

Table 1: Development of Modern Islamic Financial Services

Year	Event
1963	First Islamic banks established in Egypt.
1969	Tabung Haji (Pilgrims Savings Funds) was established. It is recognized as the first Islamic savings institution for specific purpose of Muslim making Hajj in Mecca, the fifth pillar of Islam.
1975	The World's first fully-fledged Islamic bank is established - Dubai Islamic Bank
1977	Fatwa issued by the Fiqh Council of Muslim World League in favor of Islamic insurance. Sudanese Islamic Insurance Company is established as the world's 1st Takaful company by Faisal Islamic Bank of Sudan.
1979	Arab Islamic Insurance Company (AIIC) is established in Dubai by the Dubai Islamic Bank.
1984	Malaysian Takaful Act 1983 comes into effect. The first Takaful company is established in Malaysia - "Takaful Malaysia." Fiqh Council of the OIC approves the Takaful system in 1985 as the correct alternative to conventional insurance in full compliance with Shariah
1985	National Company of Co-operative Insurance is established in Saudi Arabia by Royal decree and is 100% owned by the government.
1997	Asean ReTakaful International Limited (ARIL) the first active Islamic reinsurer is formed.
2006	Worldwide re-insurance operators enter the Re-Takaful market: Hannover Re Takaful, Bahrain; Munich Re, Malaysia.

Source: Adapted from Ernst & Young, 2008 in Al-Amri (2013).

In Malaysia, Insurance and Takaful operation is supervised by the central bank, Bank Negara Malaysia. Before Insurance Act 1963 came into effect, branches of foreign firms dominated the industry, particularly in the urban areas. Upon the Act enforcement, domestic firms have increased participation from six (6) in 1983 to 51 in 1997 (Abu Mansor & Radam, 2000). At present, after the industry restructuring and consolidation driven by market evolution and economic changes, Bank Negara Malaysia issued licensed to the total number of life insurance companies of 14 and eleven Takaful operators.

In essence, Takaful functions as insurance in managing the risks against the unexpected. However, in its fundamental Takaful portrays the Islamic virtues of brotherhood in protecting both individual and corporate bodies against loss or hazards to themselves and their properties. In that light, it follows the Islamic principles of the Maqasid (objectives) as-Shariah of protecting properties and livelihood. Most Muslim scholars (e.g. Alnemer, 2013) endorsed Takaful over conventional insurance for Muslim. In terms of its business model, there are four basic types practiced in the market namely, the Mudharabah model, the Wakalah, the Hybrid and the Waqf Model. Family Takaful products are structured based risks profiles of the community and aimed at various market segments. The features or policy coverage are basically similar to the conventional policies, namely savings and investment, family income protection, education, retirement or pension, credit or mortgage, health and medical and key-man Takaful. However, Takaful Waqf is offered only by Takaful operators.

Family Takaful Demand

Yaari (1965) describes the demand for life insurance is a person's wish to prepare a guaranteed fund for dependents or provide income for retirement. Thus, the demand for life insurance has been posited as a function of wealth, a person's lifetime expected income, interest rates, the cost of life insurance policies like administrative costs and future consumption's subjective discount (Mahdzan & Peter Victorian, 2013).

Many studies have investigated the factors that influence demand for conventional insurance and also Takaful (for examples, Yaari (1965), Fisher (1993), Lim and Haberman (2001), Abdul Rahman, Mohd Yusof and Abu Bakar (2008), Redzuan et al., (2009), Ismail, Alhabshi and Bacha (2011), Yazid, Arifin, Hussin and Wan Daud (2012), Redzuan (2014) and Abdou et al. (2014). Based on those studies, a conceptual framework is developed in order to guide this research. It can be concluded that in general terms, the internal factors that determine the demand of family Takaful in Malaysia is shown in the diagram below.

