

Effects of Interest-free financing of Islamic Banking on Information Asymmetry among Islamic bank customers: Evidence from Nigeria

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Abstract

Purpose: This study investigates whether interest-free financing contract of Islamic banking provides an incentive for entrepreneurs in Nigeria, to provide full information disclosure of their business performance and thus reduce the incidence of information asymmetry in respect of financing received from Islamic banks.

Design/methodology/approach: Multivariate Logistic Regression Model was employed to estimate the binary categorical variables of the model.

Findings: The result shows a positive and significant relationship between incentive of interest-free financing contract and motivation to give voluntary information disclosure, thereby minimizing the incidence of asymmetric information in respect of the funding obtained from Islamic banks. It was also found that the religious belief of the entrepreneurs does not significantly impact their decisions to have a banking relationship with Islamic banks but are rather motivated by economic factors and business decisions.

Practical implications: The policymakers in Nigeria can, therefore, leverage the positive attitude of entrepreneurs towards Islamic banking interest-free financing contract to promote financial inclusion and narrow down the widening funding gap faced by small and medium enterprises thereby promoting entrepreneurship and significantly reduce the unemployment level in the country.

Social implications: Access to accommodative financing of Islamic banking can improve the general welfare of the citizenry, raise the national productivity and positively impact the national income.

Originality/value: This study, unlike most previous studies on Islamic banking in Nigeria which were largely focused on the value proposition of Islamic banking, examines the effects of the incentive of interest-free financing contract on the behaviour of Islamic bank customers to volunteer greater information. The study further enriches the literature on the effects of the incentive of interest-free financing as a significant determinant of the attitude of entrepreneur bank customers towards full information disclosure thereby minimizing the incidence of information asymmetry in banking relationship with Islamic banks.

Keywords: Asymmetric information, Islamic banking, and interest-free financing

Type of Paper: Research

JEL Classifications: G21, G41, M40, M41, M42, M49

1. Introduction

Banks all over the world and throughout history have been agents of economic growth and development. Banks function not only as agents of financial intermediation but, more importantly, as a link in the monetary transmission process. Banks, as catalysts for economic development, mobilize funds from surplus spending units and transmit them to deficit units. However, despite their strategic importance in the attainment of national economic goals, banks operate in an environment characterized by risk and uncertainty (Klein, 1971). Moral hazard and adverse selection resulting from

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asymmetric information are among the significant risk banks often face in their financial intermediation functions. Chick (1992) asserts that the financial markets in which banks operate are inherently different from the markets for goods; the demand for loans is always characterized by moral hazard. Therefore, non-performing credit resulting from moral hazard and information asymmetry had been a significant source of credit risk faced by banks in the course of their lending activities.

Conventional banks have, over the years, devised strategies to minimize the impact of information asymmetry on the quality of their risk assets. Strategies such as critical assessment of borrower's character, which is a critical component of the five C's of credit² traditionally used in credit request evaluation. Beaulieu (1996) posited that character is at the centre of the lending decision by banks, as borrowers' character affects their presentation of, or response to, all other information. He further illustrated the fact that a borrower fails to keep a promise to provide specific financial information would be classified as a character deficit, which sends a negative signal towards a lack of integrity, reliability, and honesty. Therefore, a character deficit is at the root of information asymmetry. Also, the use of high-interest rates on loans to high-risk customers and demand for collaterals as securities for such loans have become strategies of credit rationing in the debt market.

Collateral is a critical contracting tool employed by lenders to reduce problems associated with asymmetric information (Berger, Espinosa-Vega, Frame, & Nathan, 2007). These strategies have often resulted in screening out many potential good businesses, particularly small and medium enterprises (SMEs) and thereby denying them access to investable funds (Bartlett & Bukvic, 2001; Olawale & Garwe, 2010; Steinerowska-Streb & Steiner, 2014). The negative impact of this is not only to cripple the capacity of businesses to undertake profitable investment activities but continues to thwart the efforts of many developing countries to encourage entrepreneurship, reduce unemployment, promote financial inclusiveness, and thereby achieve economic growth and development.

To achieve the objective of the economic growth and development, the importance of financial inclusion in today's global economy has attracted global attention particularly in the developing countries (Khan, 2011). Financial inclusion has been defined as access to financial services such as savings and credits from the banking sector at a low cost for the less privileged segment of the society (Khan, 2011; Mahandra, 2006). Marktanner (2012) also argues that financial inclusion which provides access to formal financial services has great potentials to create economic growth and development. However, because of the very nature of the Nigerian economic and financial system, which is driven by the interest mechanism, a large number of Nigerian citizens are excluded from the formal financial markets. For example, a major tool of economic and financial management in the country is monetary policy. Monetary Authority in the country controls the banking sector by the tools of monetary policy. Monetary policy invariably directly or indirectly influence the degree of financial inclusion in the economy. For example, a high-interest rate has the effect of raising the cost of fund that can crowd out small and medium enterprises (SMEs). This, therefore, keeps many

² character (integrity, stability and honesty), Capacity (management ability to operate the business), Capital (the fund available to operate the business), Condition (the prevailing economic conditions), and collateral (an alternative source of repayment).

