ASTROLABE

Research Article

Assessing the Prospects of Islamic Insurance in Ghana

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1.0 INTRODUCTION

The global growth rate of the Islamic finance industry has been increasing by leaps and bounds since the wind of Islamization swept across Muslim-majority countries and beyond. This impressive growth, as noted by Mehdi (2010), reaffirms that Islamic finance is one of the most dynamic sectors in international finance. The need to have an alternative financial system that is not based on interest was due to the exploding oil revenues experienced by the Gulf States, as well as the rise in political Islam and the resurgence of Pan-Arabism in the 1970s (El-Qalqili 2017, Moisseron *et. al* 2015). The execution of the *Mit Ghamr* project and the establishment of Tabung Haji in Malaysia in 1963 emphasized the need to establish Shariah advisory committees and boards in order to develop Shariah-compliant products and services (Ali 2015). Upon issuance of various Shariah decrees regarding the prohibition of the high level of uncertainty, interest/usury, and gambling that are inherent in conventional financial contracts, and the organization of various international conferences on Islamic economics and finance in order to deliberate on the need, alternative financial structures were engineered based on Islamic principles.

Islamic insurance—or *Takāful* as the Arabic term goes—was among the early financial products which was engineered to replace conventional insurance, the latter in which a

contract of exchange (*Mu'áwadah*) is largely based on uncertainty, gambling, and interest. With the first Takāful institution established in 1979 in Sudan, followed by the formation of Takaful Company in Saudi Arabia, the primary aim, as noted by Lewis (2011), was to offer insurance coverage in Shariah-acceptable ways to Muslim families and business enterprises in both the family and general insurance market segments. Takāful, as an alternative, was structured on the basis of mutual help (*tabarru'*) and risk-sharing devoid of the basic prohibitions that nullify a contract within the confines of Shariah law of *mu'ámalát* (commercial law).

Established on the grounds of solidarity, equity, and stability (Siddiqi 2006), the general Islamic finance industry—of which Takāful is a subset—has recorded tremendous growth and expanded to many territories. Although El-Qalqili (2017) regards religion as the key motivation for Muslims seeking Shariah-compliant means of financial intermediation, Fisher and Taylor (2000), in a broad sense, recognize the interplay of financial efficacy, religious correctness, and spiritual reward towards its adoption. For Takāful, in particular, Abdul Rahim, Lewis, and Hassan (2007) indicate that a large number of Islamic financial products based on trading and dealing in underlying assets require that the assets should be insured through a Takāful company. This, as they noted, has spurred the development and expansion of Takāful. This growth in the Takāful sector, as noted by Mehdi (2010), is made possible by developing comprehensive Islamic banking and capital markets which are supported by legal, Shariah, and regulatory infrastructures.

With this positive growth so far, the Islamic finance industry is no longer considered to be in its nascent stage as it does not need to prove its viability, resilience, and competitiveness in the global financial terrain (Muhammad Al-Amine 2016). This is evidenced by the Islamic Financial Service Board (IFSB) report on the performance of the Islamic finance industry across the following three main sectors: banking, capital markets, and Takāful. The global Islamic finance service industry, according to the report, picked up from a marginal growth to a positive growth trajectory as the industry's assets slightly surpassed the $2 trillion mark. The asset of this sector was estimated at $2.05 trillion at year-end 2017 compared to $1.88 trillion in 2016, representing 8.3% growth in assets (IFSB 2018). This growth, according to the report, was led by the capital market sector which experienced an increase in Sukuk and Islamic funds by 25.6 and 19% respectively. The banking sector experienced a growth in assets by 4.3%, while the Takāful sector recorded a 4% increase in the total contribution.

Although the size of the Takāful industry remains significantly small, with only a little above 1.3% of the global Islamic finance assets, its consistent growth over the years has attracted the attention of many practitioners worldwide in order to explore the basis of the system as operated in various countries (Abdul Rahim, Lewis, and Hassan 2007). With Africa being considered for some time now as a new frontier for Islamic finance and only a few international Islamic institutions currently active in the market (KPMG 2010), Takāful has been identified as a key industry towards the socio-economic development and welfare of African societies (Hatim 2010).

Keywords: Takaful, Islamic insurance, Africa, Microtakaful, Ghana

1.2 Literature Gap

The history of the insurance industry in Ghana can be traced back to the colonial era upon the establishment of the Royal Guardian Enterprise in 1924, now known as the Enterprise Insurance Company Limited (Francis et al. 2014). Since its inception, the insurance industry, which is a component of the financial sector, has witnessed tremendous growth (Isaac 2016). This is evidenced by the number of players in the Ghanaian market. Currently, there are 24 life insurance and 27 non-life insurance companies, 3 reinsurance companies, and 78 broking companies (National Insurance Commission (NIC) 2017).

Although these developments might seem to suggest that the insurance industry is thriving well in terms of contribution to GDP and the number of policyholders, the contribution of this sector to the GDP remains insignificant with a total of 1.1% (0.5 and 0.6% for life and non-life respectively) in 2017 (Swiss Re Sigma Report 2018), while the penetration rate, as estimated by Oxford Business Group (2018), was expected to remain less than 2% during 2017–2018. The real premium growth decreased from 7.5% in 2015 to 5.2% in 2016. Not much improvement in growth was observed in 2017 as it stood at 5.8% by year-end (Swiss Re Sigma Report 2018). With the government's ambitious target of hitting a double-digit penetration by 2021, Takāful has been identified to play a vital role in supporting the government's effort to diversify the markets and boost premiums (Acquah-Hayford 2016). According to the NIC, the success story of Takāful in The Gambia and Nigeria is a sufficient reason to adopt it in the Ghanaian market in order to increase insurance penetration in the country (Acquah-Hayford 2016).

In the literature review, it has been observed that although only a few studies have been published on Islamic finance and its related subsectors in Ghana, none of them—at the time of the study—has focused on Islamic (Takāful) insurance. Multiple studies (Brew 2015, Mbawuni and Nimako 2016, Wilmot 2017, Broni 2018, Abdul-Wahab and Abdul-Razak 2019) examine the prospects, viability, and challenges of introducing the Islamic finance model in Ghana.

Ibrahim (2017) explores the structuring and investment protection concerns of using Islamic venture capital to finance SMEs in Ghana.

However, in other jurisdictions, various studies have been carried out to ascertain the viability of Takāful services (Akhter and Hussain 2012; Coolen-Maturi 2013; Lukman and Abdelghani 2012; Maysami and Williams 2006; Shabiq and Zubair 2016; Sheikh Ali and Abdi Jama 2016; Sheila and Syed 2014; Soualhi and Ahmad 2015; Maizaitulaidawati, Noraini, and Nasiha 2015; Htay and Salman 2013). For example, they have explored the acceptability and demographic features, as well as other related variables that influence the patronage and adoption of Takāful in different jurisdictions.

Aside from the fact that most of these studies are carried out in jurisdictions where Takāful has already been institutionalized, it is also worth noting that their findings cannot be extended to include jurisdictions such as Ghana where Takāful, as an alternative to conventional insurance or product innovation, is yet to hit the market.