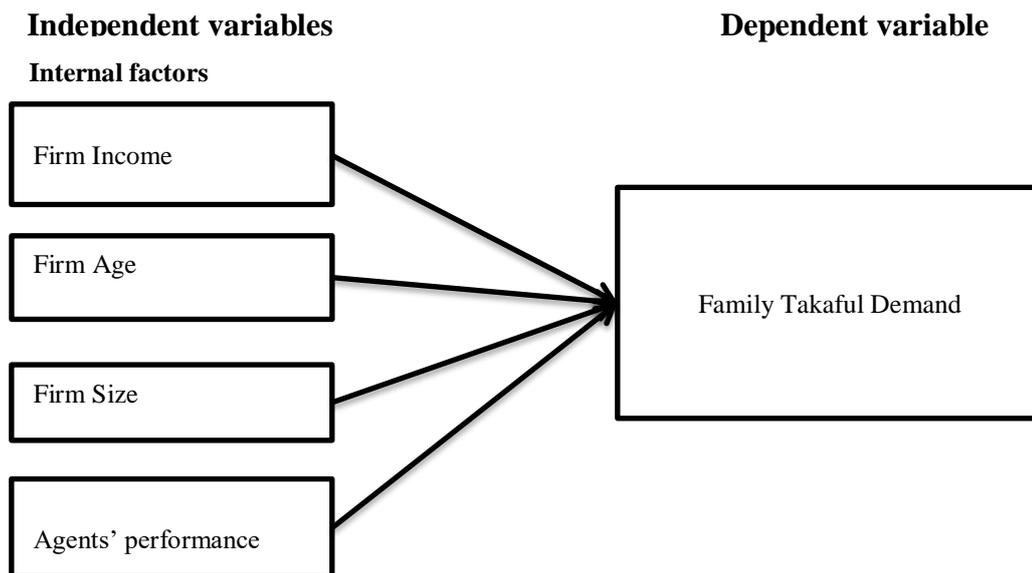


Figure 1: Conceptual framework of family Takaful demand

Factors influencing family Takaful demand

A number of the early research abroad and locally had focused on examining external factors such as economic factors and consumer behavioural factors affecting the demand. For example Fisher, 1993 focused on inflation rate, budget surplus/deficit and black market exchange premium. Other equally significant studies in determining the demand factors are Outreville, 1994; Gandolfi & Miners, 1996; Ward & Zurbruegg, 2000; Attanasio, Picci, & Scorcu, 2000; Lim & Haberman, 2001; Liu & Chen, 2002; Beck & Webb, 2003; Abdul Hamid & Osman, 2006; Redzuan et al., 2009; Kadir, 2013.

Gustina & Abdullah, 2012, has examined GDP per capita, education, saving and religion as the demand factors. Also, a few other researchers have employed both economic and socio-demographic determinants (Hawariyuni & Che Mohd Salleh, 2010; Loke & Goh, 2013; Sherif & Shaairi, 2013). While, family Takaful demand studies by Ab.Rahim and Amin, (2011), Yazid et al., (2012), Annamalah, (2013) focused on the consumer behavioural effect.

Given that a number of studies have emphasized on the internal factors influencing the Takaful demand, such as Al Amri, Gattoufi and Al-Muharrami (2012), studied management expenses; and Pan, Chang and Su (2012) and Lim and Haberman (2001) studied the impact of pricing on the life insurance demand. Mixed results presented by the previous studies have prompted the initiative to examine further on the impact of firms characteristics or internal factors. Therefore, this study proposes the following hypotheses to be tested.

H₁: There is a positive and significant relationship between firms' income and family Takaful demand in Malaysia.

H₂: There is a positive and significant relationship between firms' size and family Takaful demand in Malaysia.

H₃: There is a positive and significant relationship between firms' age and family Takaful demand in Malaysia.

H₄: There is a positive and significant relationship between agents' performance and family Takaful demand in Malaysia.

Family Takaful trends and opportunity

Various forces like evolving regulatory system and a rise of Islamic belief within the population have strongly forced the Takaful industry to experience a healthy growth for over few years globally and regionally. Family Takaful (LIFE) Framework has been implemented in South East Asia especially in Malaysia which is expected to spur various market activities and enhance the sustainability of the Takaful industry in the economy (IMARC Group, 2018).

In Malaysia, upon IFSA enforcement in June 2013, on the basis of product differentiation, Takaful market has been segmented into family Takaful and general Takaful. The Takaful operators are instructed by the Central Bank of Malaysia to operate with a single license for each type of business (Bank Negara Malaysia, 2013).

Despite of recorded growth in 2017, family Takaful however, for over the past four years at national-level growth has been muted with only 1.1% (between 2014-2017) annual growth (Midf Research, 2018, Bank Negara Malaysia, 2017). Concerned of slow progression, the central bank, Bank Negara Malaysia (BNM) has come up with initiative by introducing more affordable family Takaful products range especially by the underserved Bottom 40% household segment (B40). To further stimulate the industry growth, other measures launched are implementation of Balance Scorecard framework and direct distribution channel products offering.