SMEs out of the conventional banking system. The Islamic banking system, however, has a different proposition thereby creating easy access to alternative funding arrangement at much more favourable terms and conditions.

The proposition of '*La riba*' (no interest) sets Islamic banking as opposed to the fundamental role of interest rate within the capitalist economic and financial systems. Therefore, a critical element of interest-bearing financing perpetually keeps businesses in debt and many cases out of the market. This is fundamentally at variance with the principles of the Islamic banking system. It is, therefore, expected that a higher number of investors who had been denied access to funding by the conventional banking system would be motivated by non-interest financing incentive to source funds for investments from Islamic banks.

Similarly, the demand for collateral has been another instrument Conventional banks used to crowd out many investors from the debt market. This has been taken care of by various instruments of financing contracts such as Profit and Loss Sharing contracts (*Mudharabah and Musharakah*). Islamic banking opens various channels of investment financing to different categories of investors, particularly young entrepreneurs, hitherto denied access to investment funding by the conventional banking system.

Islamic banking: An overview

An Islamic bank, like its conventional counterpart, is a financial intermediary. It mobilizes funds from surplus units for the use of the deficit units. Historically, the development of Islamic finance can be traced to the time of Prophet Muhammad (p.b.u.h.) (ISRA, 2013). At the time of the Prophet, the principles of justice, fairness, and equitable economic and financial relationship, derived from the Qur'an and *Sunnah* (sayings and practices) of Prophet Muhammad had been established as the cardinal rules of engagement among the members of the emerging Muslim Ummah (community). Islamic banks, like their conventional counterpart's act as intermediaries between savers and investors. However, unlike the conventional banking system,

The principles of Sharia primarily guide Islamic banking. Notably, Islamic banking differs from the conventional banking system in four unique ways. Prohibition of interest (*riba*), profit and loss sharing arrangement, the prohibition of a game of chance (*maysir*) and speculation (*ghara*), and prohibition of financing of activities such as pornography, alcohol, and all kind of illegal activities are the four cardinal principles of Islamic banking. Hussain, Shahmoridi, and Turk (2015) considered equity, participation, and ownership as the fundamental principles that govern Islamic finance. Therefore, Islamic finance is considered the asset-based financial system because financing can extend only to productive activities. Hussain et al. (2015) further argued that if these principles of Islamic finance are complied with, the incidence of moral hazard would be significantly limited.

Similarly, Imam and Kpodar (2015) classified Islamic banking into two broad financing modes: (i) venture financing (*Mudharabah*, i.e., profit sharing) and *Musharakah* (partnership, i.e., profit and loss sharing), and (ii) Payment smoothing arrangements such as cost-plus (*Murabahah*), leasing (*ijarah*). Detailed consideration of these various modes of Islamic banking and other instruments such as *Wadiah* (safekeeping) *Sukuk* (Islamic bond), *Bai' al-inah* (sale and buy-back agreement), *Bai muajjal* (credit

sale), *Istisna'* (advance payment), *Qard Hassan* (right loan), *Hibah* (gift) among others are not the focus or scope of the present study. Touyounchian (2009) argues that the real essence of Islamic banking is not only to remove “the evil” of interest but also to provide an environment where there are stable prices, full employment, equitable distribution of income and wealth. Askari et al. (2012) argue that Islamic financial system functions similarly to those in the conventional system, except that, the interest rate is prohibited in Islamic financing, and that Islamic financial system is based on risk-sharing as contrasted with risk transfer as is the case of the conventional system.

The nature of fiduciary responsibility in the Islamic financial system differs from conventional banking because, in Islam, intermediary "passes through" the performance of its assets to the investors or depositors on its liability side (Askari et al., 2012). The core principles of Islamic finance are the promotion of risk-sharing, entrepreneurship, and social and financial inclusiveness. The risk-sharing and asset-based financing nature of Islamic financing and its potential contribution to the growth and inclusive prosperity have considerable merit, particularly considering the mounting evidence of adverse effects of debt and leverage on the economy (World Bank & IDBG, 2016, p.2).

The history of modern Islamic banking, however, can be traced to the development of Islamic banking in Egypt and Malaysia in the early 1960s (ISRA, 2013). The establishment of *MitGhamr* Saving Bank in the small town of *MitGhamr* in Egypt in 1963 and Lembaga *Tabung Haji* in Malaysia also in 1963 provided an impetus to Muslims in other countries to establish financial institutions that can screen their wealth from *riba* (interest) and non-permissible transactions. Lembaga *Tabung Haji* was incorporated in 1963 as a financial institution to help Muslims to save regularly towards pilgrimage to Mecca. *MitGhamr*, on the other hand, was established as a rural savings bank providing funds to its customers based on profit and loss sharing arrangements.

In the 1970s, the development of Islamic banking received a significant boost in the countries of the Middle East and North Africa (MENA) by their adoption of Islamic finance and banking as significant vehicles for economic growth and development. Countries like the United Arab Emirates (UAE), Bahrain adopted the development of Islamic finance as a critical component of their national development strategic plans. Similarly, Islamic banking made significant growth in the Indian Sub-continent of India and Pakistan. Industry-led approach to development has been a major characteristic feature of Islamic finance in these regions (Hassan, 2014).

