TUJISE Turkish Journal of Islamic Economics

The Role of Islamic Banks in Tackling Financial Exclusion in North-East Nigeria

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Abstract: The purpose of this study is to explore the level of financial exclusion in North-East Nigeria and determine the reasons and barriers behind the huge percentage of financial exclusion. The contemporary Islamic bank is considered as a solution to tackle financial exclusion. The paper uses a quantitative approach in which 2500 questionnaires were distributed out of which 2352 were received back from the respondents. The data was gathered and analyzed using Structural Equation Modeling, and descriptive, correlation and regression analyses. The findings revealed that awareness, literacy, and religiosity are considered as the key barriers to financial exclusion and the need of Islamic banks with Shariah-compliant products is highly felt to address religious motivation in North East Nigeria. Since Islamic banks are compliant with Shariah principles, the Nigerian government should facilitate the creation of more Islamic banks to tackle financial exclusion.

Keywords: Islamic bank, Awareness, Poverty, Financial exclusion, North East Nigeria.

JEL Classification: G2, L5

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DOI: 10.26414/A102
TUJISE, 8(1), 2021, 87-110
tujise.org

Submitted: 15.01.2020
Revised: 15.09.2020
Accepted: 13.11.2020
Online first: 15.01.2021

Introduction

Financial exclusion is an issue that is caused by different factors. Different programs are devised in many countries to tackle and reduce financial exclusion. In addition to the efforts of the governments, several programs have been proposed such as N-Power, cash-transfer and trader money, in order to address poverty and attract financial inclusion. Financial exclusion is referred to as a situation where people lack access to financial services and products (Sain, Rahman & Khanam, 2016). Nearly three billion of the world's population faces difficulties in accessing affordable financial services which is an alarming condition in context of the incidence of financial exclusion in the world (Kumar & Mishra, 2011).

A financial system should cater for the needs of the people by providing them with good financial services such as credit, offering savings and risk management products and services. Such a financial system stimulates access to financial services in turn enhancing economic growth and bridging the income inequalities in the society (Simpson & Buckland, 2009). Nigeria consists of six geo-political zones namely: North-East, North-West, North-Central, South-South, South-West, and South-East. However, the study will only focus on North-East region which is a Muslim dominated area with the majority of its population facing financial exclusion. However, a faith or religious belief has been considered as one of the strong barriers to financial inclusion in this region. An earlier research conducted by Muhammad, Dauda, and Mamman (2018) suggested that the illiteracy and religious beliefs were the fundamental contributors to financial exclusion in this region. The authors recommend creation of awareness and financial literacy to attract and accommodate the excluded people in the region. This research focuses on the role of Islamic banks in tackling financial exclusion in the North East Nigeria. Financial exclusion is an important issue in today's world, both in the developed and developing countries. The concept of financial exclusion has lately attracted attention of different governments and non-governmental organizations including the World Bank. Many policies and programs have been introduced in different parts of the world to tackle and address this issue. Nigerian situation is different and graver when compared to other countries because people in Nigeria lack access and confidence in conventional intermediaries due to their religious beliefs, the primary reason behind exclusion.

Literature Review

Financial Exclusion

In contemporary literature, financial exclusion has been described as a lack of access to financial services in the contemporary literature (Boutabba, 2014; Bryne et al., 2007). The rate of unbanked population has been estimated at approximately 39-40 percent among Nigerian adults and 60-60.2 percent in the North-East Nigeria. However, there is theoretical debate on the question that whether religious reasons contribute to financial exclusion in the region or not (Muhammad, Dauda & Mamman, 2018). Some studies suggested that difficulty in accessing financial intermediaries was a result of lack of awareness about financial institutions (Aliyu 2012). Allen, Demirguc-Kunt and Klapper (2016), suggested that the availability of financial institutions within rural and urban communities provides better financial inclusion opportunities.

Financial Literacy

Financial exclusion is recognized world-wide as a significant aspect of socio-economic imbalance whereby the vulnerable communities and society groups are isolated from the mainstream financial services, especially bank lending and borrowing (Affleck & Mellor, 2006). Certain measures are being undertaken to combat the issue of financial exclusion and such measures are divided into different categories which include social investment programs, community finance, microfinance programs, and community finance development. However, such policies were initiated and adopted in United Kingdom to stimulate the local enterprises and mitigate dependency on state support, and enhance community development and financial literacy to provide loans to the vulnerable communities - the neo-market approach adapted to the grant-funding community to resolve the problem of financial exclusion.