It is against this background that this study is embarked on in an attempt to fill the

literature gap by undertaking an exploratory study on the introduction of Islamic (Takāful) insurance in the Ghanaian context.

1.3 The Aim of the Study

The aim of this study is to investigate and analyze the prospects and viability of Takāful in Ghana as the insurance industry makes a move towards its adoption and integration into its pool of insurance offerings.

1.4 Objectives of the Study

The main objectives of this study are:
1. To examine the state of the insurance industry in Ghana.
2. To examine the potential impact of Takāful on the insurance sector and the Ghanaian economy at large.
3. To identify the potential drivers of the patronage of Takāful in Ghana.

1.5 Research Questions

1. What is the state of the insurance industry in Ghana?
2. What is the possible impact of Takāful on the insurance sector and the Ghanaian economy at large?
3. What are the key factors that will drive the patronage of Takāful in Ghana?

1.6 Study Hypothesis

1. **H1**: There is a significant relationship between relative advantage and potential demand.
    H0: There is no significant relationship between relative advantage and potential demand.
2. **H1**: There is a significant relationship between product features and potential demand.
    H0: There is no significant relationship between product features and potential demand.
3. **H1**: There is a significant relationship between compatibility and potential demand.
    H0: There is no significant relationship between compatibility and potential demand.

2.0 OVERVIEW OF THE TAKĀFUL INDUSTRY

Although the contribution of the Takāful industry to Islamic finance industry remains small (1.3% of the 2.05 trillion worth of the industry), its growth rate has been impressive as the sector continues to expand to new and emerging markets. According to IFSB (2018), a growth rate of 12.5% was reported in 2016 when compared with the 13% growth rate recorded in 2015. In 2016, contributions of global Takāful amounted to $26 billion, with the major contributors from Saudi Arabia (38%), Iran (34%), Malaysia (7%), and the UAE (6%). The sector in 2017 was worth $26.1 billion, which is an increase of about $1 billion when compared with $25.1 billion recorded in 2016.
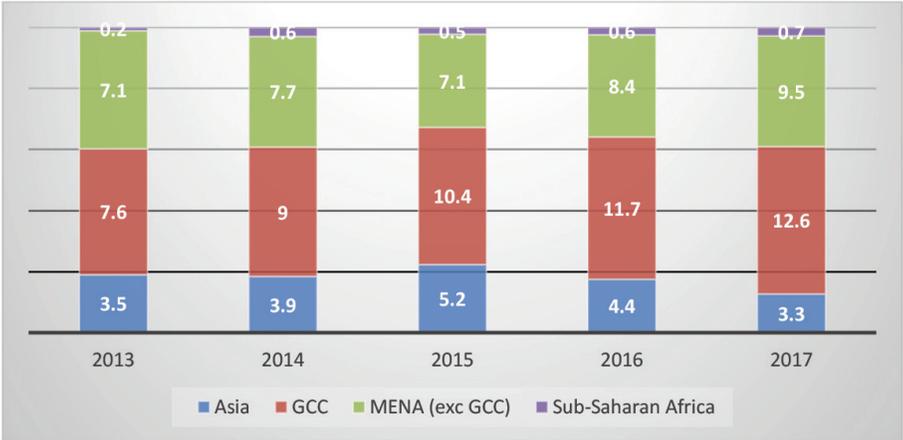
Figure 1. Takāful contributions by region (USD billion, 2013–2017). Source: IFSB (2017).

As shown in Figure 1, the Takāful industry is largely led by the GCC and MENA regions; their collective contribution increased from $14.7 billion in 2013 to $22.1 billion in 2017 (50.43% within the 5-year period). The Asian market, with Malaysia, Indonesia, and Brunei being active participants, is the third largest contributor to the Takāful industry, although their contributions recorded a reduction from $5.2 billion in 2015 to $4.4 billion in 2016 and then further to $3.3 billion in 2017.

However, Africa still lacks behind in terms of geographical coverage and amount of premiums as total premiums still hovered around $700 in 2017, with Kenya, Nigeria, Gambia, and Senegal being the active participants (IFSB 2017). Although Takāful was introduced recently (except for Sudan), Africa is seen to have a great potential for its growth. In recent times, the drafting and review of Takāful laws in countries such as Morocco, Algeria, Nigeria, Kenya, and Tanzania, in order to either introduce or improve on Takāful business, "reinforce the view that the Takāful industry can present a platform for financial inclusion" (IFSB 2017).
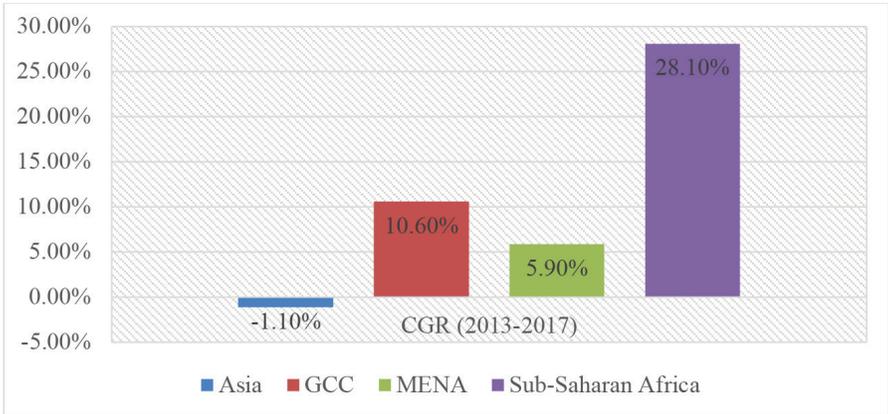
Figure 2. Cumulative growth rate (2013–2017). Source: IFSB (2017).

In response to the growing recognition of Takāful by West African countries, Ghana has only recently hinted its willingness to tap into the industry to boost premiums and deepen insurance penetration. The rising income levels, increasing awareness and growing preference for Shariah-compliant insurance products by Muslims are expected to fuel the demand for Takāful in emerging markets such as Ghana.

2.1 The Ghanaian Insurance Industry

The history of insurance in Ghana can be traced back to the pre-independence era in which this industry was dominated by overseas firms whose headquarters were mostly based in the United Kingdom (Kwadjo, Charles, and Joshua 2012). The Royal Guardian Enterprise, now known as the Enterprise Insurance Company Limited, was established in 1924 to meet the insurance needs of the British colony (Agya Kwadjo 2015). This was followed by the establishment of Gold Coast Insurance Company in 1955 as the first local insurance company (Kwadjo, Charles, and Joshua 2012).

