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Financial Inclusion in Rural and Urban Nigeria: A Quantitative and Qualitative Approach

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Abstract

The study provided insights into current realities of financial inclusion among financially vulnerable (financially illiterate and semi-literate) customers in an emerging economy. The two-phased study adopted both quantitative and qualitative methods in which cross-sectional and phenomenological approaches were used for data collection, with specific emphasis on rural-urban differentials. Data for the first phase was obtained from an urban (n=211) and rural (n=242) sample selected via a combination of purposive and convenient sampling. A structured questionnaire was utilized in eliciting relevant information from the study participants. Data for the second phase was obtained from bank managers who are key informants with professional knowledge about trends of financial inclusion in Nigeria. Quantitative outcomes showed that residential status had a significant main effect on access to marketing financial inclusion services, such that rural residents had limited access to financial inclusion services; while perceived cost of financial inclusion had a significant main effect on usage of financial inclusion services, such that perceptions of high cost of perceived inclusion resulted in less usage of financial inclusion services. Qualitative outcomes highlighted major efforts used to drive financial inclusion including financial education and financial literacy in rural Nigeria, while highlighting the prospects, problems and possible interventions.

Keywords: financial inclusion, financial literacy, emerging economy, financially vulnerable group

1. Introduction

1.1 Study Background

Marketing financial inclusion services plays an important role in the essential functioning of individuals, businesses, and the macro-economic stability of countries (Mogaji et al., 2021; Soetan, 2014; Soetan et al., 2021). The success or failure of banks in marketing financial inclusion services therefore significantly affects people in their daily activities. There are still many people who are financially excluded because they are not financially literate and as a result are not able to access financial products and services (Asuming et al., 2018; Mogaji et al., 2021). Financial inclusion is defined as the ability to own an account and have access to credit and be able to conduct transactions in a formal financial institution by the financially excluded in the society (Dev, 2006; Ozili, 2018; Zins & Weill, 2016). The economic and financial well-being of financially vulnerable customers is linked to their financial inclusion which is defined as a state in which all people of working age have access to a full suite of quality financial services, provided at affordable prices, in a convenient manner, and with dignity for the clients (Accion International, 2009).

Financial inclusion as a result of financial literacy offers huge benefits to financially vulnerable customers at both the individual and societal levels. At the individual level, financially included customers are able to save, invest in education, and absorb financial shocks while at the societal level, financially included customers are able to contribute to economic growth and poverty reduction (Demirguc-Kunt et al., 2018; Mende et al., 2019; Mogaji et al., 2021; Soetan, 2019; 2020). Financial inclusion implies access to mainstream financial service providers (Mende et al., 2019) but many financially vulnerable customers who mostly reside in the rural areas in Nigeria do not have that kind of access. For example, customers who live in urban areas are more likely to have access to mainstream financial services providers compared to those who live in rural areas who are often excluded because of their 'status' and issues such as bank charges (Baradaran, 2012; 2015; Morgan et al., 2016; Hegerty, 2016).

1.2 Overview of Financial Inclusion in Nigeria

Nigeria prides itself as the largest and most populous country in Africa with over 200 million people (World Bank, 2021). Nationally, 40% of Nigerians (83 million) live below the poverty line while 25% (53 million) are vulnerable. These vulnerable citizens can fall easily into poverty and live below poverty following the Covid-19 outbreak (World Bank, 2021). The financial services sector in Nigeria has been making significant contributions to the enhancement of financial inclusion in the country. The country boasts of 22 commercial banks, over 400 Microfinance banks, several licensed mobile money operators, and over 110,000 mobile money agents (MMAs) according to (Adesanya, 2017). Nigeria's financial inclusion landscape continues to grow, and it offers great hope even though there are several challenges such as insecurity and economic instability (Financial Inclusion Insights, 2021) to be contended with. In Nigeria, 60% of the population live below poverty. These people, who are mostly rural dwellers, are mostly uneducated and not financially literate. 29% of the adult population in the country are digitally included through their banks because their banks offer digital services, 59% of the adult population have savings with their financial institutions while 63% of the adult population are gainfully employed (Financial Inclusion Insights, 2021).