Aimed to achieve 75% of Malaysian population covered by 2020, Malaysia's Financial Sector Blueprints has recommended five focus area for Takaful improvement which are 1) effective intermediation for a high value-added and high-income economy, 2) Financial inclusion for greater shared prosperity, 3) internationalisation of Islamic Finance, 4) the regulatory and supervisory regime and 5) raising the standards of governance and risk management (Ernst & Young & Malaysian Takaful Association, 2015).

Looking at the overall growth trends, Takaful operators are required to offer pure protection term products through direct distribution channels, other multi channels as well as more innovative products to match the needs of the various consumer segments, thus increase the family Takaful uptake (Bank Negara Malaysia, 2017). Going forward, the Takaful industry contribution growth is expected to improve the industry's earnings performance. With the launch of *Perlindungan Tenang* products by BNM which is more affordable to penetrate the B40 segment, it is foreseen that more participation is to be expected in future.

Methodology

This study will be utilizing the data of eleven Takaful operators in Malaysia for the period 2008 through 2016. Nine years of data period (2008 until 2016) of family Takaful operators in Malaysia will be the sampling frame and sampling unit. The dependent variable for this research is the demand for family Takaful in Malaysia. The independent variables are the internal factors or firms' characteristics anticipated to influence the demand. The variables are firm income, firm age, firm size, and agents' performance.

Defined as the number of years of incorporation of the firm (Ilaboya & Ohiokha, 2016), firm age is believed to have be related with a more established brand and wider customer base. However, Loderer and Waelchli, (2010) asserted that, over time, corporate aging can reflect the rigidity of organizational stiffness and advanced the diffusion of rent-seeking behaviour (involves seeking to increase share of existing wealth without creating new wealth whereby from family Takaful perspective refers to expansion of the existing customers' family members to get coverage) within the firm.

This study also look into firm size as the determinant whereby it relates to market power, large resources and higher entry barrier; and agents performance which relates to better delivery, aggressive marketing and better quality increase demand and participation.

The theoretical framework for this study can be described in a general form of a functional relationship between family Takaful demand, and the estimated theorized determinants as follows:

$$\text{Demand} = f(\text{firm income, firm age, firm size, agents' performance}) + \varepsilon$$

Measurements of Variables

To analyze the relationship among variables, linear regression analysis has been conducted. Table 2 below presents the measurement and source of data used in this study.

Table 2: Variable Definition, Measurement, and Source of Data

Variable	Measurement	Source of Data
Demand for Family Takaful	Gross Contributions of Family Takaful	Takaful annual report
Firm's Income	Surplus/deficit of Family Takaful fund	Takaful annual report
Firm's Age	Tenure of establishment	Takaful annual report
Firm's Size	Total assets	Takaful annual report
Agents performance	The amount of Agent Fees paid	Takaful annual report

Data Analysis

Result analyses

In this study, we attempt to identify the relationship between internal factors, namely firms' income, firm's size, firm's age and agents and family Takaful demand in Malaysia. The first test that has been performed is the model specification, followed by Breusch Pagan LM test and Hausman test. Table 3 below shows the results of the tests.

Table 3: Results of regression analysis

Independent variable = Demand	POLS	FE	RE
IInc	0.010 (0.704)	-0.054 (0.265)	-0.004 0.883
ISize	0.513*** (0.000)	0.572*** (0.000)	0.513*** (0.000)
IFees	0.335*** (0.000)	0.319*** (0.000)	0.326*** (0.000)
Age	-0.011 (0.114)	-0.042 (0.256)	-0.009 (0.360)
<u>Diagnostic test</u>			
N	107	107	107
R-squared	0.949	0.958	0.950
Breush Pagan Test	0.436		
Hausman Test	0.5335		
Poolability Test	162.73***		

p-values in parentheses *p<0.1 , **p<0.05 , ***p<0.01

Pool OLS (POLS), random effect (REM) and fixed effect (FEM) have been run to estimate the regression model. POLS concluded that ISize and IFees significantly and positively affected demand. However, IInc and Age were insignificant. REM and FEM concluded that ISize and IFees were significantly affected demand.

To choose the best model, Breusch Pagan LM test is widely used by the researcher to test whether or not POLS is adequate. As the alternative hypothesis (H1) stated, REM is more appropriate than POLS, when $p < 0.05$. The result shown is $p\text{-value} = 0.436$; thus, the POLS is better than REM.