Islamic finance has also witnessed a phenomenal growth in many parts of Europe, America, and Sub-Sahara Africa, including Nigeria. For example, Islamic banks are in operation in countries such as Denmark, France, Luxembourg, Switzerland, United Kingdom, South Africa, and Nigeria (Hussain et al., 2015). Many banks in the West are vital active players in the global Islamic financial market to take advantage presented by the new emerging financial order. Western banks such as Citibank, Standard Chartered Bank, UBS, and HSBC are vital players in the Islamic financial market (ASRA, 2013). The presence of Islamic financial institutions in non-Muslim countries is captured in Figure 1.

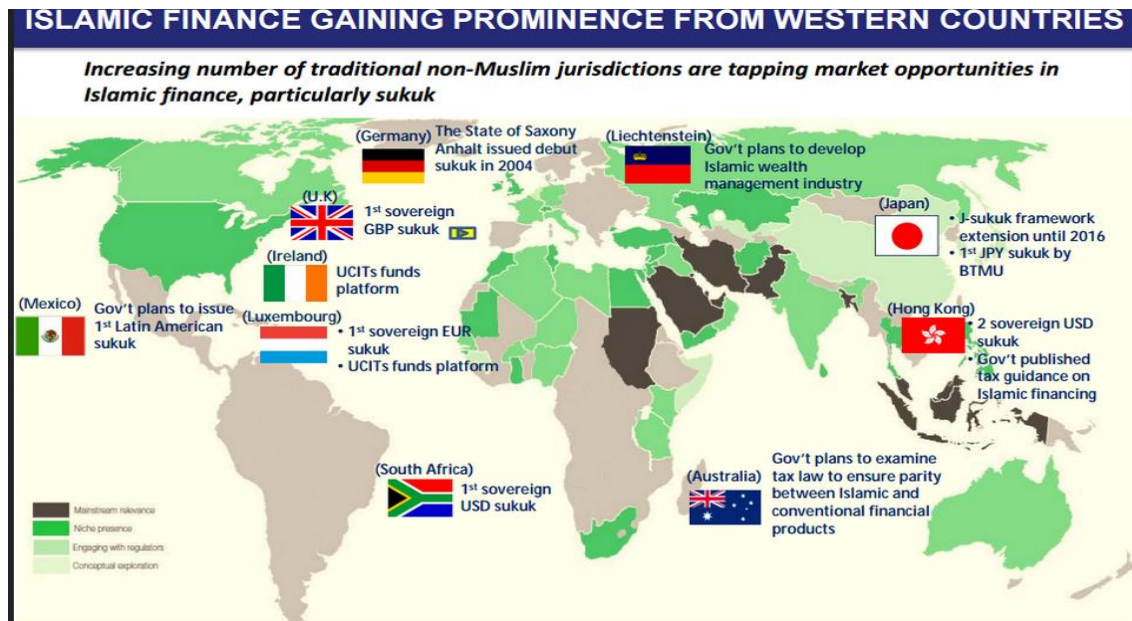


Figure 1: Islamic finance in Western Countries. (Adopted from Lifegate.com)

As Islamic finance continues to expand globally, the value of its assets has reached US\$2.4 trillion by 2017 and projected to reach USD3.8 trillion by 2023 (Thomson Reuter, 2018). The Global Islamic finance assets in 2017 are represented in Figure 2.