Joshi and Rajpurohit (2016) analysed one hundred (100) respondents on the basis of their perspective and awareness about financial inclusion. The results suggested that more than seventy five percent of the households were engaged in agricultural business and still had poor awareness and understanding level of financial inclusion. The study further predicts that financial inclusion is not merely opening an account in the bank. Instead, the objectives of financial inclusion should include keeping people informed, aware and confident about the financial services which in turn should be provided at their doorstep. The study by Vikram (2014) shows awareness and penetration levels of different financial services offered by the financial institutions. The awareness was measured using primary data which was gathered from the poor in the urban region of Nagpur. The findings predict that the financial products such as demand loan, current account, credit card, direct debit facility, and mobile banking were not effectively utilized. However, the aggregate awareness of the services was realized just below 41 percent. It further indicated that lack of proper guidance, cooperation and transparency were the reasons behind low level of literacy and high exclusion. Shabna (2014) examined the level of literacy and awareness about financial inclusion among Kerala households and investigated the extent of financial exclusion among poor and their access to the bank account. The survey method was employed and two hundred (200) respondents from Karala were selected. The findings predicted that the level of literacy and occupation of the respondents significantly influenced the access and usage of the bank services. It further disclosed the households generally access and operate bank accounts to receive government benefits under different schemes or for monetary aid by different non-governmental organizations.

Lack of Awareness

Mujhesh (2012) examined people's behaviuor towards the banking system in the rural areas in India. His findings indicate that the level of awareness is the biggest problem and attracts exclusion in rural communities. Rao (2013) conducted a study from the banker's perceptive. The study emphasized the banks could not be blamed for exclusion a vast array of banking services remains potentially unexplored. The research recommends regular campaigns to create awareness about financial inclusion. Joshi and Rajpurohit (2016), Shabna (2014), and Friday (2015) analyse the impact of financial exclusion on economic growth. Muhammad, Dauda and Mamman (2018) shows that in context of financial exclusion nearly one-third of world's adults i.e. 1.7 billion, are still unbanked and do not have access to formal financial institutions. The research explores the level of financial exclusion and potential ways of tackling and promoting inclusive growth in the economy. In performing this analysis, the authors use different inclusive growth indicators and indices. The results indicate that accommodating new technology, innovations, and improving access to banking services may promote financial inclusiveness and enhance growth in the economy. Hence, it recommends improvements in education on financial literacy and better access to internet services (Mehrotra & Yetman, 2015; Della Torre et al. & Solari, 2013).

Low-income Households

Drakeford and Sachdev (2001) investigated the causes of financial exclusion in the United Kingdom and analysed the government efforts to deal with problem.

Hannig and Jansen (2010), and Prasad (2010) revealed that the government being concerned and disturbed with the level of the problem, perhaps, had been actively taking a step by step approach to deal with the issue. However, all steps taken to address the issues were supply side solution oriented. Instead, using their regulatory ways, the government appeals to the financial institutions to increase access to the excluded. The method used in this study was a common model that compares the influence and different forms of financial exclusion. The variables included gender, age, social class, household status, and house tenure. The research findings predict that households, employment status, housing tenure, and income are factors that significantly influence financial exclusion whilst marital status, level of education and age have a lesser correlation with financial exclusion. Das and Suganthan (2010), and Job, Innocent and Godfrey (2015) highlighted the unreachable financial system and low- income earner status as hindrances to financial inclusion and economic growth.

Policy Responses

Dymski (2005) concludes his insightful investigation and analysis by ranking financial institutions in terms of their competence and equality of wealth opportunities. Adeyemi, Pramanik and Meera (2012) investigated a wide range of issues related to financial exclusion. Their study investigated the extent to which financial exclusion was caused by different policies. The study indicated that the widespread liberalization of financial intermediaries and industry that took place in Europe, intensified the banking competition which was partially responsible for exclusion during the past. Sarma (2012), and Duncombe and Boateng (2009) examined the existing relationship between the variables of financial exclusion and, sustainable development and livelihood such as social capital, physical capital, natural capital and human capital whilst comparing them with savings, credit, and remittances among Muslim households in Ilorin, Kwara State, Nigeria. Furthermore, the study analysed a structured survey questionnaire distributed to the households by using SPSS and Amos modelling equation. The invariance analyses and findings revealed that household needs are unaccomplished. Nonetheless, the results entail that financial inclusion strategy should be encouraged and a broader sustainable framework for enhancing financial inclusion should be introduced. Gender disparity is mentioned among the causes of financial exclusion that may emerge from different social attitudes emanating from biological differences. However, studied find inconclusive evidence on the correlation between empowerment of women and their financial inclusion. Ashraf, Karlan, and Yin (2010) identified experimental evidence that empowering women financially through financial institutions reduces their bargaining position and promotes inclusion among the households. Studies by Joshi and Rajpurohit (2016), and Neumark and stock (2006) confirm this result. Equal pay has reduced unemployment amongst women and has enhanced their financial inclusion (Omotayo, 2015; Siddiki 2015). Friday (2015) find that in the developed countries, financial exclusion is invariably experienced by vulnerable members of the society. The percentage of adults in Europe that lack access to financial intermediaries is almost 17.9 percent in Greece, 22.4 percent in Italy, 16.8 percent in Ireland, 13.5 percent in Australia, 16.7 percent in Portugal and 10.5 percent in the United Kingdom. The aforementioned level of financial exclusion and its consequences for the developed world are alarming. Financial exclusion effects are becoming significantly severe primarily resulting from an incapacitated effort or alternative traditionally towards financial exclusion. As a result, it prevents the government from generating income through collecting taxes from those who are excluded. On the order hand, it prevents unbanked from accessing loans and insurance; hence also exposes them to financial and social exclusion. Kumar and Mishra (2011) proposed a financial inclusion index to determine the level of financial inclusion in the country. The supply side such as insurance and access to savings and demand dimensions such as availability of banking services, banking penetration and usage of banking services were all considered for the development of the index. Furthermore, it was observed that adequate policy measures are required to enhance and improve the levels of financial inclusion (Morgan & Pontines, 2014). Mckillop et al. (2007) investigated financial exclusion in the UK while focusing on the government's policies designed to tackle and reach out to the financially excluded particularly ones that actively encourage credit unions and access to loans. The study used publicly available data on credit unions to determine the effectiveness of the government's efforts. Their findings show that the government grants stimulate growth of credit unions and assist inclusion. The authors further recommend government policies and trade associations to encourage the development of credit unions and enhance financial inclusion.

