A Measurement Model of the Determinants of Financial Exclusion among Muslim Micro-entrepreneurs in Ilorin, Nigeria

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Abstract

This study investigated the various factors that impede both the access to and use of the requisite financial resources for entrepreneurial development in Ilorin, Nigeria. Data was collected via a survey questionnaire administered on Muslim micro-entrepreneurs in the study area. A measurement model using the structural equation modelling approach was adopted. The paper concluded that both the voluntary and involuntary financial exclusion factors significantly account for financial exclusion among the respondents. However, voluntary exclusion signals a relatively serious problem. This is because it is a reflection of lack of use, rather than lack of access to financial services by the Muslim poor. In this regard, religious consideration as well as debt phobia as a reflection of the presence of Islam in the area had statistically significant factor loadings. Recommendations were also offered.

1. Introduction

The relative importance of an efficient and inclusive financial system cannot be ignored. Such system is needed for among other reasons to ensure efficient allocation of resources, and to prevent inequalities in outcome and opportunities especially among the poor and micro-entrepreneurs (Demirguc-Kunt, Beck, and Honohan, 2008). According to Chowdhury, Ghosh, and Wright (2005), evidences abound suggesting that the financial repressions from both the formal and informal sources of finance interact with many other economic, social and demographic factors to cause the vicious circle of poverty. The survey findings indicate that financial exclusion is one of the most often-quoted factors that impede micro-entrepreneurial development (Demirgüç-Kunt, Klapper, and Panos, 2007:27), (Cull, Demirguç-Kunt, and Morduch, 2007:2; (Kimenyi, 2006).

In the case of the OIC countries, the incidence of financial exclusion is even more severe[1] and that of Nigeria is peculiar. According to Isern, Agbakoba, Flaming, Mantilla, Pellegrini, and Tarazi (2009), notwithstanding the global expansion in the financial sector, it is still below average in Sub Saharan Africa. Specifically, and without prejudice to the on-going financial sector reforms in Nigeria, her financial sector is apparently still considered very weak and shallow. As such, most Nigerians still lack access to and use of financial services. In comparison to other African countries like Kenya, Tanzania and South Africa, Nigeria has the highest percentage of people who are financially excluded in absolute terms.[2]

Frankly, a very fundamental issue in financial inclusion is that not everyone should; and ideally would be qualified to have access to some financial services at some point in time.Parker (2008) cited Nobel Laureate, Prof. Mohammad Yunus as saying that some people need philanthropy to stabilise them before access to credit can have an empowering and meaningful impact on their poverty status. Nonetheless, an inclusive financial system would ensure that as many people as possible have access to their peculiar financial services required for sustainable livelihood.[3]This is in tangent with the central economic tenet of Islam (Mohieldin et al, 2011).

The implication of financial exclusion, may, therefore, be viewed from two perspectives following Beck and De la Torre (2007). First, the inability to transform the poor's talents into productive uses due to lack of inherited physical, financial and social capital. Second is the view that access to financial services is not a public good that everyone regardless of socioeconomic status should have access to. This perhaps underlines the notion by Prof. Yunus and proponents of his ideas, who opine that access to credit, and perhaps the gamut of financial services should be seen as a right else some people will be perpetually excluded (Ikhwan and Johnston, 2009).

Sequel to the foregoing, the main objective of this paper is to investigate the reasons why the poor are financially excluded. This is in the context of the various reasons stated in the extant literature and how these factors impede financial citizenship in a predominantly Muslim semi-urban setting. The remaining of this paper includes both the conceptual and theoretical framework as well as the methodology adopted. The results, conclusion and recommendation follow in that order.

2. Conceptual Framework

In this study, the converse of the definition of financial inclusion by Mor and Ananth (2007:1121) is used to operationalize the concept of financial exclusion. It is, therefore, viewed as the inability of some individual to access and use basic financial services. Such services include savings, loans, and insurance in a manner that is reasonably convenient, reliable and flexible in terms of access and design.