Table 1. Data showing financial inclusion in Nigeria

Registered Bank Accounts by Gender	Registered Bank Accounts by Locality	Registered Bank Accounts by Income
Women, 20%	Urban dwellers, 42%	Over $2/day, 45%
Men, 37%	Rural dweller, 23%	Less than $2/day, 18%

Source: Financial Inclusion Insights (2021).

From Table 1, the percentage of adult Nigerians who own a bank account shows that women are still in the minority with more men owning an account. This may be an offshoot of the patriarchal nature of the society which reflects in the cultural practices and religious beliefs that condemn women and girls to certain roles and responsibilities in the society based on their gender and age (Aidis et al., 2007; Drinkwater, 2017). This gender bias limits their ability to make contributions to socio-economic development (Umukoro & Okurame, 2017; Bako & Syed, 2018) and reduces female participation in bank account ownership compared to men. This pattern, as expected also obtains in terms of the location of the people who own an account. They are mostly urban dwellers compared to the rural dwellers. This may be attributed to the insufficient spread of financial institutions, particularly in rural areas (MP & Pavithran, 2014) and low adoption and use of mobile banking and MMAs in the rural areas (Yawe & Prabhu, 2017). Also, regarding registered account owners, there are more people who make over $2/day who own an account with a financial institution in Nigeria compared to those who make less than $2/day as seen in Table 1. Sahoo et al. (2017) argued that there is a significant correlation between household income and bank account ownership. Indeed, the fact that those who make a higher income from Table 1 own an account compared to those on lower income further confirms the position of Sarma and Pais (2011) who averred that those individuals with higher incomes tend to have formal bank accounts and are able to better take advantage of the benefits of financial inclusion compared to individuals who have low or irregular incomes.

1.3 Financial Inclusion

In recent times, financial inclusion has been a major policy initiative and objective of governments in both developing and emerging economies due to the benefits it provides to their economic development. It provides the opportunity to bring the excluded and vulnerable population into the formal financial sector, such that they can be empowered through the provision of access to formal financial products and services (Allen et al., 2016). As a result of the tremendous efforts being paid to financial inclusion, several emerging economies are already experiencing high levels of financial inclusion which is aiding the economic acceleration of these economies. There have been some success stories on financial inclusion in a few emerging and developing economies in Sub-Sahara Africa (SSA) according to (Hove & Dubus, 2019; Lichtenstein, 2018; Mogaji et al., 2021; Ndung'u, 2018; Okoroafor et al., 2018; Otioma et al., 2019; Ozili, 2020; Soetan et al., 2021).

In spite of these recorded successes, there is still a long way to go for developing and emerging economies to achieve the effective form of financial inclusion obtainable in developed economies. This disparity highlights the huge gap between those in the financial inclusion bracket and the excluded groups in developing and emerging economies. Literature reveals that a low level of financial inclusion does not augur well for economic emancipation in emerging and developing economies. Dawar and Chattopadhyay (2002) suggest that most consumers in emerging and developing economies are daily wage earners who do not have the capacity to engage in significant savings but rather depend on a limited cash flow of income for daily survival. Consequently, such consumers are focused on survival (food, clothing, and shelter) and are not invested in owning or using financial services. In addition, there are fewer financial services operators across the vast rural areas of these emerging and developing economies. As a result, most consumers in these communities do not have access to financial services (Dupas et al., 2012; Soetan, 2019).