Upon the establishment of the State Insurance Cooperation (SIC) by the government of Ghana in 1962 in an attempt to take control of the insurance sector, many laws were enacted to give the SIC monopoly over all government businesses. Kwadjo, Charles, and Joshua (2012) noted that these laws led to the withdrawal of almost all foreign insurance companies as 40% of the proprietary interest was reserved for Ghanaians. Ghana Reinsurance Company (Ghana-Re) was later established in 1972 as a reinsurance subsidiary of SIC, and it gained autonomy by 1984 and now extends its operations to Cameroon and Kenya (Ghana-Re 2019). In accordance with the International Association of Insurance Supervisors (IAIS) law in 2006, which prohibited composite insurance, insurance companies were made to separate between life and non-life operations by the end of 2007.

Although insurance coverage hovers around 30%, the penetration rate is still as low as about 1.2% of GDP. This indicates that the introduction of microinsurance has not

positively affected the premium growth. The annual premium growth rate from 2013 to 2017 was positive, although a fluctuation was observed in 2014 where non-life insurance experienced a negative growth as shown in Figure 3. At the end of 2017, there were 24 life insurance and 28 non-life insurance companies, 3 reinsurance companies, 3 insurance loss adjusters, and 81 broking companies (NIC 2017).
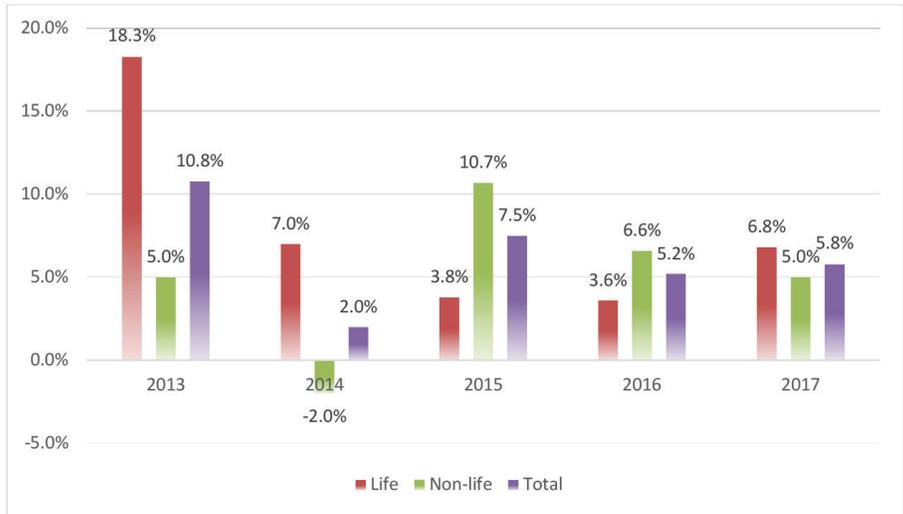

Figure 3. Real premium growth in percentage (2013–2017). Source: Swiss Re Sigma Report (2018).

Currently, the Insurance Act 2006 (ACT 724), which is based on the core principles of the IAIS, governs the insurance industry. This act also recognizes the NIC as the regulator of insurance businesses in the country.

The insurance act is currently under review to ensure that it complies with the most recent core principles of the IAIS. It will also be in tandem with the changes that have occurred within the industry with respect to compliance with new directives and guidelines. Other issues, as outlined in NIC (2017), are described below.

Risk-based Capital Requirement

The capital requirement for insurance companies was to increase from GH₵ 15 million ($3 million) to GH₵ 50 million ($10 million) in the second quarter of 2019. This is expected to enable the insurance companies to absorb enough industry-related risk.

Compulsory Insurance

Apart from mandatory third-party motor insurance and fire insurance for private commercial buildings, the NIC intends to make certain insurance services are mandatory in order to widen its coverage and increase the penetration rate.

Group-wide Supervision

The authority also intends to adopt a group-wide supervisory framework for regulating

insurance companies. This will replace the standalone approach that does not give the exact picture of the kinds of risks to which policyholders are exposed. This framework will ensure "Macroprudential Surveillance and Insurance Supervision" and "Cross Border Collaboration of the Supervision of Insurance Groups" (NIC 2017).

2.2 Empirical Literature on the Impact of Insurance on Economic Growth

Traditionally, insurance is considered a means of risk transfer and diversification at the individual or unit level. However, for the economy at large, it is seen as an essential characteristic of a resilient economy. Some of the important roles played by insurance in any given economy include promotion of financial stability, facilitation of trade and commerce, encouragement of loss mitigation, mobilization of savings, substitution for government security programs for efficient management of risk, and fostering of efficient capital allocation (Skipper 2006). It is worth noting that only a few empirical studies have linked insurance (both conventional and Islamic) to economic growth and, more specifically, to Takāful.

To examine whether market activities in the insurance industry that serve as a financial intermediary and provider of risk transfer or indemnification promote economic growth, a study by Arena (2008) used the generalized method of moments (GMM) of panel data from 55 high-, middle-, and low-income countries between 1976 and 2004. The study found a causal relationship between insurance market activities and economic growth. It further found varying impacts for different levels of development as represented by low-, middle-, and high-income countries. It concluded that life insurance had a larger impact on the economic growth of low-income countries, while non-life insurance had a larger impact on the economic growth of middle-income countries.

Similarly, Haiss, and Sümegi (2008) investigated the impact of both insurance investment and premiums on GDP growth in Europe. A cross-sectional panel data was used for 29 European countries from 1992 to 2005. The study found that in EU-15 countries, there was a positive impact of life insurance on GDP growth compared with central and eastern Europe. It further found that insurance growth was largely influenced by the real interest rate and the level of economic development.

In the context of developing countries, Ouédraogo, Guérineau, and Sawadogo (2016) sampled 86 developing countries during 1996–2011 to examine the relationship between the life insurance sector and economic growth. The result showed that the development of life insurance had a positive effect on economic growth per capita among the sampled countries. It also established a relationship between the deposit interest rate, the bank credit, the stock market value traded, and the development of life insurance.

Perhaps the only empirical study that singled out Takāful to assess how its development had an impact on economic growth was that of Ibrahim and Ahmad (2016). In their study, data was extracted from the annual reports of various Takāful Re and Takāful companies. A dynamic panel of the GMM technique was used for 22 countries for a period of 9 years to measure the impact of the development of the Takāful sub-sector on economic growth. The study found a positive causal relationship between Takāful gross premiums and economic growth.

The Ghanaian insurance sector, however, is expected to be significantly impacted by the introduction of Takāful. In the short to medium term, the impact of its contribution to GDP on economic growth may be very minimal, which will be mainly felt at the individual or unit level where patronage will be largely influenced by religious and ethical motives. Nonetheless, Muslims who, for religious reasons, do not patronize insurance services (except for mandatory ones) will now have a reason to get an insurance policy.

Takāful has the potential of enhancing financial inclusion in Ghana. As this potential might be encumbered by adopting the structure of Takāful or the pricing of the policy, offering microtakāful to low-income earners will expedite their inclusion in the financial system as it will also provide them with some degree of financial security. Small businesses whose turnover is very low can also opt for microtakāful to protect their investments.

In the medium to long term, however, a favorable legal and regulatory environment for the operation of Takāful will enhance quality of service since competition for a greater market share within the industry will push operators to improve their service delivery. This will, among other things, necessitate innovation and improvement in the overall operations of the industry.