Being financially excluded may be viewed as implying the existence of both the price and non-price barriers to use financial services. Nonetheless, measuring financial exclusion, therefore, is very complex given that it has a considerable diversity behind it. This is especially so when viewed from the perspective of whether such exclusion is voluntary or involuntary. For instance, Corr (2006) noted that some self-exclusion barriers exist due to personal and religious inclinations. Osili and Paulson (2006:22) also found that based on cultural distrusts for banks based on past experiences, potential clients may self-exclude themselves. This is usually in demonstration of their psychological response to systematic financial discrimination (Beck and De la Torre, 2006). On the other hand, however, when micro-entrepreneurs do not voluntarily exclude themselves financially, other factors relating to financial illiteracy, eligibility and affordability barriers still impede their

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[1] See Mohieldin, Iqbal, Rostom, and Fu (2011).
[2] See appendix 1 for key figures on Nigerians' access to and use of financial resources cited in Isern et al (2009:2)
[3] Beck and De La Torre (2006) in their extensive literature review observed that empirical evidences abound relating both the depth and breadth of financial inclusiveness to economic development and poverty alleviation.

access to requisite financial resources for micro-entrepreneurial development (Owuallah, 2002, Beck and De la Torre, 2006).[4]

The combined impact of both the lack of access to and or use of financial resources on entrepreneurship intention, promotion and development can be very serious. This is even so when viewed against the backdrop of the misconception of taking access to finance as implying automatic usage of same (Demirguc-Kunt et al, 2008). Therefore, such situation demands that the indicating factors and their inter-linkages are understood. This facilitates coming up with the right policy formulation to mitigate the likely negative outcomes of financial exclusion. The main objective of this paper, therefore, is to determine both the voluntary and involuntary factors that cause financial exclusion among micro-entrepreneurs in Ilorin, Nigeria.

3. Theoretical Framework

Unlike other markets, the financial market behaves quite differently. As such, it is arguably the most regulated in most countries. Such regulations are aroused by the banks and other financial institutions' dual but conflicting obligation of liquidity and profitability.[5] Another reason may be the nature of their product – money – and its fungibility[6]. Consequently, the principles of safety and profitability underline their transactions. This according to Stieglitz and Weiss (1981) limits the ability of price allocation mechanism to ration credit even when financial market is in equilibrium. The implication, therefore, is that equilibrium does not exist at the point where the demand and supply of credit equate. This is so because financial institutions are faced with information asymmetry and its consequential adverse selection and moral hazards. The explanation provided by Stieglitz and Weiss (1981) is succinctly captured with the graphs below adapted from Demirguc-Kunt et al (2008).
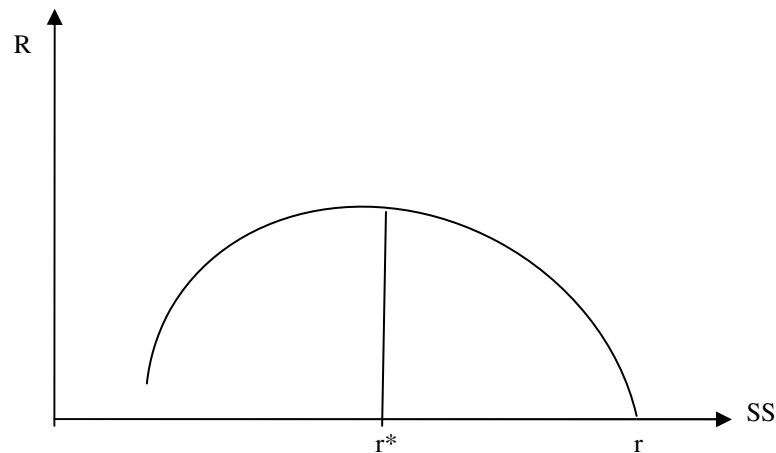

Figure 1. Supply of Loan Curve (Demirguc-Kunt et al, 2008:31)

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[4] Another classification in the literature is that of Honohan (2004). He made a distinction between price factor (financial service is available but not affordable), informational factors (poor credit records and ratings of borrower household and or individual, and product and service barrier (non-offer of the most needed financial services).

[5] A financial institution has an obligation to pay its customers on demand. Therefore, it has to be liquid. On the other hand, the financial institutions' shareholders expect consistent dividend payment and growth which depend on profitability.

[6] The fungibility of money makes it difficult for lenders to ensure that borrowers use the loan funds in the way lenders wish; one way they try to get round "misuse of funds" is to lend in kind (Srinivas, n.d)