The absence of a high level of financial inclusion in any society implies financial vulnerability. Financial vulnerability can be conceptualised from both a personal perspective and a market structure perspective (Mogaji et al., 2020). On the one hand, the personal perspective occurs when an individual does not have access to financial services and as a result, cannot manage their transactions and bills effectively. Hence, these personal circumstances can force an individual to become financially vulnerable (Coppack et al., 2015). On the other hand, the market structure perspective relates to market contexts that limit access to financial services (CMA, 2019). In emerging and developing economies, especially in Africa, there are high levels of institutional adversity (Parente et al. 2019). This is due to the absence of market-supporting institutions, lack of infrastructure and specialised intermediaries, weak government regulations, non-implementation of policies (Centre for Global Development 2018), high levels of market imperfections, low levels of financial literacy and education (Bongomin et al., 2016; Sashi, 2010; Shah & Dubhashi, 2015; Zins & Weill, 2016), and poor communication and transportation services (Bayero, 2015).

1.4 Vulnerable Group Theory of Financial Inclusion

The theoretical framework upon which this study is hinged draws from research on financially vulnerable customers and financial inclusion. Literature reveals an increasing number of studies and findings on financial inclusion involving both policy research and academic research (Demirguc-Kunt et al., 2018) although Prabhakar (2019) argued that there is still an absence of synergy between the policy and academic literatures of financial inclusion. A number of theories related to financial inclusion have been identified even though there are presently no elaborate theories of financial inclusion in the policy or academic literature (Ozili, 2018). The theory of vulnerable group of financial inclusion argues that empowerment programs that enhance financial inclusion should be targeted at the vulnerable members of the society such as the poor, young people, unemployed/underemployed, women, physically challenged and elderly people who mostly suffer from economic hardship and crises (Mogaji et al., 2020; Ozili, 2020).

One way of increasing the financial inclusion bracket to vulnerable people according to this theory is by extending Government-to-Person (G2P) social cash transfer to vulnerable people. The success of the G2P social cash transfer to this category of people encourages them to open a formal bank account in order to better take advantage of the benefits of the G2P initiative of the government which also helps to increase the financial inclusion bracket. The other benefits of this theory include its focus on vulnerable people by bringing them into the formal financial system as a way of enhancing financial inclusion. Furthermore, the theory identifies vulnerable people based on certain attributes and/or characteristics such as income level, gender, age, and other demographic characteristics. These make it easier to enhance financial inclusion by targeting the vulnerable people in the society who live mostly in the rural areas rather than the entire population (Ozili, 2020).

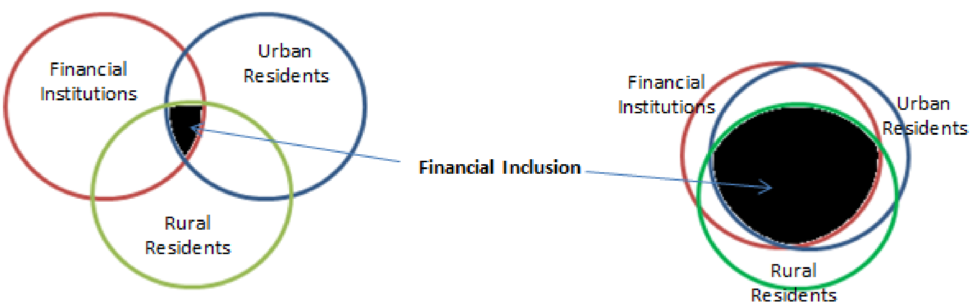

Figure 1. Interplay of participants involved in Financial Inclusion

Figure 1 shows the interplay of the participants who are involved in the attainment or enhancement of financial inclusion. According to the figure, financial institutions are expected to promote a proximodistal pattern of increasing financial inclusion in the society. Financial institutions which include both banks and non-banks have marketing strategies, services, and programs to attract vulnerable customers who are mostly the poor, low-income earners, women and youth into the financial inclusion bracket. These financial institutions also ensure that they continue to come up with different initiatives, services, and programs that continue to engage non-vulnerable customers (Mogaji et al., 2021) who include gainfully employed workers, salary earners, and entrepreneurs to continue to enjoy the benefits that accrue to customers who are gainfully employed. That is in addition to ensuring that vulnerable customers who have been drawn into the financial inclusion bracket remain there through programs such as financial literacy, education, and other training seminars that would sustain their interest in financial inclusion services.