At the macro level, the introduction of Takāful will contribute towards boosting premiums, widening the insurance coverage, and deepening insurance penetration in the medium to long term. This will translate into a diversified insurance market in lieu of the different preferences of customers as far as their risk appetite is concerned.

2.3 Assessing the Potential Demand for Takāful in Ghana

In order to determine the potential drivers of Takāful in Ghana, this study adopts and modifies the Diffusion of Innovation theory developed by E.M. Rogers in 1962. The theory has its roots in communication studies, which is used to explain how an idea or product spreads through a specific social setting. This theory classifies the drivers of new innovation into five variables and explains why some spread faster than others: relative advantage, compatibility, simplicity, trialability, and observable result (Robinson 2009).

This theory has been used by many authors from different disciplines of Takāful. Notable among those who have used this theory in determining the drivers of Takāful in different parts of the world include Shabiq and Zubair (2016), Maizaitulaidawati, Noraini, and Nasiha (2015), and Lukman and Abdelghani (2012). All these studies were *ex post* since the institutionalization of Takāful made it easier to assess all the variables of the Diffusion of Innovation theory.

Apart from the fact that this particular study was *ex ante*, not all the variables of the model could be measured. As a result, trialability, simplicity, and observable results were replaced with product features, making the variables 3 instead of 5.

Table 1 summarizes the empirical works embarked on in different jurisdictions highlighting their major findings.

Table 1. Summary of empirical works and other reviewed investigations.

Authors and year of publication	Topic	Sampling	Variables	Major findings
Coolen-Maturi, T. (2013)	Islamic Insurance (Takaful): Demand and Supply in the UK	A non-probability sampling technique was used to sample 230 respondents comprising students and workers. Questionnaires were the research instrument, which was administered via an online platform. A total of 178 completed questionnaires were retrieved and analyzed.	*X1: Knowledge X2: Awareness **Y: Demand for Takāful products	There was a lack of awareness about Takāful and its principles among Muslims in the UK. Majority of the respondents preferred to get Takāful via banking channels rather than from an independent Takāful company.
Sheikh Ali, A., and Abdi Jama, A. (2016)	Determinants of Islamic Insurance Acceptance: Empirical Evidence from Somalia	Convenient sampling was used to sample 400 respondents from Mogadishu. Data analysis was based on 179 completed questionnaires that were returned.	X1: Awareness X2: Knowledge X3: Attitude X4: Perception Y: Behavioral intention to use Takāful products	There was concise knowledge about Takāful products. There was a significant positive relationship between all predictors and the intention to adopt Takāful.

*X is an independent variable. **Y is a dependent variable.

Soualhi, Y., and Ahmad, A. A. (2015)	Indicators of Takaful Awareness among Kuwaitis	An online survey was used with a minimum sample size of 385 respondents. A questionnaire was used as the instrument and the response rate was 184.4% as 710 completed questionnaires were retrieved.	X1: Gender and marital status Y1: Awareness of general information X2: Age, education, income and occupation Y2: Awareness of features and compliance of Shariah X3: Shariah background Y3: Motives of Takāful	More than half (52%) of the sample had not heard of Takāful. There were significant differences between degree holders and non-degree holders regarding knowledge and exposure to Takāful.
Sheila, H. N., and Syed, A. S. (2014)	The Viability of Islamic Insurance (Takaful) in India: SWOT Analysis Approach	Quota sampling was used to sample 500 respondents comprising 250 each from Muslims and non-Muslims in Hyderabad, Kerala, and Bangalore (India). A total of 333 questionnaires were returned.	X1: Awareness X2: Acceptability X2: Prospects Y: Viability of Islamic insurance	The awareness level of Takāful was very minimum. Although Takāful had great potential, it would require the support of the government.

Author	Title	Methodology	Variables	Findings
Akhter, W., and Hussain, T. (2012)	Takāful Standards and Customer Perceptions Affecting Takāful Practices in Pakistan: A Survey	A total of 150 questionnaires were administered using convenient sampling to insurance holders both from rural and urban areas in Pakistan, but only 142 questionnaires were retrieved.	X1: Age X2: Education X3: Gender X4: Marital status X5: Monthly income X6: Channels of insurance distribution X7: Payment pattern of insurance premium X8: Option to shift the company X9: Takāful as a Shariah-compliant business X10: Perception of Takāful as a risk management tool Y: Takāful awareness	There was a critically low level of awareness (90.8%) of Takāful. There was a significant association between the education of the respondents and their level of Takāful awareness.
Maysami, R. C., and Williams, J. J. (2006)	Evidence on the Relationship between Takaful and Fundamental Perception of Islamic Principles	Data for this study was generated from a larger research project by the same authors. The response of 84 Singaporean Muslims was taken from the original sample of both Muslims and non-Muslims.	X: Fundamental perceptions of Islamic principles Y: Awareness of Takāful	Muslims who were the target of Takāful were largely unaware. "Liberal Muslims" were more informed of Takāful.

Author (Year)	Title	Methodology	Variables	Findings
Lukman, O. A., and Abdelghani, E. (2012)	Perception and Adoption of Islamic Insurance in Malaysia: An Empirical Study	A questionnaire was used to obtain data from 200 respondents. A total of 168 questionnaires were completed and returned. Structural equation modeling (SEM) and t-test were used for data analysis.	**X1**: Uncertainty **X2**: Relative advantage **X3**: Compatibility **X4**: Social influence **X5**: Awareness **Y**: Adoption	Uncertainty, relative advantage, and social influence did not have a significant impact on adoption. Relative advantage and awareness had a significant impact on adoption.
Shabiq, A., and Zubair, H. (2016)	Factors Affecting Adoption of Takaful (Islamic Insurance) in the Maldives	A sample size of 350 was chosen and questionnaires were administered. A total of 340 questionnaires were returned and SPSS was used for data analysis.	**X1**: Awareness **X2**: Relative advantage **X3**: Compatibility **X4**: Social influence **X5**: Attitude **Y**: Adoption	Compatibility and attitude were found to have a significant effect on Takāful adoption. Relative advantage, social influence, and awareness were not found to have a significant effect on Takāful adoption.
Maizaitulaidawati, H. M., Noraini, I., and Nasiha, R. (2015)	The Effects of Compatibility, Social Influence and Awareness in the Adoption of Takaful	A total of 300 questionnaires were originally distributed. However, only 210 (70%) questionnaires were returned. Regression and correlation analysis were used to assess the relationship among the variables.	**X1**: Compatibility **X2**: Social influence **X3**: Awareness **Y**: Adoption	The study found a positive significant relationship between awareness and Takāful adoption. Social influence and compatibility were found to have a positive but insignificant effect on Takāful adoption.