In figure 1 above, 'R' is the expected return to the bank, while 'r' is the interest rate charges. The bank's supply of loan curve is backward bending, that is, concave down and reaches a maximum at the point where interest rate is r*. At this optimal rate, the bank would not want to raise interest rate (price) even though there is higher demand for credit. This is because as explained by Stieglitz and Weiss (1981), doing so may lead to adverse selection and moral hazard. In the first instance, interest rate as a screening device may discourage risk-averse borrowers (micro-entrepreneurs) with good probability of repayment. Moreover, it may also attract risk lovers who, though with higher probability of failure do not mind paying the high interest rate. For this latter group of borrowers, there is a high probability of siphoning the credit granted by engaging in risky projects other than that for which the credit was approved. As a result, there would definitely be some borrowers inadvertently left un-served by the financial institutions. Such financial exclusion may also be aggravated by physical access, affordability and eligibility barriers (Demirguc-kunt et al, 2008). These constraints are depicted diagrammatically in figure 2 and figure 3 below.
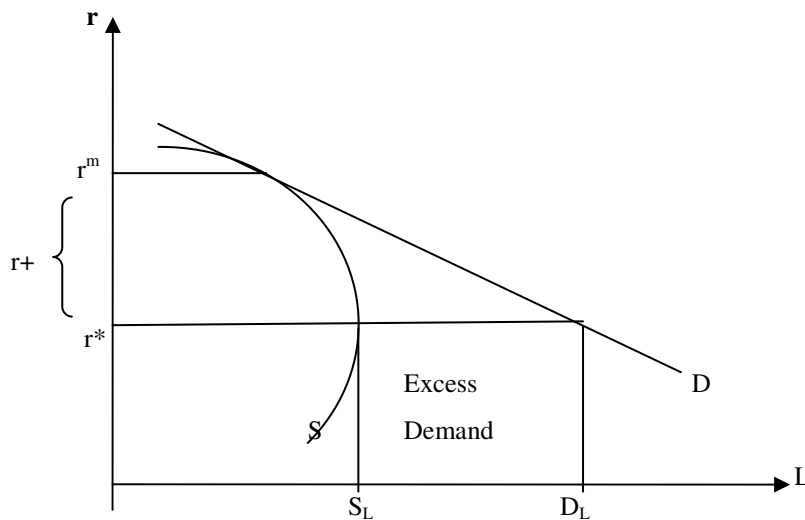

Figure 2. Juxtaposed Demand and Supply of Loan Curves (Demirguc-Kunt et al. 2008:32)

In figure 2 above, assuming there is no credit rationing and as such, as many people as desire access to funds have unlimited supply by the financial institution. In this case, r*, the equilibrium interest rate will be raised to r^m. The difference between r^m and r*, r+ is the additional rate of interest that the involuntarily rationed-out borrowers in figure 1 above will be willing to pay as long as they have access to credit. Their subscription to the availability doctrine [7] of finance is discernible. This is because, the financially repressed do not mind having lesser amount of credit even at a higher interest rate r^m than they would at the equilibrium rate of interest, r* which is lower. According to Koveos (2004:8),, "evidences abound suggesting that micro-entrepreneurs and indeed the poor can and do pay interest rates that would choke a large business." Robinson (2001) also corroborated this view in her conclusion that high interest rates are never a deterrent to microfinance clients. This may be an indication of moral hazard and adverse selection. Financial institutions, therefore, tend to be cautious in lending further at higher interest rates especially to the poor and microenterprises.

Following Stieglitz and Weiss (1981), the safety and profitability principle of financial institutions would not make the financial institutions to increase supply even at r^m. Hence r*, the optimal rate of interest would still be the equilibrium price even if the backward bending supply

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[7] See Fuerst (1994). The Availability Doctrine. Journal of Monetary Economics, 34(3), pg. 429-443.

curve S and the downward sloping demand curve intersect at r^m. Therefore, equilibrium in this case may not hold at the point where demand and supply of loan equate.

Furthermore, the excess demand for loan $\mathbf{D_L}$ - $\mathbf{S_L}$ would mean that some eligible and willing borrowers are denied access to finance. According to Demirguc-Kunt et al (2008), therefore, as long as the effects of moral hazards and adverse selection are difficult to separate, it may even be more complex to distinguish between access to and use of finance. But then, the financial requirements of the poor transcend availability of microcredit. In this regard, Demirguc-Kunt et al (2008:49) argued further that some other financial services like deposits, payments and remittances may still not be available to some willing clients. In order to capture the implication of this line of argument, figure 3 below shows the shift in the supply curve and its consequence.
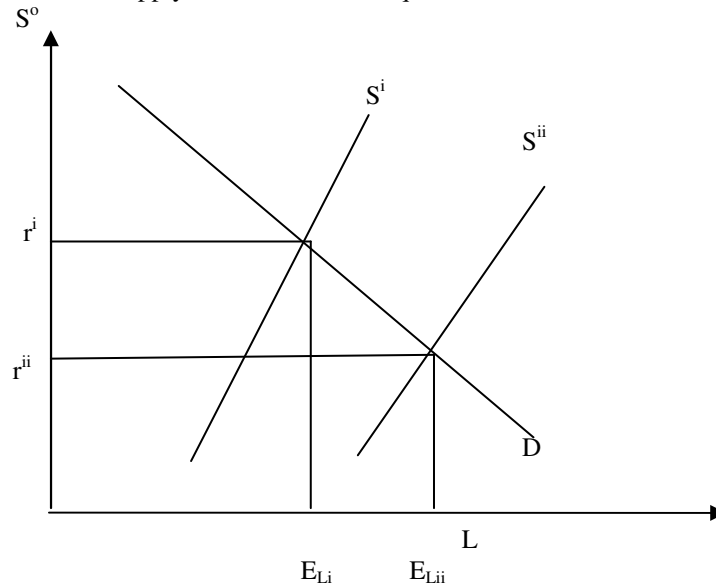