Adeyemi, Pramanik and Meera (2012) discusses literature on financial exclusion that mentions factors limiting the access to banking in developing countries, particularly in Nigeria. The study reviews the literature related to financial exclusion and identifies the way in which financial intermediaries operate in African countries, specifically in Nigeria. The study attributes the problem of financial exclusion to a high percentage of ignorance, illiteracy and underdeveloped banking culture and banking industry in Nigeria. The findings show that financial intermediaries shall develop away a system that attracts a large informal economy through corporate social responsibility to address society's objectives and realities.

Furthermore, activities should be enacted to improve the human condition and encourage access of poor to financial institutions and enhance inclusion. Joseph and Varghese (2014) examined the financial exclusion in India by analysing five states by including both public and private banks. In the study, the number of bank branches, onsite and offsite Automatic Teller Machines (ATM), and debit and credit cards issued were used as variables indicating the growth of banks. The findings of the study suggested that in semi-urban and rural areas usage of debit cards had significantly increased and the level of financial inclusion was low despite inclusive measures and policies.

Khraim (2010), and Mujhesh (2012) revealed that the low levels of awareness about banking in rural areas led to vast exclusion. Studies also indicate the incidence of low access to the financial service among low-income earners and suggested the development of a system of awareness in order to achieve financial growth and enhanced financial inclusion. Mansoor, Fida, Nasir and Ahmad (2011) indicate a variety of formidable issues related to financial exclusion that hindered financial inclusion and economic growth. Whilst Muhammad, Dauda and Mamman (2018) show that over 60 percent of North-East population was not in the financial industry, 30 percent had formal access to the financial institutions and 10 percent were not in formal banking due to unemployment and lack of initiatives from the government. Bihari and Pradhan (2011) show that lack of adequate digital facilities in rural and underdeveloped areas leads to low financial inclusion in these areas. Arya (2015) identified the role and significance of financial inclusion in economic growth of a country. Nadar (2013) expressed that technology may help increase the access of urban population to financial institutions. His research attempts to understand the banking services and the role of information technology in promoting financial inclusion.

Benefit of Islamic Microfinance and Poverty Alleviation Policy

Yinusa, Alimi and Ilo (2016), Abiola and Salami (2011) describe microfinance as an alternative approach that reduces financial exclusion and poverty by accommodating and empowering poor people around the globe. Despite the large potential of microfinance, it hardly reduces financial exclusion and its schemes generally remain untapped (Drakeford & Sachdev, 2001; Mckillop, Ward & Wilson, 2007; Abdul Rahman, 2007). In Muslim communities, interest- based microfinance is rejected due to the incidence of interest. Realizing this, Bangladeshi regulators proposed the idea of Islamic microfinance that comes with a Shariah-compliant model and offers a range of products to replace the conventional microcredit offered by financial intermediaries. The history of poverty alleviation in Nigeria can be traced back to year 1976 when General Olusegun Obasanjo was in power. Similarly, the Green Revolution was introduced in 1980 by the president Shehu Shagari to reduce the level of food importation to boost the local fabric industry and crop production in the country. In 1986, the directorate of food, roads and rural infrastructure was introduced by General Ibrahim Babangida. Subsequently, General Sani Abatcha introduced family support programme in 1997 under the military regime. After the return of the democracy in 1999 National Poverty Eradication program was introduced but hardly achieved any success in addressing the issues of poverty and financial exclusion (Adebayo, 2012; Tunji, 2013). Late president Umaru Musa Yar Adua, introduced a seven point agenda in an effort to tackle poverty and address inclusion amongst the poor and vulnerable in Nigeria. Notwithstanding, president Goodluck Jonathan launched You Win and Subsidy Reinvestment Empowerment program to reduce massive unemployment among Nigerian graduates and to provide them with business opportunities (Tunji, 2013). As mentioned above, nearly all regimes enacted different programs to deal with poverty and increase financial inclusion but none of the programs had promising results. The current government of president Buhari has also introduced different strategies to deal with poverty and financial exclusion in Nigeria, particularly in the agricultural sector. Despite all these initiatives and strategies of poverty eradication, financial exclusion is yet to be achieved.