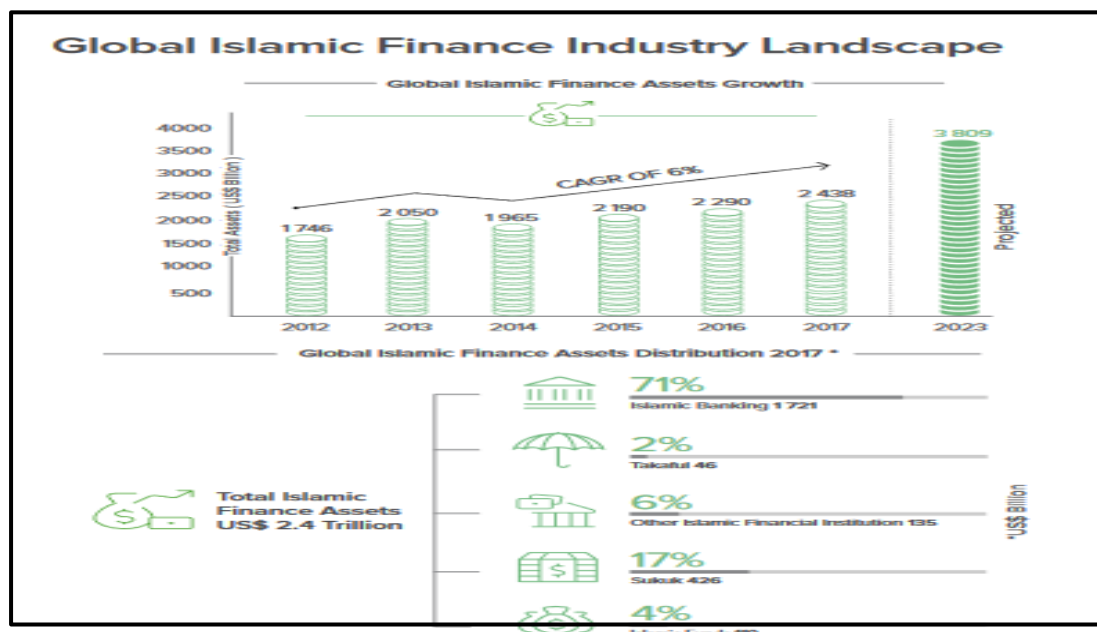


Figure 2: Global Islamic finance assets in 2017

Islamic banking in Nigeria

Islamic banking and finance's entry into the Nigerian financial system is a recent phenomenon. The first full-fledged Islamic Bank, Jaiz Bank Plc, was granted an operating license in 2011 and began full operations in 2012. However, the history of Islamic banking can be traced to Habib Nigeria Bank Limited and Ahmed Zakari

company in the mid-1990s (Obiyo, 2008). Taj Bank makes the full-fledged Islamic bank in the country. Along with Jaiz Bank Plc and Taj Bank are other conventional banks operating Islamic windows such as Sterling Bank, Stanbic IBTC Bank and Sun Trust Bank Nigeria limited. There are also other Islamic financial institutions in the country operating in the Islamic capital market (Lotus Capital) and microfinance banking sector.

Nigeria is grossly underbanked. According to (Demirguc-Kunt et al. (2017), “China has the world’s largest unbanked population, followed by India (190 million), Pakistan (100 million), and Indonesia (95 million). Indeed, these four economies, together with three others — Nigeria, Mexico, and Bangladesh — are home to nearly half the world’s unbanked population”. Nigeria, therefore, is in dire need of focused expansion in financial institutions, particularly those who can provide banking services.

Nigeria, therefore, presents a huge market and opportunities for a more significant number of Islamic financial institutions. Nigeria is a pluralistic society with multicultural ethnic and religious diversity. This diversity often drives the dynamics of socio-political allegiances among the people. Nevertheless, the economy and economic activities of the country remain largely immune to the negative impacts of the socio-political prejudices in the country. Nigerian economic environment presents Islamic banking as a conducive space to operate. Despite the potential roles of Islamic banking in promoting economic growth and development through financial inclusion in a multi-religious society such as Nigeria, research studying the attitude of the banking public towards Islamic banking and the impact of interest-free financing incentive on information disclosure is still at its infancy. This study, therefore, aims at filling this gap by creating a depth of investors' understanding of the significant roles Islamic banking can play to narrow down the investment fund deficit in the economy.

The question this paper proposes to answer is whether interest-free financing of Islamic banking would elicit incentives for investors (borrowers) to minimize the incidence of moral hazard arising from information asymmetry in their business and financial relationship with Islamic banks.

2. Literature review :

2.1 Theoretical review

Asymmetric information and Islamic banking

In the conventional financial system, every participant in a financial transaction either as a borrower or lender assumes a relative negotiating power depending on the level and the strength of information advantage available to him in respect of a particular transaction. In the conventional financial market, information is a crucial instrument that is often manipulated by various economic agents to optimize his benefits, usually to the disadvantage of his partner in a business transaction. Asymmetric information creates incomplete information to parties in a contractual relationship, which describes a phenomenal consequence of agency relationship.

Sandmo (1999) reviewed the pioneering works of William Vickrey (1961) and James Mirrlees (1971) on the economic theory of incentive under uncertainties and considered

the theory of asymmetric information as a new development in the economics of uncertainty. Sandmo (1999) further argued that the theory of information asymmetry focuses on the type of uncertainties where individuals have different types of information, the typical situation being that individuals have private information about their characteristics that are not directly available to other people (p, 166). Sandmo then gave the example of a situation in which asymmetric information can exist in a relationship between employers and employees in which employees have information about their skills and preferences that are not observable by the employers.

Akerlof (1970), in his study of the market for lemons (used cars), noted that the owner of a car knows more about the car than any potential buyer. The used car market inevitably involves asymmetric information. Akerlof (1970) further argues that awareness of their relative ignorance would lead potential buyers to assume that any used car would have a high probability of being a low-quality lemon. This would cause them to bid down the price of used cars in general, and this would drive the most high-quality used cars out of the market. According to the Akerlof theory of asymmetric information, and later by Spence and Stiglitz, informational advantage creates the possibility of adverse selection and moral hazard.

Information asymmetry deals with differences in information at the disposal of different parties to a financial contract (Mishkin, 1990). Since information is not freely available in the same proportion to all stakeholders in a decision process, in a capitalist financial system (incidence of asymmetric information), then come the risk and uncertainty in business and financial transaction. To minimize the impact of these risks and uncertainties, lenders, in addition to the reason for making income, charge interest rates as a price for parting with their money and compensation for the risk inherent in a business or associated with a borrower. This is, however, at variance with the Islamic principles of full information disclosure and risk-sharing in business transactions.