Figure 3. A Shift in Supply of Loan Curve (Demirguc-Kunt et al. 2008:32)

The non-intersection of the supply and demand curve in figure 1 above indicates that there are some clients who still lack access to finance. This is depicted as S^o in figure 3, which indicates that the supply curve is vertical at the origin. Although not all barriers to access to finance are price-based, overcoming them may still require that these clients grapple with the price-based barriers. In this case, at the equilibrium price r^i, where S^i and D intersect, some clients may still not be able to afford the high price. In this case, even when rationing is non-existence, other physical and weak institutional structures may exacerbate financial exclusion. It is, therefore, desirable that effective policy options in the financial sector are put in place. Such policies are needed to shift the supply curve to S^{ii} so that at E_{Lii} more funds can still be supplied at a lower rate r^{ii}, to cope with the excess demand. This policy intervention may also take a look at the need to repose clients' confidence in the system so as to take care of voluntary exclusion (Osili and Paulson, 2006).

Sequel to the forgoing, a discernible fact may be that both the voluntary and involuntary financial exclusion may be a manifestation of the passive dichotomy between access to and use of financial services. As noted by Demirguc-Kunt et al (2008), the mistaken presupposition that access to finance implies automatic use is in itself a foundational policy flaw towards financial inclusion. Quite often than not, financial inclusion strategies are supply-driven thus, minifying the operational efficiency and effectiveness of policy outcomes. The peculiarity of the core poor in this regard vis-à-vis their lack of collateral and credit history further magnifies their lack of financial citizenship. This aspect of financial inclusion literature is enormous albeit evolving. Nonetheless, a comprehensive coverage is offered in Datta (2004).

4. Access to and Use of Finance by the Core Poor

Based on his extensive Bangladeshi study, Datta (2004) offered some reasons behind the financial exclusion of the core poor. These reasons can be generally categorised into the supply-side and demand side factors.

4.1. Supply-side factors:

Exclusion arising from the supply side factors is predicated upon the mistaken and inappropriate grouping of the poor. They are often misconstrued as a homogeneous lot and with same socio-economic status and needs. The consequence is that potential beneficiaries, for instance, in a microfinance programme are, therefore, targeted by happenstance rather than by design. This lack of systematic targeting makes certain categories of intended beneficiaries miss the opportunity of partaking in such microfinance programme. For instance, the eligibility criteria may often time not favour the elderly, disabled, ill-health, and at times women headed households. According to Solomon, Baliff-Spanvill, Ward, and Furhiman (2002), if at all there is a targeting of some sort, it is channelled towards those that have established businesses, or at least above the poverty line no matter how slightly. This favourably compares to the findings of Copestake, Johnson, and Wright (2002) that the impoverished are often not targeted by the microfinance institutions.

Furthermore, the lack of infrastructural facilities like good roads, healthcare, electricity, security (since microfinance entails cash handling) and so forth influence the choice of location of the financial institutions. They often concentrate in the urban areas, therefore, excluding those poor in the slums, chars, and rural areas from access to financial services (Porter, 2003).[8]

In a similar vein, Beck and De la Torre (2006) noted the implication of the fixed transaction costs on the provision of financial services to the poor on three different levels. At the client level, the independence of each archetypically small value of financial transaction of the poor and the cost of processing same may not make it viable to serve the poor. Moreover, regardless of the transaction value, the fixed expenses and costs on fixed assets, accounting systems, security arrangement, computers and so forth does not permit spreading of fixed costs on the small value transactions of the poor. Finally, the supply side factors of providing finance to the poor may be viewed from the regulatory perspective. In this case, the financial institutions would have to comply with among other things, the minimum paid up capital requirements, incorporation fees, clearing and settlement fees and so forth.

Aggravating the supply side factor of financial exclusion is the group lending approach adopted by most microfinance institutions. Although the potency of this approach for repayment and risk reduction is acknowledged (Evaristus et al, 2004; Al-Azzam, 2006), it nonetheless magnifies the discrimination against the core poor. This is especially in the sense of group formation. Often, and in fact usually, relatively more prosperous members form groups for lending purposes. In most cases, the core poor and the socially repugnant are isolated. Therefore, they are often group-less and financially excluded or marginally included behind.