Religious Factor

Wan et al. (2008) indicate that Muslims are aligned towards Islamic banking in different parts of the world although non-Muslim customers also prefer Islamic banking to conventional banking. Some studies reveal that religion is not a major motivator rather than the standards of such financial institutions and their Shariah-compliant products are what matter. Ahmad and Pandey (2010), and Dusuki and Abdullah (2006) opined that non–Muslim participation in Islamic banking is not because of religious affiliation but due to the qualitative financial services that are provided by the Islamic banks. Echchabi and Aziz (2012) emphasize that religiosity has a positive influence on Islamic banking and attracts majority Muslims towards these banks. Thus, it clearly indicates that religious education promotes Islamic bank sensitivity through shariah- compliant products that are preferred over their conventional counterparts (Khraim, 2010). It has been observed that in countries with large Muslim populations Islamic banks help in addressing the issue of financial exclusion.

Methodology

The study explored the level of financial exclusion in North East Nigeria, a region that suffers from a huge financial exclusion as indicated by the Central Bank of Nigeria. The quantitative method was adopted, and structured questionnaire was designed and distributed between two thousand five hundred (2500) individuals in the North Eastern region consisting of Adamawa, Bauchi, Borno, Gombe, Taraba, and Yobe. Only two thousand three hundred fifty-two (2352) of these questionnaires were received back. The audience that was targeted included bank customers, marketers, the staff of the banks, poor households, and unemployed people. The Confirmatory Factor Analysis (CFA) and correlation coefficient and regression analyses were used to analyse the data and test the model. The survey was conducted between 25 March 2019 and 10 May 2019 in which questionnaires were filled face-to-face, or via WhatsApp or Facebook for accuracy, validity, and reliability. All the respondents chosen were over 18 years old. The regression and correlation were analyzed using SPSS through descriptive analyses, and the study variables are explained in the Methodology table in appendix 1. Amos analysis of the demographic data was performed and entries for outliers and missing values were generated. A descriptive analysis of the data was then performed to review its reliability and validity. According to Neumark and Stock (2006), reliability refers to determining repeatability or internal consistency of the factor using Cronbach's alpha, however, if the alpha coefficient for a particular factor or variable is low the item or factor should be deleted for the improvement of the coefficient (Schmitt, 1996). Hair et al. (2006) show that addition or removal of any item of factor loadings in the study can improve the reliability of the variable. The Cronbach's alpha showed the overall reliability to be above 0.7 hence indicating that our model is reliable (Nunnally & Bernstein, 1994). Confirmatory factor analysis (CFA) based on Hair et al. (2006) was also performed to determine convergent and discriminant validity. Thus, the Confirmatory factor analysis (CFA) manifested the reliability of entire variables for having values above 0.5 (Hair et al., 2006; Bryne et al., 2007).

Reliability and Convergent Validity

The dimensionality of the constructs was successfully achieved for the reliability using Cronbach's alpha, Average Variance Extracted (AVE) and Composite Reliability (CR).

Table 1

Reliability and Convergent Validity

Item(s)	Factor Loading	Cronbach's alpha	Average Variance Extracted "AVE"	Composite Reliability "CR"
AW1	0.663	0.785	0.755	0.801
AW2	0.801			
AW3	0.803			
AT1	0.884	0.797	0.776	0.828
AT2	0.888			
AT3	0.557			
BE1	0.793	0.793	0.811	0.794
BE2	0.829			
LI2	0.771	0.700	0.731	0.698
LI4	0.692			
RE1	0.698	0.848	0.782	0.865
RE2	0.878			
RE3	0.857			
RE4	0.696			
FE1	0.729	0.784	0.739	0.783
FE2	0.736			
FE3	0.753			

The above construct items indicate that the (17) of constructs were used however some construct items were deleted due to their low loading and for the model fit. These constructs items are (BE3, LI1, LI3 and FE) with constructs item load at the below 0.390. Cronbach's alpha values show the acceptability level to be above 0.5. The Average Variance Extraction (AVE) shows high reliability to be greater than > 0.5 as recommended by Fornell & Larcker (1981). Moreover, Composite Reliability (CR) is showing good reliability i.e. above 0.70, as recommended by (Hair et al., 2010) except literacy which indicates the value of 0.698, marginally below 0.7.