Mishkin (1990) further argues that borrowers have an informational advantage over lenders because borrowers know more about the business to undertake than the lenders. Mishkin further asserted that adverse selection leads to the inability of lenders to distinguish between borrowers of good quality and bad quality. Lenders, therefore, strike a balance by making loans at an interest rate that reflects the average quality of the good and bad borrowers. Therefore, if lenders cannot discriminate between the poor quality borrower and good quality borrowers, he may result in cutting down the number of loans he makes, thereby decreasing the supply of credit, leading to a substantial decline in investment and aggregate economic activities (Mishkin, 1990).

Armendariz and Morduch (2010) argue that the bank's incomplete information about poor borrowers and the borrower's lack of collateral to offer as security to banks explain why banks find it difficult to finance small businesses. Armendariz and Morduch (2010) also argue that due to the problem of adverse selection, banks often cannot quickly determine that customers are likely to be risky than others. To compensate for the probability of default risk, banks would like to charge riskier customers more than the right customers. However, because banks find it difficult to determine this, then they charge an average interest rate on all customers. This, however, tends to drive good customers out of the credit market. Armendariz and Morduch (2010) further argue that

banks also face the problem of moral hazard, which arises because banks cannot ensure that customers make the full effort required for their project to be successful. The study then concludes that the problems of adverse selection and moral hazard could potentially be eliminated if banks had costless information on their customers and able to enforce contracts.

Agency creates asymmetric information leading to the problems of adverse selection and moral hazard between the agent (borrower) and principal (lender). As a result of the moral hazard effects, there is the possibility that the agent's utility may not maximize the utility of the principal (lender). Therefore, the effects of asymmetric information are usually addressed by incorporating incentive structures in the contract for the complete sharing of information (minimizing the effect of information asymmetry) and for the agent to behave in a way to maximize returns for the principal (lender). To achieve this objective function of maximizing the lender's return, and thus, reducing the effect of asymmetric information in financial contracts. This impact of incentive in the contract was the focus of Laffont and Martimort (2001) studies. According to Laffont and Martimort (2001), the collective aspect of contracting settings is the possibility of information gap (information asymmetry) between agents and principals with dire consequences for the attainment of the objective of the contract. They further argue that contracts must be designed in a way to elicit the agent's private information through some incentives to reach an efficient use of economic resources. To achieve this objective function of maximizing the Islamic bank's return (reducing the effect of asymmetric information in financial contracts, it is hypothesised that:

H1 Interest-free finance will serve as a strong incentive to customers of Islamic banks to give full disclosure about their business transactions.

Theory of Planned Behaviour

The hypothesis that interest-free finance will elicit positive behaviour from Islamic bank customers to give full information disclosure about their business transactions can also be anchored on the Theory of Planned Behaviour (TPB) and Theory of Reasoned Action (TRA).

Conner (2020) posits that the Theory of Planned Behaviour and the Theory of Reasoned Action are the key determinants of an individual's actions or behaviour. He argued that that behavioural intention manifests a person's motivation influencing his conscious plan, and his decision to act. Also, Ajzen (1991) cited in Quintal, LLee & Soutar (2020, p798) argued that Theory of Planned Behaviour suggests that people are likely to carry out a particular type of behaviour if they believe: (1) such behaviour will lead to the outcome they value, (2) their important referents will value and approve of their behaviour and (3) they have the necessary resources, abilities and opportunities to perform such behaviour. Similarly, the Theory of Reasoned Action predicts that consumer's behaviour is influenced by the attitude which explains his purchase behaviour (Yadav, et al., 2015). These theories, therefore, explain the decision of Islamic bank customers not only to patronize the banks but be motivated by the outcome they value (i.e. of easy access and interest-free financing of Islamic banking) to volunteer full information about their business.

Every economic agent is rational in his behaviour and would always make such decisions that would maximize his benefit. To achieve this, lenders in conventional banking adopt the principle of risk transfer as an instrument of financial management. The principle of risk transfer has always led lenders to believe that problems consequently faced by borrowers in the process of applying the fund borrowed are the sole responsibility of the borrowers. This principle creates an opportunity for borrowers to indulge in asymmetric information. This, however, is in total contrast to the fundamental principle of risk-sharing of Islamic economic and financial system.

Risk sharing is a core fundamental principle of Islamic economic and financial relationships. Askari et al. (2012) assert that risk-sharing finance is trust-intensive and that Islamic finance is a financial system structured on risk-sharing. This means that since trust is the foundation of risk-sharing in Islamic finance, the incidence of information asymmetry should be very low. Askari et al. further stated that Islamic finance discourages risk shifting or risk transfer, that characterize interest-based debt financing.

An interest-based debt financial system is the bedrock of capitalist economies (Askari et al., 2012). Espousing the thought of Akerlof (1970), Stiglitz (1974), Stiglitz and Weiss (1983), and Askari et al. (2012) further state that because of agency problem creating asymmetric information, there is the possibility that an agent's utility maximization may not maximize the utility of his principal. The study then concludes that agency problem is usually looked into by incorporation of incentive structure in the contract for the complete sharing of information and for the agent to behave in a way to maximize rewards for the principal. Therefore, the hypothesis of the study is:

H2 The likelihood that an entrepreneur will be motivated to reduce information asymmetry about their business performance is related to both his/her religious belief and interest-free characteristics of Islamic banking financing (i.e., product characteristics of Islamic financing).