Another notable factor identified in Datta (2004) is that of the variance that exist between the micro and macro objectives of the micro-financing programmes. For instance, at the macro level, loan officers are often saddled with the responsibility of ensuring full repayment of loans advanced to the poor and microenterprises. The easiest way these officers can meet their obligations is two-

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[8] Dunford (2006:6) corroborated this assertion stating that "rather than select their program sites randomly from all possible villages or neighborhoods, microfinance providers typically and reasonably choose sites for program placement because of characteristics associated with program success, such as economic activity level."

fold. First, they discriminate against groups with majority members being identified as the core poor. Second, they favour those groups, which though have members that may designate as being poor, but at least better off by far compared to the core poor.

4.2. Demand side Factors

Even where there exist more than enough credit for lending to the poor, the impact of what Osili and Paulson (2006) called cultural capital may debar them from borrowing. Adewale (2006) also found that phobia for debt may be a reason for the poor not borrowing. Evidences also support the notion that women headed households and the number of working adults in a family influence whether or not the poor will avail themselves of credit opportunities (Datta, 2004). Moreover, the credit delivery system of the microfinance institutions and their relatively high interest rates are usually beyond what the poor can cope with (Demirguc-Kunt et al, 2008).. These factors suggest that the core poor may, therefore, lack the risk-taking attribute associated with successful entrepreneurship (Datta, 2004). Therefore, the individual or combined effects of these factors may impede demand for financial services by the core poor.

Questions about access to and use of financial services are, therefore, numerous. These questions often demand that answers are provided to them if any meaningful effort is to be made towards ensuring an all- inclusive financial access. In this regard, a lot of pertinent questions are raised:

> 'Just how limited is financial access around the world? What are the chief obstacles and policy barriers to broader access? How important is access to finance as a constraint to growth or poverty alleviation? Which matters more: access by households, or access by firms? Is it more important to improve the quality and range of services available to those firms and households who might already have access (intensive margin), or to provide basic services to those who are completely excluded (extensive margin)? How important is direct access to finance for the poor and small firms compared with economy wide spillover effects of greater financial development through more efficient product and labor markets?' (Demirguc-Kunt et al, 2008:26).

Efforts at providing answers to these myriad of questions related to financial access are still on-going. However, most of these researches are carried out at the macro level. The fear that aggregate data can be misleading was, however, raised by most researchers (Demirguc-Kunt et al, 2008). This is due to the differences in the socio-economic condition of countries and the paucity of requisite data upon which such aggregate findings can be validated. Bearing this limitation in mind, the study is focused on the financial exclusion barriers facing micro-entrepreneurs in Ilorin, Nigeria.

5. Study Area

The study area covered in this study is some parts of Ilorin metropolis. Ilorin metropolis is located some 300 kilometres from Lagos and 500 kilometres from Abuja, the Federal Capital Territory of Nigeria, on latitude North $8^0\ 30^1$ and longitude East $4^0\ 35^1$ of the equator. Ilorin, city in North-Central Nigeria, capital of Kwara State is a commercial, manufacturing, and transport centre situated in an agricultural region producing grain, yams, peanuts, and livestock. Manufactured goods include processed food, cigarettes, crafts, and sugar. The community was established in the late 18th century, becoming the centre of a state that was part of the Oyo Empire. In the 1820s it became a Muslim emirate associated with the Fulani caliphate of Sokoto. The emirate subsequently annexed considerable territory. The British captured Ilorin in 1897. Its population based on the

2006 national census estimate is about 2,371,089 people Adedibu, 1981; National Population Commission, 2006). The choice of Ilorin is based on the fact that the author worked and lived there for about a decade. Moreover, it is predominantly Muslim and noted for its Islamic inclination. As such, an assessment of religious reasons as barriers may be assessed.

6. Methodology

Primary data elicited through survey questionnaires were used mainly in this study. Added to obtaining data on respondents' demographic profile, the issues raised in the questionnaire focused mainly on access to and use of financial services, and the factors impeding financial inclusion. As there is no standard financial exclusion scale, questions were developed by the researcher following issues raised in previous empirical studies and surveys. The target respondents are proprietors of microenterprises in the Ilorin metropolis.[9] Out of 450 micro-entrepreneurs sampled based on convenience sampling, only 302 questionnaires among the returned met the criteria for usage in this study and therefore, were used for analysis[10]. The demographic distribution of the respondents is shown in table 1 below.