Discriminant Validity

The discriminant validity evaluates how truly the above construct items are discrete and distinct from the others. Discriminant validity is examined to show the correlation between factors in the model that should be below 0.85 as suggested by (Kline, 2010).

Table 2

Discriminant Validity

	FE3	FE2	FE1	LI4	RE4	RE3	RE2	RE1	LI2	BE2	BE1	AT3	AT2	AT1	AW3	AW2	AW1
FE3	.658																
FE2	.333	.630															
FE1	.377	.375	.693														
LI4	.372	.299	.317	.681													
RE4	.268	.228	.216	.308	.776												
RE3	.284	.206	.215	.232	.434	.762											
RE2	.286	.260	.262	.263	.438	.576	.697										
RE1	.284	.234	.228	.333	.379	.365	.410	.745									
LI2	.374	.373	.332	.371	.279	.277	.282	.280	.709								
BE2	.232	.250	.283	.241	.239	.218	.246	.322	.248	.750							
BE1	.238	.256	.311	.249	.183	.164	.212	.257	.259	.506	.792						
AT3	.267	.236	.232	.210	.195	.179	.197	.194	.265	.284	.440	.688					
AT2	.206	.219	.212	.221	.204	.165	.232	.260	.287	.341	.323	.289	.548				
AT1	.245	.263	.264	.248	.215	.174	.220	.311	.347	.362	.335	.302	.474	.644			
AW3	.265	.296	.255	.240	.356	.357	.364	.337	.303	.280	.282	.251	.267	.286	.654		
AW2	.264	.248	.271	.244	.351	.343	.351	.362	.291	.221	.220	.201	.232	.227	.447	.614	
AW1	.285	.208	.241	.205	.426	.418	.416	.320	.228	.168	.189	.202	.148	.167	.308	.309	.671

The inter-correlation between the constructs items ranged from 0.148 to 0.792 which indicates the lower level of cut-off of 0.85 as recommended by (Kline, 2010). It shows that the correlation is less than the average variance extracted hence indicating an absolute good fit loading and good validity as well as the discriminant validity (See figure 1).

The Study Area

The North East region is selected for the research. The selection was deliberated on compared to the level of financial exclusion in the area, North East it is the most complicated area and abundant by the government in term of implementing policies of financial inclusion and some of the policies were not effectively monitored. North East has a population of 23,558,674, which is 60.5% and about (14, 252, 997) of the population were financially excluded in North East, Nigeria, that is 0001% of the entire population of the region.

Table 3
Descriptive Results

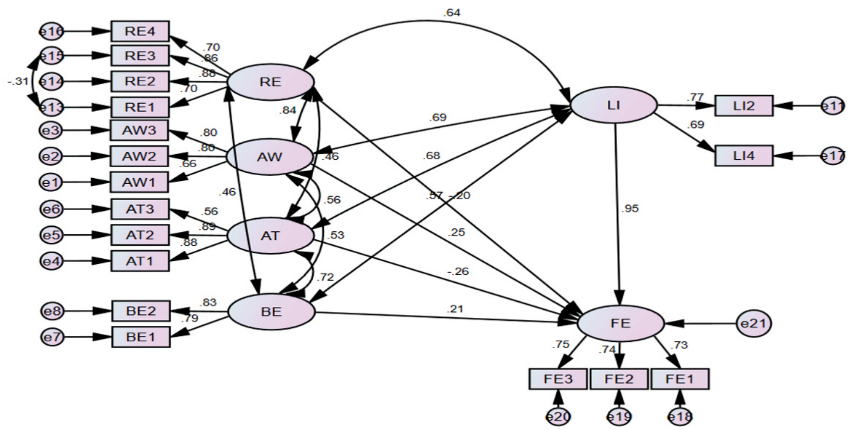
Demographic variable	Descriptive Items	Frequency	Percentile
Gender	Female	784	33.3 %
	Male	1568	66.7 %
Age	18-30	990	42%
	31-45	838	35.6%
	46-60	443	18.84%
	60-Above	81	3.5%
Education	Primary	344	14.7%
	Secondary	638	27%
	Degree	882	37.5%
	Master-above	194	8.3%
	None of the above	294	12.5%
Religion	Muslim	1764	75%
	Christian	392	16.7%
	Others	196	8.34%
Monthly Income (₦) (₦): Nigerian currency symbol	Less than 10,000	325	13.82%
	20,000 – 40,000	875	37.21%
	50,000 – 99,000	376	16%
	100,000- Above	776	33%