1.5 Hypotheses

Mia et al. (2021) found that lending in rural areas is more cost-efficient than in urban areas, even after considering various proxies and endogeneity issues. In another study, Liu et al. (2021) found that the industrial economy and governmental intervention are the common determinants of urban and rural digital financial inclusion development. In that regard, Song (2017) argued that digital inclusive finance could serve more rural customers by extending the reaches, reducing the costs and enhancing the risk controls. Based on outcomes of these related studies, the direction of this study is guided by the following hypotheses.

Hi: There will be a significant main and interaction effect of residential status and perceived cost of financial inclusion on access to financial inclusion services in an emerging economy.

Hi: There will be a significant main and interaction effect of residential status and perceived cost of financial inclusion on quality of financial inclusion services in an emerging economy.

Hi: There will be a significant main and interaction effect of residential status and perceived cost of financial inclusion on usage of financial inclusion services in an emerging economy.

In addition, this study aims to provide intervention-based insights for policymakers on improving the rural-urban gap in financial inclusion while encouraging financial services managers towards product development through appropriate services research. Therefore, further analysis would be guided by the following research question.

What form of digital inclusion finance measure can be adopted to reduce the rural-urban financial inclusion gap in an emerging economy?

2. Method

The study adopted both quantitative and qualitative approaches across two phases. Quantitative methods were adopted for Phase One of the study while qualitative methods were adopted for Phase Two of the study. The first phase of the study was dedicated to obtaining information that described perceptions of financial inclusion services among consumers while the second phase focused on obtaining further insights about financial inclusion from key informants in the Nigerian banking industry.

2.1 Phase One

2.1.1 Design

A cross-sectional design was adopted as a quantitative approach to obtain data from a target population within a specific point in time. The study was conducted in one of the largest cities in Africa with specific emphasis on an urban and a rural population. The variables of interest included financial inclusion and cost of financial inclusion. Financial inclusion was defined as the availability and equality of opportunities to access financial services among a populace. Cost of financial inclusion describes the financial implication of utilizing resources of financial inclusion. Relevant data were collected between November 18 and December 8, 2021. The urban sample was obtained from a major urban setting in the city while the rural sample was obtained from the outskirts of the city. The study sample was made up of 453 participants with 46.8% of them being rural residents and 53.2% being urban residents. The sample comprised of more male (60.9%) participants than their female counterparts with ages ranging from 18 to 60 years and a mean age of 37.9. Non-probability sampling methods were used to derive the study sample, which included a combination of purposive and convenient sampling. The justification for adopting non-probability sampling methods stemmed from the limited control over a sampling frame for members of the general public.

A structured questionnaire was developed and utilized in eliciting relevant information from the study participants. The questionnaire was made up of three sections; the first section contained items that described the socio-demographic characteristics of the respondents. The second and third sections contained items that measured *financial inclusion* and *cost of financial inclusion* respectively. The scales for measuring these variables of interest were developed by the researchers through an in-depth review of the literature on financial inclusion from a culturally relevant perspective. Financial inclusion was measured along three dimensions:

- Access to financial inclusion services,
- Quality of financial inclusion services; and,
- Usage of financial inclusion services.

Five items were used to rate the first dimension based on a 'yes' or 'no' response format. Sample items included *'I own a functional bank account'* and *'I know my bank's USSD code for financial transactions'*. The second dimension was measured using a 5-item scale with a 5-point response format ranging from '1=strongly disagree' to '5=strongly agree'. Sample items included *'there are several POS units in my area of residence'* and '*my bank branch is proximally available in my home environ'*. The third dimension was measured using a 7-item scale with a 5-point response format ranging from '1=Never' to '5=Always'. Sample items included '*How often do you use POS units for transactions?*' and *'How often do you use bank USSD codes for transactions?*'

Perceived cost of financial inclusion was measured based on a 3-level rating (Low, Moderate and High) of the service charges incurred for utilizing financial inclusion platforms such as ATMs, POS, Bank Apps etc. A list of relevant financial platforms was provided for the respondents.