Further, Hausman test is used to determine either FEM or REM where H_0 is that the preferred model is random effects; H_1 is that the model is fixed effects. If the p-value is small, (< 0.05), to reject the null hypothesis. The result shows that $p\text{-value} > 0.05 = 0.5335$, to reject H_0 , and accept H_1 that is random-effect model is better than the fixed-effect model.

H₁: There is a positive and significant relationship between firms' income and family Takaful demand in Malaysia.

The impact of firms' income (IInc) on the family Takaful demand was tested using empirical model of the study. The empirical results indicate a negative and not significant relationship between firms' income and family Takaful demand as shown in table 2, (Beta = -0.004, $p > 0.05$). Therefore, H_1 is rejected.

H₂: There is a positive and significant relationship between firms' size and family Takaful demand in Malaysia.

The impact of firms' size (ISize) on the family Takaful demand was tested using empirical model of the study. The empirical results indicate a positive and significant relationship

between firms' size and family Takaful demand as shown in table 2, (Beta =0.513, $p < 0.05$). Therefore, H_2 is accepted.

H₃: There is a positive and significant relationship between firms' age and family Takaful demand in Malaysia.

The impact of firms' age (Age) on the family Takaful demand was tested using empirical model of the study. The empirical results indicate a negative and not significant relationship between firms' age and family Takaful demand as shown in table 2, (Beta = -0.009, $p > 0.05$). Therefore, H_1 is rejected.

H₄: There is a positive and significant relationship between agents' performance and family Takaful demand in Malaysia.

The impact of agents' performance (IFees) on the family Takaful demand was tested using empirical model of the study. The empirical results indicate a positive and significant relationship between agent fees and family Takaful demand as shown in table 2, (Beta = 0.326, $p < 0.05$). Therefore, H_3 is accepted.

Discussions and Conclusion

Despite a considerable progress in research on the demand for family Takaful, the issue of low penetration within the industry continues to become the main concern. Past studies have focused on the external factors and implicitly assuming that the Takaful products are generic and demands are generally driven by externalities. It might also assume that the customers or policy buyers are passive and the operators are riding on the macroeconomic curve. However, it can be observed that performance of the Takaful operators differ from each other. This might suggest that the individual operators possess discretionary decision in terms of how they trigger the customers demand behaviour. The end results of these decisions in aggregate might influence the overall demand of the industry. Based on this premise, this study will shift the focus from the external factors to the internal factors which may influence the demand behaviour for family Takaful business in Malaysia. It hope to contribute towards a better understanding of how Takaful industry is evolved.

Based on the results obtained, this study finds that the random-effect model is more superior compare to the POLS and FEM models, hence it is used for further discussion.

The data indicate that the two factors that positively and significantly influence the family Takaful demand are firms' size and agents' performance. The size of the firms plays an important role to the public in accepting the offered services. The larger the size the better their business performance and will increase the trust among the public on firms capability of sustaining the business especially in providing the protection as intangible business subject matter.

The second factor that produce significant results is the agents' performance. Here, it is believed that the larger the number of active agents will open to the wider access of services public can expect. As one of the major marketing channel at the introductory or growth stages of product life cycle, Takaful which relies significantly on word of mouth, product education and repeat purchase. Hence, agents play an important role in the bringing up the image of the

Takaful industry, educating the customers as well as servicing them. In other words, agents also provide face to face services in providing the information and can educate the prospects. Good and highly motivated and well-endowed agents reflect the trustworthiness of the potential customers.

This study contributes in a way that, after decades of operation in Malaysia, with the development and improvement of lifestyles, as well as the economic scenario, the main factors towards Takaful and insurance demand changed over time. The results of this study may contribute towards the industry to further sustain and grow effectively and efficiently. Theoretically, this study also provides a deeper perspective into the demand of family Takaful. This study is optimistic that it will enlighten the operators to further enhance their focus on establishing a strong internal strength of their business and promote the Takaful industry to grow and cater the low penetration rate in Malaysia and opens to a new perspective of family Takaful demand.

While this study goes a long way in filling gaps within the existing literature on the factors influencing family Takaful demand, it opens up numerous avenues for further research. Therefore, future study on the impact of legal system and government policies such as splitting of the licence into general and family Takaful would benefit family Takaful industry in the country besides expanding the variables omitted in this study due to unavailability of data.

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