2.2 Empirical literature review

The World Bank and IDBG Global Report on Islamic finance (2016) revealed the under-development of risk-sharing instruments as a significant disincentive for investing in businesses considered to be of high-risk such as micro, small, and medium enterprises. The study concludes that micro, small, and medium enterprises sectors of the economies of most developing countries remain mostly untapped. World Bank and IDBG (2016) recommended that governments and relevant authorities should remove barriers such as lack of proper definition of property rights and appropriate tax treatment to boost the attractiveness of risk-sharing contracts of Islamic banking.

The fundamental principle of Islamic finance is the risk and profit-sharing feature of Islamic finance transactions as *Mudarabah* or *Musharakah* contracts (Ahmed, 2010). Ahmed further argues that it is this profit and risk-sharing feature of Islamic finance transactions that require a high level of disclosure and transparency in the Islamic finance system. Islamic finance emphasizes a strong linkage between the issue of financial stability and social responsibility. Fundamentally, therefore, according to Ahmed's (2010) study in Islamic finance, transactions must be real to give and take

delivery. Unlike in the conventional financial system, the associated risk with it cannot be transferred but shared between the parties. Ahmed (2010), therefore, concludes that because interest-based transactions are prohibited, Islamic finance is anchored on trade activities that generate fair and legitimate profit.

Islamic banking and finance have emerged as an essential component of the financial system of many countries, not only the majority of Muslim countries but also in Western countries. Awan and Bukhari (2011) investigated the criteria for selecting Islamic banks as against conventional banks in Pakistan. With a sample of 250 respondents consisting of Muslims and non-Muslims, the study finds that religious belief as an influential factor plays less significant in their choice of banks to patronize. The study concludes that the customers were significantly motivated primarily by product features and quality of service offered by Islamic banks. The study did not, however, consider the issue of information disclosure to the banks by the customers.

There have been several studies that attempt at investigating the factors that shape the attitude and behaviour of banking customers particularly towards Islamic banking (Al-Hunnayan & Al-mutairi, 2016; Saiti, et al., 2019). Al-Hunnayan and Al-Mutairi (2016) examine the factors that motivate customers to bank with Islamic banks in Kuwait. The study finds the quality of service and low service charge as the significant factors that influence the attitude of customers in Kuwait to patronize Islamic banks. Similarly, Saiti, Ardo & Yumusak (2019) investigate factors that influence the choice of Islamic bank by non-Muslim customers in Nigeria. The study finds that Non-Muslim customers who patronize Islamic banks were influenced by the subjective norm, perceived behavioural control and attitude. Subjective norm is the attitude to take a decision based on the expected value derivable from such a decision. The effect of interest-free financing contract as a factor that can influence the behaviour of Islamic bank customers to volunteer full information remains largely unexploited. This, therefore, provides a critical gap that needs to be filled.

3. Methodology

This study aims to investigate the effects of business decision motivation rooted in profit objective and religious beliefs on the probability of the interest-free characteristics of Islamic financing serving as an incentive to reducing information asymmetry by Islamic bank customers. The study obtained the view of the banking public in Nigeria using the questionnaire as the survey instrument. The study adopts a Multivariate Logistic Regression Model (MLRM) to explore whether business decision motivation and religious beliefs influence interest-free finance. Also, to investigate interest-free finance constitutes a strong incentive to entrepreneurs (borrowers) to enhance full disclosure of the performance of their businesses, and thus minimising the effect of information asymmetry.

Generally, logistic regression is more appropriate for testing hypotheses about relationships between a categorical outcome variable and one or more categorical or continuous predictor variables (Peng et al., 2002). Peng, et al. (2002) further state that the central mathematical concept that underlies logistic regression is the logit – the natural logarithm of an odds ratio. The logistic model, therefore, predicts the logit of Y

from X . The odds ratio of non-interest-bearing financing of Islamic banks serving incentive to reduce information asymmetry is represented in the model by (INC). Also, the independent variables in the model are economic factor represented by easy access to credit (CR), religious belief represented by religion (RG) and level of the knowledge and awareness of the credit processes and procedures in both conventional and Islamic banking by the respondents is represented by (LE).

Data collection

Data used for the study were obtained from primary sources with the aid of a questionnaire. The Likert-type questionnaire was designed to collect data from respondents. The scoring technique for the responses was also the Likert scale scoring device.

Population and sampling size

The population of this study is made up of entrepreneur (borrowers) who are in a financial relationship with banks in Nigeria. It is important to note that in Islamic finance, there is no such thing as a borrower or a lender relationship. The fundamental principle in Islamic finance is the entrepreneur/investor-capital provider relationship. The capital provider (*Rabul Mal*) and the entrepreneur or fund user (*Mudharib*) are in a business relationship under the *mudharabah* or *musharakah* contracts. Therefore, within the context of this study, entrepreneurs are to be understood as borrowers in the context of conventional banking. The entrepreneurs are customers with business accounts with the operating commercial banks in Nigeria.

Since the samples were from both Islamic and conventional banks, a combination of stratified sampling and stage sampling techniques were applied to select the banks from which respondents were finally selected. From each of the banks, questionnaires were administered to 20 customers selected randomly, giving the total number of sampled customers to be 200.