3.0 METHODOLOGY

3.1 Research Approach

Research is often approached either qualitatively, qualitatively, or a mixture of both. Burns and Burns (2008) noted that the scientific quantitative method reflects the positivist paradigm, while the qualitative research method reflects the interpretivist paradigm. The approach that needs to be adopted for a study is informed by the research problems and the type of data required for the study. The process of conducting the research can either be deductive or inductive. According to Burns and Burns (2008), inductive research adopts a bottom-up approach, which is a major characteristic of a qualitative approach, while deduction is a top-down strategy, which works from general to specific and is typical of the deductive process. As such, this study adopts a deductive approach that relies on theory to first establish a framework and then make use of variables to confirm or reject the study hypothesis.

3.2 Research Design

The research design, as indicated by Saunders, Lewis, and Thornhill (2009), outlines the structure and plan adopted to find answers to the research questions. Due to the nature of the study, the research type was descriptive. This research type was adopted with the aim of finding how compatibility, product features, and relative advantage will predict the potential demand for Takāful and the association among these variables. This will be further used in testing the hypothesis of the study.

For the time horizon, cross-sectional data was used. Bryman and Bell (2005) noted that cross-sectional design collected "data on more than one case and at a single point in time in order to collect a body of quantitative or quantifiable data in connection with two or more variables which are then examined to detect patterns of association." Therefore, this study adopted a cross-sectional design.

3.3 Sampling and Sampling Technique

Sampling is a process of selecting a segment of a population for the purpose of obtaining information of relevance for investigating a phenomenon. The approach to sampling can be either probability or non-probability sampling. In probability sampling, also referred to as representative sampling, there is a known probability that each unit of the population will be selected. In non-probability sampling, there is no known probability that each case will be selected from the total population.

The study used convenience and snowball sampling methods, which are non-probability sampling techniques. Cooper and Schindler (2008) noted that convenience sampling can be used to test an idea or gain ideas about a subject matter. Snowball sampling was used to enable the first-hand respondents to invite more participants in the survey. The combination of these techniques was meant to target many respondents who were ready and willing to complete the online survey questionnaires within the specified time.

3.4 Sample Size

To determine the sample size for the study, the average of four prior studies conducted in different jurisdictions was computed and used as the sample size. Sheikh Ali and Abdi Jama (2016) in their study used a sample size of 400 with a response rate of 44%, while Coolen-Maturi (2013) in his study had a sample size of 230 with a response rate of 77%. Soualhi and Ahmad (2015) used a sample size of 710 with a response rate of 90%, while Akhter and Hussain (2012) used a sample size of 150 with a response rate of 85.9%. The average sample size of these studies can be calculated as follows:

$$\frac{710+400+230+150}{4} = 372.5 \text{ or } 373$$

The sample size thus obtained was 373. However, 321 completed online survey questionnaires were retrieved, constituting an 86% response rate. Determining the sample size using this average allows for comparability with previous research work in the same field.

3.5 Pretesting

The reliability test measures the internal consistency of the research instrument (in this case the questionnaire) used to collect the data. Cronbach's alpha was used as a reliability measure to find the internal consistency of the questionnaire. Cronbach's alpha reliability coefficient normally ranges between 0 and 1: the closer it is to 1, the greater the internal consistency.

The result indicates an acceptable Cronbach's alpha, which confirms the internal consistency of the questionnaire items used for collecting the data.

Table 2. Reliability statistics.

Variables	Number of items	Cronbach's alpha
Awareness	5	0.711
Potential demand	8	0.764
Relative advantage	4	0.697
Product features	5	0.703
Compatibility	5	0.709

Source: Field Survey (2019).

3.6 Test for Multicollinearity

The study tested for the presence of multicollinearity in the explanatory variables used in the regression analysis and the extent to which it can be a problem. To assess multicollinearity, the variance inflation factor (VIF) index was used. The rule of thumb for

multicollinearity is that the VIF should be less than 10, indicating that the multicollinearity problem is not serious. Jamal (2017) provided a rule of thumb for interpreting the VIF: VIF=1 indicates uncorrelated, 1<VIF≤5 indicates moderately correlated, and VIF>5 indicates highly correlated. Table 3 summarizes the result of the VIF computed for the explanatory variables.

Table 3. Variance inflation factor.

Variables	VIF
Relative advantage	1.718
Product features	1.723
Compatibility	1.402
Mean	**1.614**

Source: Field Survey (2019).

It can be observed that the explanatory variables are moderately correlated and the rule for multicollinearity is not violated. This indicates that all the explanatory variables are fit for the regression test.

4.0 DATA ANALYSIS

4.1 Descriptive Analysis

Descriptive statistics, including frequencies and percentages, were computed to describe the demographic characteristics of the respondents, such as gender, age group, level of education, and whether they had any insurance policy.

Discussion of the Results

Age

The first demographic data to be analyzed was the age of the respondents. The survey revealed that the majority of the respondents (241, 75.1%) were males, while 80 (24.9%) respondents were female.

Age Category

A greater proportion of the sample (146, 45.5%) was in the age category of 30–39 years. This was followed by those in the age category of 18–29 years, comprising 137 (42.7%) respondents. The age category of 40–49 years represented by 26 (8.1%) respondents and that above 50 years represented by 12 (3.7%) respondents formed the least proportion of the sample. This reveals that a majority of the respondents who participated in the survey were in the active age group whose need for insurance services was growing compared to the age group above 50 years.

Level of Education

The survey revealed that most of the respondents were educated: those with first and postgraduate degrees comprised 181 (56.4%) and 89 (27.7%) respondents respectively, those with high school and diploma education comprised 29 (9%) and 17 (5.3%) respondents respectively, and those with professional degrees comprised only 5 (1.6%) respondents. This indicates that the respondents were educated enough to understand and relate to the content of the survey, thereby reducing the likelihood of giving wrong responses.

Insurance Policy

When the respondents were asked whether they had insurance policies other than statutory and mandatory insurance schemes, 109 (34%) reported they had insurance policy, while 212 (66%) reported otherwise. Although more than half of the respondents reported that they had not subscribed to any insurance policy, 34% was sufficient to show the importance attached to insurance products subscribed by the sample population with respect to their level of education and age category.

Table 4. Demographic data of the respondents.

Variables	Frequency	Percentage
Gender		
Male	241	75.1
Female	80	24.9
Age category		
18–29 years	137	42.7
30–39 years	146	45.5
40–49 years	26	8.1
Above 50 years	12	3.7
Level of Education		
High school	29	9.0
Diploma	17	5.3
First degree	181	56.4
Postgraduate	89	27.7
Professional	5	1.6
Do you have an insurance policy?		
Yes	109	34.0
No	212	66.0
Total	**321**	**100.0**

Source: Field Survey (2019).

Potential Demand

In order to find the components of the patronage of Takāful in Ghana, the respondents were asked to rate the factors that contributed to the potential demand. A mean of 2.24 and a standard deviation (SD) of 0.61 indicate that there is not much dispersion from the mean, as shown in Table 5.

Relative Advantage

This was one of the explanatory variables used to find its influence on the patronage of Takāful. The overall mean was 1.98, which indicates that the responses fell within the "agreed" rating without much dispersion with the SD at 0.72, as shown in Table 5.