Table 4 above summarizes the demographic facts of our sample. The gender clearly shows that the majority of respondents i.e. 66.7 percent were male. The age levels of the respondents were divided into four categories but the majority of the participants were young age i.e. from the first and second age groups (18-30 and 31-45) hence showing the potential resilience of the system in future. The levels of education of the respondents were highly impressive. 46 percent of respondents were graduates holding their first degree and postgraduate degree. However, overall, the level of literacy is still a concern with over 53 percent respondents yet without their first degrees.

Almost 86 per cent of the respondents were government workers, businessmen and women as each group had a monthly earning of over ₦10, 000. Moreover, the majority of the respondents are Muslims i.e. 75 per cent. Notwithstanding, most of the respondents were Muslim, which indicates that a motivating factor behind not joining the conventional system was religious bias.

Figure 1

Model Measurement



CMIN/DF:	3.656	IFI:	0.917	RMSEA:	0.087
GFI:	0.893	TLI:	0.890		
AGFI:	0.841	CFI:	0.917		

The assumption of factor loadings and normality distribution of endogenous variables indicated the level of loadings to be above 56 per cent, hence showing good loading (Hair et al., 2006). The constructs item signifies the impact of religion, awareness, literacy, and benefit on financial exclusion in the North-East. Despite that fact that the goodness of fit indices (GFI) is below than the value required (Hair et al., 2006), it is still in the range and close to 90 percent as recommended by (Hoyle, 1995; Kline, 2010). AGFI meet the recommended value of above 0.8 as indicated by Chau and Hu (2001), the same is the case with CFI with value above 0.9 as recommended by (Bryne, 2007) and TLI and IFI that also are around the required value. Furthermore, the RMSEA is 0.087 and below the recommended value ≤ 0.10.

Table 4
Covariances Between the Construct Items Loadings

Constructs	Estimate	SE	CR	P
AW <-> AT	.239	.032	7.439	***
AW <-> RE	.327	.037	8.770	***
AT <-> BE	.362	.041	8.731	***
AW <-> BE	.227	.034	6.753	***
AT <-> RE	.198	.030	6.534	***
BE <->RE	.196	.032	6.132	***
AW <->LI	.280	.035	8.038	***
AT <-> LI	.313	.038	8.315	***
BE <-> LI	.260	.034	7.443	***
LI <-> RE	.250	.034	7.443	***

***Indicates the significant covariance amongst the constructs

The covariances between the construct items fit others with a significant p-value of 0.000, as indicated in the figure 1. Therefore, the relationship between the variances is considered significant among the variables. Precisely, measuring the random constructs items between the constructs is to justify the flexibility of the variables to fit each other. A positive covariance indicates the positive relationship between the variables.

Table 5

The Effect of the Religious Tested on The Three Variables, Awareness, Attitude and Benefit

	Ind. Varbs	Reg. Coe. Var	B	T	Sig
Religion Religiosity					
	Aware of the existence		.013	.221	.825
	Aware of Principles of Islamic finance		-.063	-1.125	.262
	Islamic Products are always best		-.318	-.5.521	.000
	Cautious about religion and my duties as Muslim		-.011	-.190	.850
	Strictly adhered to my religious obligations		.041	.745	.457
	I used to seek Islamic religion knowledge to understand the religion better		-.066	-1.146	.253
	Islamic Banking Products are best financial service		-.051	-.879	.380
	Islamic Bank provides essential financial services		.021	.358	.720
	Islamic Banking products enhances access to finance		.136	2.251	.025
	Islamic Banking Products have less constraint compare to conventional		-.242	-.1.758	.080
	Cost of lending is less, Theoretically		.135	1.297	.196
	Cost of lending is less, practically		-.156	-2.404	.017
	Profit maximization potentials of Islamic Banking Products is higher than conventional		-.152	-2.502	.013
	Significant at < 0.05 level of probability.				

The results in table above indicate that the independent variable (Religious) determines the awareness, attitude, and benefit.

The regression used to predict the model parameters of likelihood indicates the religious effects on the tested constructive variables. However, most of the measurable bundles integrate a logit model equation that shows deviance of high exp. (ß) related to the p-value, therefore, the above table shows that the religiosity stands as a tool for Shariah-compliance and promoter for financial inclusion. The absence of Islamic products or Shariah-compliance will affect the tacking of financial exclusion in North-East Nigeria.