The Model

Logistic regression is a predictive modelling technique that is used when the dependent variable is binary categorical. That is, it can take only two values 1 and 0. The logit is the natural logarithm ($\ln$) of odds of y , and odds are the ratios of probabilities (π) of Y happening (i.e., entrepreneur been motivated by interest-free financing incentive to minimize information asymmetry) to probabilities ($1 - \pi$) of Y not happening (i.e., entrepreneur not motivated by interest-free financing incentive to minimize information asymmetry). This study adopts the model (Peng et al., 2013). The simple logistic model has the form:

$$\text{Logit}(Y) = \text{natural log (odds)} = \ln\left(\frac{\pi}{1-\pi}\right) = \alpha + \beta x \dots\dots\dots (1)$$

π = probability ($Y = \text{outcome of interest}/X = x$)

$$\text{a specific value of } X = \frac{e^{\alpha + \beta x}}{1 + e^{\alpha + \beta x}} \dots\dots\dots (2)$$

Where π is the probability of the outcome of interest, α is the Y-intercept, β is the regression coefficient, and $e = 2.71828$ is the base of the system of the natural logarithm.

Extending equation (1) into a multivariate model, we have equations (3)

$$\text{Logit}(Y) = \ln\left(\frac{\pi}{1-\pi}\right) = \alpha + \beta_1 X_1 + \beta_2 X_2 \dots\dots\dots (3)$$

Therefore,

$$\pi = \text{probability}(Y = \text{outcome of interest} / X_1 = x_1, X_2 = x_2) \\ = \frac{e^{\alpha + \beta_1 X_1 + \beta_2 X_2}}{1 + e^{\alpha + \beta_1 X_1 + \beta_2 X_2}} \dots\dots\dots (4)$$

Where π is once again, the probability of the outcome of interest, α is the Y-intercept, β s are **regression** coefficients, and Xs are set of predictors. α and β s are usually estimated by the maximum likelihood (ML) method.

The null hypothesis underlying the model states that all β s equal zero. A rejection of the null hypothesis implies that at least one β does not equal zero in the population, which means that the logistic regression equation predicts the probability of the outcome better than the mean of the dependent variable.

The results of the analysis

The result shows the logistic model in equation (5).

Predicted logit

$$\text{INC} = -2.3458 + (2.4794) * \text{CR} + (0.2212) * \text{RG} + (2.1275) * \text{LE} \dots\dots\dots (5)$$

Where INC indicates the odds (whether) of an entrepreneur being motivated by incentive (INC) of easy access and non-interest-bearing financing of Islamic banking to voluntarily give full information about the performance of their businesses and thereby reduce the incidence of moral hazard and information asymmetry.

CR represents the real economic factor for obtaining financing as a critical variable in determining whether an individual will be motivated by the incentive of non-interest-bearing financing to volunteer full information about the performance of their businesses.

RG also indicates the religious belief of an individual and its influence in taking economic decisions

LE represents the level of awareness and understanding of individuals of the processes and procedures required for obtaining financing from both conventional and Islamic banks.

Table 1: Logistic regression analysis of incentive (INC) of interest-free financing of Islamic banking to reduce information asymmetry.

Predictor	β	SE β	Wald's test X^2	df	P	odd's ratio
CR	2.4794	0.4954	25.0496	1	0.0000	11.934
RG	0.2212	0.4508	0.24077	1	0.6237	1.2476
LE	2.1275	0.5729	13.7893	1	0.0002	8.3941

C	-2.3458	0.6537	1	0.0003	NA
Test statistics			X^2	df	p
Overall model evaluation					
Likelihood ratio test			70.4489	3	0.000
Wald's test			45.24918	3	0.0000
Goodness-of-fit test					
Hosmer & Lemeshow			6.2235	6	0.3986

According to the model as presented in Table 1, the log of odds (i.e., odds ratio) of an entrepreneur's pure economic reason (CR) with a coefficient of 2.4794, is positively and significantly ($p < 0.05$) related to the incentive of access to non-interest financing of Islamic banking (INC) to reduce moral hazard and information asymmetry.

Similarly, (LE) representing the level of knowledge, awareness, and understanding of the processes and procedures of obtaining credit from both conventional and Islamic banks is also positively significant. While the religious belief of the respondents, though, positive but not significant. This means that for this model, access to credit (pure economic or business decision) and level of awareness by the entrepreneur of the financing philosophies of the two types of banking are critical factors in their decision whether seeking credit requests from Islamic banking. Therefore, for most business-focused individuals, pure economic decisions relating to how to source capital and at what cost usually overshadow all other biases.

The result of the logit regression, therefore, indicates that the higher an entrepreneur considers non-interest-bearing financing as a critical factor in his business decision variables, the higher will be his readiness to voluntarily render greater disclosure about the performance of his business to the fund provider.