2.1.2 Data Collection Procedure

Ethical approval to conduct the research in the study area was duly obtained from the University research ethics board where the research was conducted. The researchers then liaised with 10 willing research assistants to administer the questionnaire. The research assistants are university graduates in the country. The research assistants were apprised about the study and given adequate training on the questionnaire administration and data collection process. The services of the research assistants were incentivized. The research assistants were given adequate introductory letters and identification credentials for the purpose of the study. The administration of the questionnaire was done on a house-to-house basis in which one questionnaire was expected to be administered to one member of each of the households visited.

The research assistants were paired up such that each pair of research assistants was tasked with visiting 50 households in their designated survey areas. Household heads (if available) or any adult member of the household was to complete the instrument. After brief introductions, the research assistants explained what the study was about and provided opportunities for prospective respondents to ask clarification questions related to the study. Participation was completely voluntary. Respondents who gave verbal consent to participate in the study were then given a copy of the questionnaire for immediate completion. Participants were assured of the confidentiality of their participation and responses. They were also implored to provide sincere responses in order to enhance the external validity of the study outcomes. Completed questionnaires were retrieved on site by the research assistants. Out of the 500 copies of the administered questionnaire, 453 of the retrieved copies were deemed adequate for further data analysis. The 453 copies of the questionnaire were coded and input into a current version of the SPSS software. Descriptive statistics such as frequency distribution and percentages were used to analyze the demographic characteristics of the respondents while inferential statistics such as the factorial ANOVA was used for the hypotheses testing at 0.05 level of significance.

2.2 Phase Two

2.2.1 Design

A phenomenological design was adopted as a qualitative approach for this phase of the study. The objective of this phase of the study was to gain further insight about outcomes obtained in the phase one of the study. Data was obtained from experienced professional bankers (as key informants) within the Nigerian banking and financial services sector. A combination of purposive sampling and snowballing technique was used to identify four key informants from branches of reputable banking institutions in the study area. The interview sessions were guided by an objective template which contained items that were in line with the study objectives. The interview guide also included items that identified socio-demographic characteristics of the participants such as work experience, designation etc. Face validity of the interview guide was achieved through an evaluation by a committee of experts. Items that received unanimous acceptance were retained while items that seemed vague, complex or invalid for the study were modified accordingly. The interview sessions were conveniently scheduled and conducted via Zoom.

2.2.2 Data Collection

A trained research assistant was recruited to cater to the initial groundwork of interview scheduling for the study.

The research assistant was provided with the necessary documentation for identification and authorization to assist the researchers on the field. Four banks were purposively sampled based on their reputation in financial inclusion efforts. Initial contact was established with experienced personnel in managerial capacity within the banks through the researchers' contact. The purpose of this initial contact was to inform the contact-person about the study and, via snowballing, identify a potential participant with expertise and knowledge about financial inclusion services in Nigeria. Upon briefing and gaining consent from the potential participant to participate in the study, a convenient date and time was scheduled for a phone call interview. Having obtained the interview schedules, the researchers made contact via Zoom to the participants for the interview as arranged. During the interview sessions, the researchers reassured the participants that all ethical considerations as previously briefed during the initial briefing would be upheld. Additionally, they were informed that their participation in the interview was based on their expertise as bank managers in the Nigerian financial services system, and not as representatives of their banking institutions. The interview sessions were recorded for further transcription and analysis. Data obtained from the interview sessions were subjected to content analysis and clustered emergent themes. This procedure provided a contextual lens used to obtain valid answers to the research questions of the study.

3. Quantitative Outcomes

3.1 Hypothesis One

There will be a significant main and interaction effect of residential status and perceived cost of financial inclusion on access to financial inclusion services. This hypothesis was tested using a 2x2 factorial ANOVA. Results are presented in Table 2.