Table 1. Demographic Profile of Respondents

Demographic Variables	Frequency (%)
Gender	
Male	55
Female	45
Age	
20-30 years	5
31-40 years	26
41-50 years	48
Above 50 years	21
Education Level	
No formal education	12
Primary school	65
Secondary school	22
Degree/Equivalent	1
MSEs Type	
Survivalists	35
Growth Oriented	65
Primary Education	
Trading	41
Services	50
Manufacturing	6
Arts and Crafts	3

Source: Authors' Computation

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[9] According to the Nigeria Economic Summit Group-NESG (2002),…..the best way to capture the definition of micro-enterprises in Nigeria should be by nature and magnitude of their business. For example, roadside artisans, petty-traders, pure/bottled water producers, bakers, local fabricators and so forth. constitute the Nigerian micro-enterprises
[10] Some of the cases deleted had missing data. The data in this instance was missing completely at random (MCAR). As suggested by Hair et al (2006), any remedy for missing data could be used. However, given sufficient sample size for the SEM, the authors preferred to exclude affected cases from further analysis.

Data obtained were further subjected to data cleaning, test of normality [11], adequacy and sphericity tests using the skewness, kurtosis, KMO and Bartlett's test of Sphericity respectively. Thereafter, based on an exploratory factor analysis through the Principal Axis Factoring (PAF), the five variables of interest (affordability, eligibility, financial complacency, religious belief, and cultural capital) had high loadings. As such, they were identified and used subsequently as the latent variables for the purpose of the analysis conducted.

Both the construct and divergent reliabilities are also tested. While the former is needed to ensure that each questionnaire item load on one indicator only, it also indicates that items loading together are, indeed indicators of the same latent construct. The criteria as suggested in the literature is the Construct Reliability (CR) score should be greater than 0.7. Moreover, Average Variance Explained (AVE) score should be greater than 0.5, and also lesser in absolute terms than the CR score. In the case of the former, it is needed to indicate that each of the latent construct differ from each other. The criteria are that the AVE should be greater than both the Maximum Shared Variance (MSV), and Average Shared Variance (ASV). Table 2 below indicate that the criteria for construct reliability, convergent and divergent validities are satisfied.

Table 2. Construct Reliability, Convergent Validity and Divergent Validity

	CR	AVE	MSV	ASV	Eligibility	Affordability	Religion	Financial Compla Cency	Cultural Capital
Eligibility	0.923	0.706	0.413	0.179	0.840				
Affordability	0.821	0.542	0.310	0.172	0.221	0.736			
Religion	0.735	0.582	0.310	0.204	0.255	0.557	0.763		
FinCompl	0.850	0.740	0.301	0.204	0.435	0.529	0.549	0.860	
CultCapl	0.831	0.622	0.413	0.162	0.643	0.223	0.374	0.213	0.788

Source: Authors' Computation

Thereafter, the goodness of fit of the measurement model was tested. In this regard, the Structural Equation Modelling (SEM) is used to analyse the data. The choice of SEM stemmed from its relevance to accommodating the multiple latent constructs.[12] Moreover, SEM's focus on theoretical explanation rather than prediction, albeit it also captures the latter, suited well the objectives of this study.

In achieving the foregoing, a number of descriptive fit indices were estimated in agreement with Hair, Anderson, Tatham, and Black (2006). These indices include the minimum value of the discrepancy between the observed data and the hypothesised model divided by the degree of freedom (CMN/df). Other measures of fit adopted are the Comparative Fit Index (CFI), Normed Fit Index (NFI) and the Root Mean Square Error of Approximation (RMSEA) as suggested by Mueler and Hancocks (2008). These measures are all expected to range between 0 and 1 in value with higher values, say above 0.9 indicating a very good fit.

Finally, a RMSEA value expected to have a value of 0.08 or less is required to have a reasonable error of estimate and to glean how well the model would fit the population covariance matrix. This is in the event of including an unknown but optimally chosen parameter values. Shown in the

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[11]. Maximum Likelihood Estimates (MLE) that was used in the CFA is robust against a moderate departure from the assumption of multivariate normality archetypal of social science data (Micceri, 1989; Smith and Langfield-Smith, 2004, Pallant, 2006, Hair et al, 2006).

[12] Each latent construct is represented by several measured variables as used in this study, thereby, permitting the measurement of latent constructs and inclusion of measurement errors for each indicator (Blunch, 2008)

Figure 4 below is the output of the confirmatory factor analysis (measurement model fits) as calculated using AMOS 16.0.