Furthermore, as a result, indicates, RG (religious belief) though not significant ($p > 0.05$), is positively related to odds of being motivated by non-interest-bearing financing of Islamic banking to provide further disclosure of their business performances. This means that there exist some levels of bias based on religious sentiment; it certainly not a dominant factor when entrepreneurs are confronted with funding decisions. This is in line with the apriori expectation that adherents of the dominant religions in the country would be more inclined to believe that avoidance of moral hazard and information asymmetry agree with their religious belief and, therefore, have natural inclination to be motivated. This is more so with the Muslim respondents who believe in Sharia as the divine law guiding all aspects of their lives. It is, however, very instructive to note that despite the rivalry usually exhibited by the two major religions in the country, economic factors shape the decision of the entrepreneurs in the manner they conduct their businesses.

For the level of knowledge and awareness of the processes and procedures (LE), the odds of influencing the decision of the entrepreneur to be motivated by the non-interest-bearing financing to reduce moral hazard and asymmetry is also positive and significant ($p < 0.05$). This means that the higher the level of awareness and understanding of the processes and procedure which tend to make obtaining financing in the conventional banking very demanding and challenging, the higher the motivation by non-interest financing of Islamic banking. Furthermore, the risk-sharing principle of Islamic banking in sharp contrast to risk transfer of conventional banking creates an additional incentive for Islamic finance products and, therefore, eliciting voluntary disclosure of more excellent information and thereby minimizing the incidence of moral hazard and information asymmetry.

Diagnostic tests

Wald's test, likelihood ratio test, and Hosmer & Lemeshow test were performed to carry out the overall model evaluation and examine the "goodness-of-fit" of the model. The Wald's test result shows the overall goodness of the model, while the likelihood ratio test confirms that there is neither variable omission nor variable redundancy in the model. The Goodness-of-fit statistics of Hosmer-Lemeshow (H-L) give an X^2 (6) of 6.2235 but not significant at ($p > 0.05$). This suggests that the model fits the data very well. This means that the null hypothesis of a good model cannot be rejected.

The statistical significance of the individual coefficients was tested using the Wald chi-square statistic. The result of the test shows economic factor in terms of easy access to financing from the Islamic banking system and level of knowledge and awareness were significant predictors ($p < 0.05$) of incentive to provide further information disclosure about their business and thereby minimize the incidence of moral hazard and information asymmetry.

Conclusion

The study examined whether non-interest financing of Islamic banking can be a strong incentive to entrepreneurs seeking financing to fully disclose the performance of their enterprises and thereby reducing the effects of moral hazard arising from information asymmetry. The relationship between incentive of interest-free financing and the attitude of investors towards information asymmetry in their financial, contractual relationships with banks was investigated using the Multivariate Logistic Regression model of analysis.

Economic factor shaping decision anchored on profit objective and easy access to credit is tested as a critical variable. Other vital variables investigated are the religious belief of the respondents as well as the level of their knowledge of bank procedures and processes for accessing credit. The findings indicate that many banking publics consider the incentive of interest-free financing and easy access to financing products of Islamic banks as a necessary motivating factor, and thus the potentials to induce them to give voluntary greater disclosure about the performance of their businesses and thereby to reduce the incidence of moral hazard and information asymmetry.

Similarly, the level of knowledge and awareness of the processes and procedures of obtaining financing facilities from the two types of banking also indicate a positive and

significant relationship with the motivation of interest-free financing of Islamic banking, and therefore, to induce the entrepreneurs to reduce the incidence of moral hazard and information asymmetry.

Furthermore, religious belief, though not significantly related to the motivation for an Islamic banking product, nevertheless shows a positive relationship. This study, therefore, concludes that even though religion is an essential factor in deciding whether to bank with Islamic banks, it is nevertheless, not significant. The conclusion from this finding, therefore, establishes that even though Islamic banking is predicated on *Sharia* principles, many Non-Muslims are motivated by interest-free financing, for economic reasons, to establish a banking relationship with Islamic banks and give voluntary greater disclosure about their businesses. The interest-free financing products of Islamic banking are found to be strong incentives to elicit more meaningful information sharing by entrepreneurs with their fund providers.

To ensure greater financial inclusion for individuals, small and medium enterprises in Nigeria; therefore, there is the need to deepen the financial market beyond the existing conventional system. Financial incentives that can naturally elicit voluntary information disclosure from borrowing bank customers and thereby reducing asymmetric information and moral hazard must be developed and promoted. It is also essential to design products that fit the need of consumers of financial services at the price they can afford.

Islamic finance in Nigeria, therefore, presents enormous opportunities to bridge the existing funding gap in the real sector of the economy particularly, for small and medium enterprises that constitute a considerable proportion of the productive sector. It eliminates the high cost of funds in the form of high-interest rates and the hurdles of collaterals usually faced by many small and upcoming entrepreneurs. Most importantly, it enshrines the principle of risk-sharing as against the risk transfer characteristics of the conventional system.

The policymakers, therefore, need to make conscious and determined efforts at promoting the establishment of many more Islamic banks through policies of encouraging the development of Sharia-compliant financial instruments, the promulgation of relevant tax laws and supportive regulations. The macro objectives of the government of full employment, price stability, and financial inclusion can further be attained through the asset-based feature of Islamic banking and finance. In conclusion, an efficient and secure environment for the Islamic financial system will no doubt open easy access to the Nigerian financial system to the global Islamic financial market.

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