Product Features

This study further investigated the influence of the features of Takāful on its patronage. A mean of 2.09 and a standard deviation of 0.68 indicates how concentrated the responses were within the "agreed" rating, as shown in Table 5.

Compatibility

Finally, this study investigated compatibility with economic, socio-cultural, and religious values. A mean of 2.26 and a standard of deviation of 0.70 indicate how respondents largely "agreed" with the compatibility with their religious, economic, and socio-cultural values, as shown in Table 5.

Skewness and Kurtosis

Skewness measures the extent to which the distribution is deviated from symmetry, which may be either skewed to the right, to the left, or not skewed. On the other hand, kurtosis measures the extent to which the distribution is flat or peaked. As shown in Table 5, skewness ranges from 0.322 to 0.893, which means that the distribution is either moderately skewed or appropriately symmetric.

For kurtosis, it can be seen that relative advantage and compatibility are slightly platykurtic (-0.245 and -0.263 respectively), which indicate that they have slightly lower and broader peaks. The other variables are slightly leptokurtic, ranging from 0.163 to 0.191, which indicate that they have slightly higher peaks. Since the distribution is approximately mesokurtic, it can be concluded that the data was normally distributed.

Table 5. Descriptive statistics.

Variables	N	Min	Max	Mean	SD	Skewness	Kurtosis
Potential demand	321	1.00	4.12	2.2457	.61375	.322	.163
Relative advantage	321	1.00	4.00	1.9852	.72158	.533	−.245
Product features	321	1.00	4.40	2.0916	.68371	.562	.191
Compatibility	321	1.00	4.20	2.2604	.70495	.893	−.263

Source: Field survey (2019).

4.2 Discussion of the Major Findings

The main objective of this study was to identify the key factors and variables that will influence the patronage of Takāful in Ghana. The drivers of demand for Takāful, as identified in the literature, were relative advantage, product features, and compatibility. Therefore, the study measured the association and relationship between these factors.

It was found that relative advantage, product features, and compatibility used as the explanatory variables had a relatively strong and positive relationship with potential demand. Relative advantage was found to have a strong positive relationship with potential demand at a correlation coefficient (r) of 0.659, which was significant at the 0.01 level. Product features and potential demand had a positive relationship at a correlation coefficient of 0.616 at the 0.01 significance level, while compatibility and potential demand had a positive relationship at a correlation coefficient of 0.508 at the 0.01 significance level.

The findings also revealed a relatively stronger positive relationship between relative advantage and product features at a correlation coefficient of 0.611, which was significant at the 0.01 level. Similarly, a strong and positive relationship was found between compatibility and relative advantage with a correlation coefficient of 0.479 at the 0.01 significance level. Finally, product features was also found to have a positive and relatively stronger association with compatibility at a correlation coefficient of 0.482 at the 0.01 significance level.

The strong positive relationship found among the variables indicates that improving one variable positively improves the other variables that will collectively influence the potential demand for Takāful in Ghana.

Table 6. Correlation matrix.

Variables	Potential demand	Relative advantage	Product features	Compatibility
Potential demand	1			
Relative advantage	.659**	1		
Product features	.616**	.611**	1	
Compatibility	.508**	.479**	.482**	1

*Correlation is significant at the 0.05 level (two-tailed).
**Correlation is significant at the 0.01 level (two-tailed).

A multiple linear regression test was carried out between relative advantage, product features, and compatibility as the independent variables and potential demand as the dependent variable. The R determines the strength of the association between the independent variables and the dependent variable, while the R square determines the extent to which relative advantage, product features, and compatibility can collectively predict the potential demand.

The *R* was 0.728, which indicates a positive significant relationship between the explanatory variables and the explained variable. The *R* square was 0.53 and the adjusted *R* square was 0.525, which indicate that about 52.5% of the variations in potential demand can be explained by relative advantage, product features, and compatibility.

The *F* statistic of 118.931 and a *P* value of <0.05 indicate that the result was statistically significant, which means that relative advantage, product features, and compatibility are important factors for predicting potential demand for Takāful.

In the regression analysis, the beta coefficient is an important parameter to consider since it explains the predictive capacity of the variables used. The beta coefficient is used to estimate how much one unit in the dependent variable will increase with a unit increase in the independent variable. However, it can be observed from Table 7 that all the beta values are positive, which indicates a positive predictive power of all the independent variables.

In this study, relative advantage was found to have the highest predictive capacity of potential demand among the explanatory variables with a beta coefficient of 0.338. This shows that for a unit increase in relative advantage, a 33.8% increase in potential demand can be predicted. The beta value of product feature was 0.257, which means that a unit change in product features will trigger a 25.7% change in potential demand. Finally, compatibility had a beta coefficient of 0.156, which indicates that potential demand will change by 15.6% if compatibility changes by one unit.

Table 7. Regression matrix.

Regression	Coefficient (β)	SE	T-ratio	Sig.
(Constant)	.984	.090	7.556	.000
Relative Advantage	.338	.043	7.873	.000
Product Features	.257	.045	5.671	.000
Compatibility	.156	.040	3.924	.000

R=0.728   Adjusted R square=0.525
F statistic=118.931   SE (standard error)=0.422
R square=0.530   Sig.=0.000

Hypothesis Testing
This study attempted to test the following hypotheses:

Hypothesis 1
H1: There is a significant relationship between relative advantage and potential demand.
H0: There is no significant relationship between relative advantage and potential demand.
The result of the regression analysis revealed that with β=0.338 and *P* value <0.05, there was a positive relationship between relative advantage and potential demand, which was

significant at the 0.000 significance level. Therefore, this study fails to reject the alternative hypothesis that states that there is a significant relationship between relative advantage and potential demand. This finding contradicts that of Shabiq and Zubair (2016) who found that the relationship between relative advantage and Takāful adoption was not significant in the case of Maldives. It also contradicts the findings of Lukman and Abdelghani (2012) in the case of Malaysia.

Hypothesis 2

H1: There is a significant relationship between product features and potential demand.

H0: There is no significant relationship between product features and potential demand.

The result revealed that there was a positive relationship between product features and potential demand. This was indicated by $\beta=0.257$ and $P<0.05$, which was significant at the 0.000 significance level. Based on the result, we therefore fail to reject the alternative hypothesis that states that there is a significant relationship between product features and potential demand.

Hypothesis 3

H1: There is a significant relationship between compatibility and potential demand.

H0: There is no significant relationship between compatibility and potential demand.

The result found that with $\beta=0.156$ and $P<0.05$, which was significant at the 0.000 significance level, there was a positive relationship between compatibility and potential demand. Therefore, this study fails to reject the alternative hypothesis that states that there is a significant relationship between compatibility and potential demand. This finding supports that of Lukman and Abdelghani (2012) and Shabiq and Zubair (2016) who also found a positive and significant relationship between compatibility and Takāful adoption. However, it partially supports the findings of Maizaitulaidawati, Noraini, and Nasiha (2015) who found a positive but insignificant relationship between compatibility and Takāful adoption.