Table 3. Tabular Presentation of Fit Indices Criteria Compared to Baseline Model Output

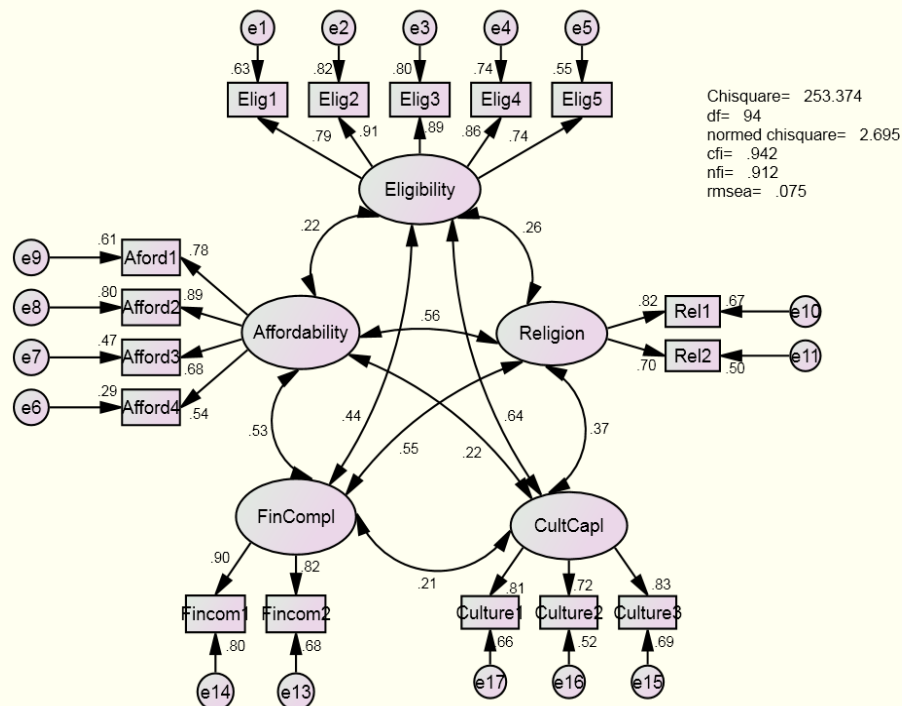| Fit Indices	Recommended Threshold	Model Output
CMINDF	$2 \geq CMINDF \leq 5$	2.695
P	$P \geq 0.05$	0.000
CFI	$CFI \geq 0.90$	0.942
NFI	$TLI \geq 0.90$	0.912
RMSEA	$RMSEA \leq 0.08$	0.075

Figure 4. Confirmatory Factor Analysis for Financial Exclusion Determinants in Ilorin, Nigeria
Source: Author's computation.

7. Results

A review of the Confirmatory Factor Analysis model above based on the various criteria in SEM shows that there are no offending estimates[13] and that the model fits the data well. The hypothesised measurement model was assessed using AMOS version 16.0 maximum likelihood factor analysis. The model was evaluated by four fit measures: a) the chi-square, b) the comparative fit index (CFI), the normed fit index (NFI), and the root mean square error of approximation (RMSEA) as per

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[13] A correlation coefficient with a value greater than 1.00 is considered unacceptable in an SEM analysis.

Mueler and Hancock (2008). Results of all four fit indexes support the proposed model. The chi-square had a value of 253.374 (94, N=302), *p*=0.000, indicating a statistical significance. Model fit based on chi-square in SEM should not be statistically significant in order to indicate a good fit. However, given that the chi-square is highly susceptible to sample sizes, Mueller and Hancock (2008), Blunch (2008), suggested the normed chi-square (CMIN) should be used instead.[14] With a CMIN value of 2.695, this is within the range of between ratios 3:1 as suggested in Hair et al (2006:748) and attests to the fit of the measurement model. Moreover, the baseline fit indices are also more than the 0.90 cut-off point specified in most SEM studies. In this case, the CFI = 0.942, and NFI= 0.912, indicate good fit of the measurement model. With a RMSEA value of 0.075 (P Close= 0.00), this is also less than the cut-off point of 0.08.

8. Discussion of Findings and Implications

The various financial inclusion barriers obtained from the CFA can be generally categorised into involuntary exclusion and voluntary exclusion factors. In respective terms, they may both proxy for access to; and the use of financial services by the micro-entrepreneurs. The classification was to align this study's analysis with the literature in a way that avoids the usual misconception of viewing access and use of financial services as same Demirguc-Kunt et al (2008). In this regard, while both eligibility and affordability can be classified as involuntary financial exclusion barriers, financial complacency, cultural capital and religious considerations are likely indicators of involuntary financial exclusion.