Financial literacy has the same scenario (significance 0.025 and exp. ß 0.136) and shows that religiosity has a direct effect on Islamic banking products and enhances access to financial institutions. Furthermore, Islamic bank offer better services to customers and gain higher profits as well as have significant level of acceptability in North Easter region compared to the conventional banks. Lastly awareness, attitude, and benefit were predicted as significant and relevant reasons for financial exclusion in North East Nigeria.

Table 6

Direct Effect of Variables Towards Financial Exclusion

	VIF	**β**	**t-value**	**Sig**
Attitude	1.226	0.381	10.547	0.000
Awareness	1.121	0.298	7.371	0.000
Benefit	42.879	0.893	0.925	0.859
Religiosity	1.253	0.332	8.460	0.000
Literacy	1.262	0.226	7.010	0.000

*VEF- Variables Effect towards financial Exclusion

The top five (5) most significant determinants behind financial exclusion are Attitude, Awareness, Benefit, Religiosity and Literacy. However, the essential problem of financial exclusion in North East can be dealt with using religious beliefs and faith as stimulants in attracting customers towards Islamic banks (Muhammad, Dauda & Mamman, 2018). It has been witnessed that the southern part of the country has tremendously achieved the target despite many challenges and has immensely overcome the huge percentage of financial exclusion. The Attitude closely indicated that North-East customers' perspective is neglected.

The Awareness about financial inclusion needs to be raised along with consistent policies to increase literacy. It is also observed that the influence of religiosity on people there and trust issues about the Shariah compliance of banks are also other influencing factors. The statistics show as interesting results regarding benefits which most of respondents did not indicate as a reason behind the widescale exclusion in the region.

Table 7

Selected Items for Matrix Correlation

Variables	**(1)**	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**	**(7)**	**(8)**	**(9)**	**(10)**	**(11)**	**(12)**	**(13)**	**(14)**	**(15)**	**(16)**	**(17)**	**(18)**
Gender	1																	
Age	**.854**	1																
Marriage	.216	.164	1															
Education	.632	.058	.050	1														
Religion	.479	.544	.077	.056	1													
Awareness																		
AW1	**.822**	**.868**	.528	.173	.229	1												
AW2	.446	**.873**	.504	.794	.592	.001	1											
AW3	.583	.523	.138	.560	.583	.000	.038	1										
Religiosity																		
RE1	.824	.518	.217	.162	**.824**	.005	.006	.060	1									
RE2	.472	**.802**	.067	.312	.893	.145	.203	.064	.494	1								
RE3	.015	.145	.378	.698	.331	.331	.070	.000	.161	.278	1							
RE4	.640	.232	.318	.004	.712	.792	.228	.342	.641	.117	.001				1			
Attitude																		
AT1	.015	**.822**	.677	.005	.593	.388	.000	.172	.619	.000	.016	.012	1					
AT2	**.969**	.035	.015	.094	.003	.004	.000	.000	.000	.691	.363	.001	**.888**	1				
AT3	.222	.182	.065	.000	.013	.737	.000	.020	**.951**	.015	.000	.000	.000	.074	1			
Benefits																		
BE1	.228	.060	.020	.000	.635	.379	.169	**.978**	**.954**	539	.000	.000	.000	.305	.000	1		
BE2	**.885**	.335	.502	.000	.046	.702	.017	.158	.002	.000	.461	.022	.364	.054	.083	.011	**.972**	1

Cross-section component of Matrix correlation and statistics reliability with significant level of >0.5

The Matrix correlation in the table above indicates a crossword relationship between two or more variables. Matrix correlation is used to predict the squared correlation of sample based on multiple correlation coefficients (Olson & Mossman, 2001). In the table above, the first column indicates the genders while male being the dominant gender with low level of literacy. At a level of 0.632 the variable of religiosity indicates a positive correlation with “Islamic Bank Product is Best Financial Service (RE4)”, showing that religion has a positive and strong relationship (0.712) and Islamic bank customer’s participation emanates from religious beliefs. However, Islamic bank products provide essential financial services suggests positive correlation at 0.593 as attitude signifying the level of 0.969 (AT2) meanwhile the relationship between (AW3) and (BE1) is significant and opposite with an antagonistic relationship at the level of 0.000 which indicates theoretical aspect been justified. Whilst the religion indicates positive relation with Islamic Products as the Best Product (AW3) with level 0.583, IT shows that the people of North East are interested in financial institution and its services once the system complies with their faith, and offers gambling free products as well as stay away from speculation, uncertainty, and interest. This would attract huge number of customers to operate with the Islamic bank. Surprisingly, the satisfaction of the customers is related to cautions about the duties and practices of the Religion with the level of 0.824 and has a strong correlation of (RE1), while gender predicts strong positive correlation with these variables (AW1), (AT2), and (BE2).