Table 8. Results of the hypotheses.

Hypotheses	Sig.	Decision
There is a significant relationship between relative advantage and potential demand.	0.000	Accepted
There is a significant relationship between product features and potential demand.	0.000	Accepted
There is a significant relationship between compatibility and potential demand.	0.000	Accepted

5.0 SUMMARY OF THE FINDINGS

Concerning the first objective of finding the state of the insurance industry in Ghana, it was noted that the insurance sub-sector has made tremendous strides over the years in improving the sector by keeping pace with international standards, increasing the number of insurance companies, and introducing innovative insurance products and delivery channels. However, the insurance coverage is still low and its contribution to the country's GDP remains below 2%, which informs of the need to explore other insurance products, including Takāful, in order to widen the coverage and boost premiums.

This study further found that Takāful has a potential impact on the growth of the insurance sector in particular, and on the Ghanaian economy in general. However, in the short to medium term, the individual or unit level impact would be mainly felt, and in the long run and with the support of regulatory framework, a positive macroeconomic impact in terms of an increase in insurance penetration, insurance coverage, and contribution to GDP will be realized.

While investigating the potential drivers of Takāful in Ghana, this study found that relative advantage, product features, and compatibility, which are the explanatory variables, have a positive and significant relationship with potential demand, which is the explained variable. This indicates that the extent to which Takāful will be patronized will be largely determined by the extent to which it is compatible with their religious, ethical, and cultural dispositions, the features of the product, as well as the competitive advantage it offers over conventional insurance.

5.1 Recommendations

1. Apart from the economic and financial aim of boosting premiums, priority should also be given to the social inclusion aspect by offering microtakāful (Islamic microinsurance) products, which target low-income workers, blue-collar workers, and small businesses. This will expedite the extension of insurance coverage to include these categories of people.

2. Leveraging technology in the distribution channels of Takāful services can be done through a mobile money service, which is widely patronized by the majority of the population. This will help reduce both the associated intermediation cost and human barriers in the process.

3. Before launching Takāful services in Ghana, intensive education and awareness creation should be embarked on to familiarize people with the product and its economic features. This will go a long way to help establish and well situate Takāful in the insurance market.

4. This study also recommends that a comprehensive Takāful framework be created according to the guidelines of Nigeria and Malaysia, which are respectively a regional and a global player in the Takāful industry. This will go a long way to ensure harmonization of Takāful guidelines across the board and ensure conformity with international standards.

5. Finally, a comprehensive understanding of other drivers of Takāful in Ghana beyond the findings of this study is required. This will give a broader insight into the key factors in creating a market demand for Takāful in Ghana.

REFERENCES

Abdul Rahim, A., Lewis, M., & Hassan, K. M. (2007). Islamic Takaful: Models, Shariah Concerns, and Proposed Solution. *Thunderbird International Business Review* 49, no. 3: 371–96.

Abdul Rahman, Z. (2009). Takaful: Potential Demand and Growth. *JKAU: Islamic Economics* 22, 171–88.

Abdul-Wahab, A.-H., & Abdul-Razak, B. D. (2019). Islamic Banking Adoption in Ghana. *International Journal of Business, Economics and Law, Vol 19*(2), 1–8.

Acquah-Hayford, N. (2016). NIC to Introduce Islamic based Insurance Program. Citifmonline. Accessed April 10, 2018. http://citifmonline.com/2016/04/25/nic-introduce-islamic-based-insurance-program/.

Agya Kwadjo, S. (2015). *Customer Satisfaction and Loyalty: Assessing the Moderating Role of Switching Cost in the Insurance Industry.* Accra: University of Ghana. http://ugspace.ug.edu.gh/bitstream/handle/123456789/8907/ Customer%20Satisfaction%20and%20Loyalty%20Assessing%3B%20the%20Moderating%20Role%20of%20 Switching%20Costs%20in%20the%20Insurance%20Industry-%202015.pdf?sequence=1.

Akhter, W., & Hussain, T. (2012). Takāful Standards and Customer Perceptions Affecting Takāful Practices in Pakistan: A Survey. *International Journal of Islamic and Middle Eastern Finance and Management* 5, no. 3: 229–40.

Ali, M. (2015). The Roots & Development of Islamic Banking in the World & in Pakistan. *South East Asia Journal of Contemporary Business, Economics, and Law* 7, no. 1: 58–63.

Arena, M. (2008). Does Insurance Market Activity Promote Economic Growth? A Cross-Country Study for Industrialized and Developing Countries. *The Journal of Risk and Insurance* 75, 921–46.

Bank of Ghana. (2018). *Monetary Policy Report.* Accra: Bank of Ghana. https://www.bog.gov.gh/monetary-policy/ monetary-policy-reports.

Bloomberg. (2018). Ghana Economic Growth Rate More Than Doubles in 2017 to 8.5%. Bloomberg. https://www. bloomberg.com/news/articles/2018-04-11/ghana-economic-growth-rate-more-than-doubles-in-2017-to-8-5.

Brew, F. Q. (2015). *Prospects of Islamic Banking and Finance in Ghana.* Kumasi: KNUST. Retrieved from ir.knust.edu.gh

Broni, M. Y. (2018). *Challenges in Establishing Islamic Banking and Finance in Ghana.* Unpublished.

Bryman, A., and Bell, E. (2005).Business Research Methods. Oxford: Oxford University Press.

Burns, R., & Burns, R. (2008). *Business Research Methods and Statistics Using SPSS.* London: SAGE Publication Ltd.

Coolen-Maturi, T. (2013). Islamic Insurance (Takaful): Demand and Supply in the UK. *International Journal of Islamic and Middle Eastern Finance and Management* 6, no. 2: 87–104.

Cooper, D. R., & Schindler, P. S. (2008). *Business Research Methods.* New York: McGraw-Hill.

El-Qalqili, J. (2017). Takaful – Foundations and Standardization of Islamic Insurance. *Electronic Journal of Islamic and Middle Eastern Law (EJIMEL)* 5, 29–54. http://www.ejimel.uzh.ch.

Fisher, O. C. (2013). *A Takaful Primer: Basics of Islamic Insurance.* Dubai: Thompson Reuters.

Fisher, O. C., & Taylor, D. (2000). Prospects for the Evolution of Takaful in the 21st Century. 237–54. Cambridge, MA: Harvard University.

FOCUSECONOMICS. (2019). *Ghana Economic Outlook.* FOCUSECONOMICS. https://www.focus-economics.com/ countries/ghana.

Francis, B., Elizabeth, D.-F., Joseph, B. K., & Albert, F. O. (2014). Assessing the Life Insurance Industry in Ghana. *European Journal of Business and Management* 6, no. 21, 14–22.

Ghana-Re. (2019). *GhanaRe.* http://www.ghanare.com/about.php.

Ghana Statistical Service. (2018). *National Account.* Accra: Ghana Statistical Service.