This study's findings seem consistent with those of Corr (2006). That is, the inability of the financially repressed to provide requisite documentation and collateral assets impedes their access to requisite financial resources. This may have implications for enhancing their well-being in its entire ramifications. Furthermore, affordability was found to be a key indicator of involuntary exclusion. This corroborates the findings in Anand and Rosenberg (2008) and Demirguc-Kunt et al (2008). These studies found that the price related barriers frustrate the financial inclusion of the poor by the mainstream financial arrangement. In fact, the Central Bank of Nigeria (CBN) (2005) stated that more than 65 percent of eligible financial service seekers are excluded in Nigeria because of the affordability factors.

Another finding that favourably compares to Anand and Rosenberg (2008) is that the fear of inability to repay given among other reasons, the unreliable income source of potential borrowers make them financially complacent Ikhwan and Johnston (2009) also noted that debt phobia and procedural complications account for the informal businesses' voluntary exclusion from the formal financing sources. Specifically, the finding in this study supports those from a Latin American study[15]. In this study, strong empirical evidences were established for the combined strength of financial complacency and phobia for debt as explanations for voluntary financial exclusion.

Therefore, an implication may be that the poor not only involuntarily exclude themselves or lack access to financial capital, but also demonstrate voluntary financial exclusion (Demirguc-Kunt et al, 2008). As such, the foregoing may likely imply that even where the poor have access, they may not likely avail themselves of the use of financial resources. In relative terms, however, both the voluntary and involuntary exclusion factors may have statistically significant causal impact on actual financial exclusion in Nigeria.

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[14] A normed chi-square is denoted by χ^2/df. That is, chi-square value divided by degrees of freedom. It is a goodness of fit (GOF) measure in SEM. According to Hair et al (2006:748), generally, χ^2:*df* ratios on the order of 3:1 or less are associated with better fitting models except when sample size is greater than 750. This measure also called the relative likelihood ratio was used to mitigate the susceptibility of chi square to spuriousness especially as sample size grows bigger (Firdaus, 2005). For this measure, a value of between 2 and 5 is considered acceptable (Sahari et al, 2004).
[15] Navajas, S, & Tejerina, L. (2006). Microfinance in Latin American and the Caribbean: How Big Is the Market? Washington D.C.: Inter-American Development Bank, November.

It may also be an interesting supposition that it is likely both the voluntary and involuntary exclusion barriers independently and collectively frustrate the financial inclusion of the micro-entrepreneurs in Nigeria. However, notwithstanding, this study contends that voluntary exclusion signals more problem of financial exclusion in Nigeria. This is because it is a reflection of lack of use, rather than lack of access to financial services by the sampled micro-entrepreneurs.

9. Recommendations

It is suggested that Nigerian microfinance banks are innovative enough to render affordable services to the poor and with less stringent eligibility criteria. As such, their target clients should ideally include the poor households and microenterprises.[16] Moreover, aggressive campaign would have to be carried out by both the Government and microfinance banks to arouse the interest of the poor in the financial arrangements again. The need for such massive awareness stems from the fact that the poor in Nigeria lack awareness of the various financing alternatives they can access.[17] The Nigerian poor's cultural capital reflected in their voluntary financial exclusion, and occasioned by the financial system distress in Nigeria necessitates this recommendation.

Finally, the prospect of the Islamic microfinance alternatives should be given consideration. This is devoid of the religious sentiments that often becloud the appropriateness of certain strategies to the Nigerian development vision. Therefore, it is recommended that the government should view Islamic microfinance as an attempt to enhance the quality of life of some of its citizens. This is because, based on their religious inclination, some of the poor will never borrow from the conventional financial institutions no matter what.

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[16] Acording to Isern et al. (2009), most of the microfinance banks in Nigeria are located in Lagos and Abuja in apparent manifestation of their commercial orientation. Isern et al. (2009) also noted the intense competition among the MFBs in these cities, whereas, the rural areas have the largest percentage of the unbanked poor.

[17] Awareness as an indicator of involuntary exclusion factors was deleted in this study due to 'offending' estimates obtained in the measurement model.

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APPENDIX 1

Key Nigerian Financial Services Access and Use Figures

- 74 percent of adults (64 million) have never been banked
- 21 percent of adults (18million) have bank accounts
- Men have better access to finance; only 15 percent of women currently have bank accounts
- 71 percent (9.6 million) of salaried workers vs. 15 percent (4.3 million) of farm employees are banked
- 86 percent of rural adults are currently unbanked
- 80 percent penetration rate of mobile phones presents excellent opportunity for mobile banking

Source: FinScope Nigeria 2008 conducted by EFinA cited in Isern et al (2009:2)