Table 2a. Summary of 2x2 factorial ANOVA showing main and interaction effect of residential status and perceived cost of financial inclusion on access to financial inclusion services

Source	**Type III SS**	**Df**	**MS**	**F**	**Sig.**
Corrected Model	140.817[a]	3	46.939	15.291	.000
Intercept	3938.944	1	3938.944	1283.191	.000
Residential Status (R)	129.585	1	129.585	42.215	.000
Perceived Cost of Fin Inclusion (PC)	3.133	1	3.133	1.021	.313
R * PC	1.484	1	1.484	.483	.487
Error	966.939	315	3.070		
Total	5377.000	319			
Corrected Total	1107.755	318			

DV: Access to financial inclusion services

Results from Table 2a show that there is a significant main effect of residential status on access to financial inclusion services [$F_{(1, 315)}$= 42.215; p<.05] while perceived cost of financial inclusion had no significant main effect on accessibility to financial inclusion services [$F_{(1, 315)}$= 1.021; p>.05]. Furthermore, the interaction effect of residential status and perceived cost of financial inclusion on accessibility to financial inclusion services was not significant [$F_{(1, 315)}$ = .483; p>.05]. The hypothesis stated is therefore partially accepted due to the main effect of residential status. The direction of effect is presented in the summary of estimated marginal means below.

Table 2b. Summary of estimated marginal mean

			95% Confidence Interval	
Residential Status	Mean	Std. Error	Lower Bound	Upper Bound
Rural	3.160	.123	2.918	3.402
Urban	4.560	.177	4.212	4.908

DV: Access to financial inclusion services.

Results from Table 2b show that residents in the rural setting reported lower ($\bar{x}$=3.160) accessibility to financial inclusion services, while residents in the urban setting reported higher ($\bar{x}$=4.560) accessibility to financial inclusion services. The results suggest that financial inclusion among the rural populace may be significantly hampered by the lack of accessibility to financial inclusion services. In simple terms, the results suggest that accessibility to financial inclusion hubs such as bank, ATM points and POS units was limited in rural areas due to their relative unavailability when compared to urban areas. It may be implied that rural communities are highly under-served as regards financial inclusion services, irrespective of the numerous financial institutions that are invested in the economy. This divide in rural-urban differentials of financial inclusion services have left a major lacuna in the financial inclusion status of the country and have created an avenue for informal players to take advantage of this deficit in rural areas. Thus, informal and non-skilled financial entities have begun to provide financial services in many rural locations (Oluwoyo & Audu, 2019). For instance, the culture of money lending by individuals as a business venture still thrives in many rural areas in both emerging and developing markets.

While some positives may be identified from the activities of such informal financial institutions in rural areas, their weak institutional and managerial capacities, as well as their isolation from the financial system pose significant limitations with huge ramifications. It is therefore suggested that financial institutions should be proactive in identifying the benefits of extending financial inclusion services to rural areas in Nigeria. Many rural economies in Nigeria are characterized by needs to purchase agricultural inputs, obtain veterinary services, maintain infrastructure, contract labour for planting/harvesting, transport goods to markets, make/receive payments, manage peak season incomes to cover expenses in low seasons, invest in education, shelter, health, or deal with emergencies. Therefore, investing in financial inclusion services in rural areas will not only be a viable long run investment for financial institutions, but will also expand the horizon for development in such areas.

3.2 Hypothesis Two

There will be a significant main and interaction effect of residential status and perceived cost of financial inclusion on quality of financial inclusion services. This hypothesis was tested using a 2x2 factorial ANOVA. Results are presented in Table 3.

Table 3. Summary of 2x2 factorial ANOVA showing main and interaction effect of residential status and perceived cost of financial inclusion on quality of financial inclusion services

Source	Type III SS	Df	Mean Square	F	Sig.
Corrected Model	22.047	3	7.349	.994	.396
Intercept	120975.710	1	120975.710	16371.271	.000
Residential Status (R)	.075	1	.075	.010	.920
Perceived Cost of Fin Inclusion (PC)	21.935	1	21.935	2.968	.086
R * PC	2.247	1	2.247	.304	.582
Error	2327.696	315	7.390		
Total	147388.000	319			
Corrected Total	2349.743	318			

DV: Quality of financial inclusion services.