Haiss, P., & Sümegi, K. (2008). The Relationship between Insurance and Economic Growth in Europe: A Theoretical and Empirical Analysis. *Empirica* 35, no. 4: 405–31. https://link.springer.com/article/10.1007/s10663-008-9075-2#citeas.

Hatim, E. (2010). *Africa: Building the Ecosystem for a Takaful Investment.* INTO AFRICA.

Htay, N. N., & Salman, A. S. (2013). The viability of Islamic Insurance in India: SWOT Analysis Approach. *Review of European Studies, Vol 5*(4), 145–154.

Ibrahim, A.-J. (2017). *Financing SMEs in Ghana using Islamic Venture Capital: Structuring and Investment Protection.* Doha: Unpublished, CIS

Ibrahim, M. M., & Ahmad, F. S. (2016). Does Islamic Insurance Development Promote Economic Growth? A Panel Data Analysis. *Procedia Economics and Finance* 35, 368–373.

IFSB. (2018). *Islamic Financial Service Industry: Stability Report.* Kuala Lumpur: Islamic Financial Service Board.

IFSB. (2017). *Islamic Financial Service Industry: Stability Report.* Kuala Lumpur: Islamic Financial Service Board.

Index Mundi. (2018). *Ghana GDP-Composition by Sector.* Indexmundi. https://www.indexmundi.com/ghana/gdp_composition_by_sector.html

Isaac, A.-F. (2016). *Causes, Effects and Deterrence of Insurance Fraud: Evidence from Ghana.* Accra: University of Ghana.

Islamic Financial Services Board. (2018). *Islamic Financial Services Industry Stability Report 2018.* Kuala Lumpur: Islamic Financial Services Board.

ISSER. (2017). *ISSER 2017 Post-Budget Analysis.* Accra: ISSER.

Jamal, D. (2017). Multicollinearity and Regression Analysis. *Journal of Physics Conference Series.* Selangor: IOP Publishing (1-6).

KPMG. (2010). *Frontiers in Finance Supplement – Islamic Finance: The New Agenda.* KPMG.

Kwadjo, A.-A., Charles, A., & Joshua, A. (2012). Evaluating the Cost Efficiency of Insurance Companies in Ghana. *The Journal of Risk Finance* 13, no. 1: 61–76.

Lewis, M. K. (2011). *The Evolution of Takaful Products.* West Sussex: John Wiley & Sons, Ltd.

Lukman, O. A., & Abdelghani, E. (2012). Perception and Adoption of Islamic Insurance in Malaysia: An Empirical Study. *World Applied Sciences Journal* 20, no. 3: 407–15.

Maizaitulaidawati, H. M., Noraini, I., & Nasiha, R. (2015). The Effects of Compatibility, Social Influence and Awareness in the Adoption of Takaful. *Proceedings of Nineteenth The IIER International Conference*, 104–07). Bangkok.

Maysami, R. C., & Williams, J. J. (2006). Evidence on the Relationship between Takaful and Fundamental Perception of Islamic Principles. *Applied Financial Economics Letters* 2, no. 4: 229–32.

Mbawuni, J., & Nimako, G. S. (2016). Introduction of Islamic banking and Finance in Ghana: Opportunities and Challenges. *Journal of Islamic Banking and Finance, Vol 4*(1), 60–70.

Mehdi, S. (2010). The Evolution of Islamic Insurance-Takaful: A Literature Survey. *Insurance Markets and Companies* 1, no. 2: 100–07.

Mohammad, M. A. (2016). Takaful Models: Their Evolution and Future Direction. *Islam and Civilizational Renewal* 7, no. 4: 457–73.

Moisseron, J.-Y., Moschetto, B.-L., & Teulon, F. (2015). Islamic Finance: na review of Literature. *International Business & Economics Research Journal (IBER), 14*(5), 745-762.

Muhammad Al-Amine, M. (2016). *Islamic Finance and Africa's Economic Resurgence.* New York: Palgrave Macmillan.

NIC. (2017). *National Insurance Commission Annual Report 2016.* Accra: National Insurance Commission.

Ouédraogo, I., Guérineau, S., & Sawadogo, R. (2016). Life Insurance Development and Economic Growth: Evidence from Developing Countries. *Études et Documents* no. 16, CERDI.

Oxford Business Group. (2018). *Ghana's Insurance Sector Targets Double-Digit Penetration by 2021.* Oxford Business Group. https://oxfordbusinessgroup.com/overview/guiding-progress-targeting-double-digit-penetration-2021.

Saunders, M., Lewis, P., & Thornhill, A. (2009). *Research Methods for Business Students.* Essex: Pearson Education.

Shabiq, A., & Zubair, H. (2016). Factors Affecting Adoption of Takaful (Islamic Insurance) in the Maldives. *International Journal of Accounting & Business Management* 4, no. 1, 86–97.

Sheikh Ali, A., & Abdi Jama, A. (2016). Determinants of Islamic Insurance Acceptance: Empirical Evidence from Somalia. *European Journal of Business and Management* 8, no. 15: 102–08.

Sheila, H. N., & Syed, A. S. (2014). Introducing Takaful in India: An Exploratory Study on Acceptability, Possibility and Takaful Model. *Asian Social Science* X, 117–23.

Siddiqi, M. N. (1999). Islamic Finance & Beyond: Premises and Promises. *Harvard University Forum on Islamic Finance "Islamic Finance: Challenges and Global Opportunities".*

Siddiqi, M. N. (2006). Islamic Banking and Finance in Theory and Practice: A Survey and State of the Art. *Islamic Economic Studies* 13, 1–48.

Siddiqi, M. N. (2000). Evolution of Islamic Banking and Insurance as Systems Rooted in Ethics. *Takaful Forum*, 1–6. New York: IBFNET. https://www.soundvision.com/article/evolution-of-islamic-banking-and-insurance-as-systems-rooted-in-ethics.

Skipper, D. H. (2006). *Foreign Insurers in Emerging Markets: Issues and Concerns.* Washington, DC: IIF.

Soualhi, Y., & Ahmad, A. A. (2015). Indicators of Takaful Awareness among Kuwaitis. *Journal of Islamic Banking and Finance* 3, no. 2: 75–89.

Swiss Re Sigma Report. (2018). *World Insurance in 2017: Solid, but Mature Life Markets Weigh on Growth*. Zurich: Swiss Re Institute.

Taqi, U. M. (2012). *An Introduction to Islamic Finance.* Leiden: Brill.

The AfrAsia Bank. (2018). *The AfrAsia Bank Africa Wealth Report 2018*. Port Louis: The AfrAsia Bank.

The Economist. (2010). *Economic Performance: Rebased GDP Figures Improve the Economic Picture*. http://country.eiu.com/article.aspx?articleid=1907643775&Country=Ghana.

Robinson, L. (2009). Summary of Diffusion of Innovations. Retrieved from www.enablingchange.com.au/summary_Diffufion_Theory.pdf

World Bank. (2018). *The World Bank in Ghana*. Washington, DC: World Bank.