The Islamic banking financial products are indicated as the best financial services (AT2) as the relationship of Islamic bank with provision of Essential Financial Services (AT2) is calculated at 0.888 based on feedback of the respondents. It also indicates a moderate relationship with the Awareness that needs more educational enlightening of customers for participation in the system. Interestingly, the more the Islamic banks increases in number and branches, the more will customers be satisfactory hence financial exclusion die down in the reason.

Discussion

The paper has tried to analyse different reasons behind financial exclusion. Table 3 shows that the level of education, faith and income levels of the respondents. While table 5 indicates that the lack of Shariah complaint products has led to financial exclusion in the North East Nigeria which is a Muslim dominated area and where religiosity has a direct effect on financial exclusion. A similar and predictable result is reflected in table 1 where factors loadings show good loading as recommended by (Kline, 2010) for Attitude, Awareness, Benefit, Religiosity and Literacy as determinant factors as GFI, AGFI, CFI, DF and RMSEA indicated the fit. Table 7 shows a correlation between the gender and lower level of literacy, and RE1 (caution about the duties and practices of religion) and gender also indicate a positive relationship with Islamic financial products (AW3). The results show that barriers to financial inclusion need to be addressed appropriately.

Conclusion and Recommendations

The contemporary literature and empirics continue to address the huge magnitude of financial exclusion in Nigeria and have proposed different measure to deal with it. The researchers argue that financial exclusion was caused in the North East due to the low levels of awareness and religious considerations while choosing the financial products. In the light of previous studies, our research investigated the real reasons behind financial exclusion in the North East region, based on awareness, attitude, literacy, and religious perspectives.

The information was gathered based on our survey that was conducted in six states of the country. It was followed by regression, correlation and descriptive statistical analyses. Our findings revealed that awareness, literacy and religious factors are correlated with the key barriers to financial inclusion in North East Nigeria. Secondly, the lack of *Shari'ah* compliant banking has immensely contributed to the growth of financial exclusion in the region. However, potentially, the introduction of interest-free in the North East will surely help to mitigate and tackle the issue of financial exclusion in the region. We have also found substantial evidence to substantiate that literacy, awareness, and religiosity have a positive impact on financial inclusion in North East, Nigeria.

Finally, we recommend that the government should encourage and support the development of Islamic banks and their *Shari'ah* compliant products in the country particularly in Northern Nigeria. The Islamic banks should also play their role in creating awareness through distributing newsletters, and organizing seminars and conferences and enlighten people about Islamic banks and their products.

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Appendix 1

Methodology

Question Number	Dependent variables	Description of the variables	Probability, Estimated or Predicted
Q1.	Gender	1- Female 2- Male	Demographic analysis
Q2.	Age	Age group belongs 1(18-30), 2-(31-45), 3-(46-60), 4-(60-above)	
Q3.	Educational Status	Explore level of education respondents 1-Primary, 2-Secondary School, 3- Degree, 4-Master above, 5- None of the above	
Q4.	Religion	Respondents' religion group, 1-Islam , 2-Christianity 3Prefer not to say	
Q6.	Monthly income	1-Less than - 10,000, 2-20,000-40,000, 3-50,000-99,000, 4-100,000-above	
Awareness Variables			Confirmatory Factor Analysis Correlation / Regression analysis
i.	AW1	Aware of the existence Bank	
ii.	AW2	Aware of Principles of Islamic finance	
iii.	AW3	Islamic Products are always best	
Religiosity Variables			
iv.	RE1	Cautions about Religion and my Duties as Muslim	
v.	RE2	Strictly adhered to my religious obligations	
vi.	RE3	I used to seek Islamic religious Knowledge to understand the religion better	
vii.	RE4	Religious understand promote Islamic Banking Products and have less constraint compare to conventional	
Attitude Variables			
viii.	AT1	Islamic Banking Products Are Best Financial Service	
ix.	AT2	Islamic Bank Provides Essential Financial services	
x.	AT3	Islamic Banking products enhances access attitude to finance	
Benefit			
xi.	BE1	Cost of lending is less and affordable	
xii.	BE2	Profit Maximization potentials of Islamic	

		Banking Product is higher than conventional Cost of lending is less Practically
Literacy Variable		
xiii.	LI 2	Lack of awareness of Islamic financial services prevent inclusiveness
xiv.	LI 4	Literacy in Islamic education also prevent participation and of Islamic bank
Financial Exclusion		
xv.	FE1	Religious motivation prevent customers from financial inclusion with conventional banks
xvi.	FE2	Islamic religious knowledge cautions customers intention of banking with conventional financial institution
xvii.	FE3	Muslim accept Islamic banking as one of the major policy to tackle financial exclusion

Acknowledgement: The research is sponsored by Tertiary Education Trust Fund (TETfund), through Federal University, Gashua, Yobe State, Nigeria.