Results from Table 3 show that there is no significant main effect of residential status [$F_{(1, 315)}$= .010; p>.05] and perceived cost of financial inclusion [$F_{(1, 315)}$= 2.968; p>.05] on the quality of financial inclusion services. Similarly, the interaction effect of residential status and perceived cost of financial inclusion on the quality of financial inclusion services was not significant [$F_{(1, 315)}$= .304; p>.05]. The hypothesis stated is therefore rejected. The results imply that participants' report of the quality of financial inclusion services did not vary irrespective of urban-rural differentials and perceived cost of financial inclusion. The results suggest that the quality of the financial inclusion services that could be obtained in rural areas was not different from that which was obtainable in urban settings. This is justified by the fact that the same models of financial inclusion services which are used by service providers function at par irrespective of their location or perceived cost. For instance, POS agents provide similar services and functions in both urban and rural areas.

3.3 Hypothesis Three

There will be a significant main and interaction effect of residential status and perceived cost of financial inclusion on usage of financial inclusion services. This hypothesis was tested using a 2x2 factorial ANOVA. Results are presented in Table 4.

Table 4a. Summary of 2x2 factorial ANOVA showing main and interaction effect of residential status and perceived cost of financial inclusion on usage of financial inclusion services

Source	Type III SS	Df	Mean Square	F	Sig.
Corrected Model	6165.647[a]	3	2055.216	37.280	.000
Intercept	134278.537	1	134278.537	2435.698	.000
Residential Status (R)	9.927	1	9.927	.180	.672
Perceived Cost of Fin Inclusion (PC)	5339.682	1	5339.682	96.857	.000
R * PC	.719	1	.719	.013	.909
Error	17365.757	315	55.129		
Total	200193.000	319			
Corrected Total	23531.404	318			

DV: Usage of financial inclusion services.

Results from Table 4a show that there is a significant main effect of perceived cost of financial inclusion on usage of financial inclusion services [$F_{(1, 315)}$= 96.857; p<.05] while residential status had no significant main effect on usage of financial inclusion services [$F_{(1, 315)}$= .180; p>.05]. Furthermore, the interaction effect of residential status and perceived cost of financial services on usage of financial inclusion services was not significant [$F_{(1, 315)}$= .013; p>.05]. The hypothesis stated is therefore partially accepted due to the main effect of perceived cost of financial inclusion. The direction of effect is presented in the summary of estimated marginal means below.

Table 4b. Summary of estimated marginal means

			95% Confidence Interval	
Perceived Cost of Fin Inclusion (PC)	Mean	Std. Error	Lower Bound	Upper Bound
High	18.044	.726	16.616	19.472
Low	27.032	.554	25.941	28.123

DV: Usage of financial inclusion services.

Results from Table 4b show that participants with perceptions of high cost of financial inclusion reported lower usage ($\bar{x}$=18.044) of financial inclusion services, while participants with perceptions of low cost of financial inclusion reported higher usage ($\bar{x}$=27.032) of financial inclusion services. The results suggest that usage of financial inclusion services among the populace may be significantly hampered by the cost of financial inclusion services. Thus, the charges incurred for utilizing financial inclusion services, may seem negligible for an urban populace, but are deemed expensive for a rural populace. This is obviously due to class disparities between rural and urban populaces; with the affluent society clustered in urban settings and the masses in rural settings. It may therefore prove worthwhile for financial institutions to consider locational differences in ascribing service charges for financial inclusion services. This is a possibility which can be exploited with technological advancements in identifying mapped coordinates of financial inclusion platforms and usage locations.

4. Qualitative Outcomes

4.1 Efforts at Expanding Financial Inclusion in Rural Nigeria

- *National financial inclusion strategy*

As obtained from the data transcripts, efforts to drive financial inclusion in rural Nigeria prompted the National Financial Inclusion Strategy (FIS) in 2012 which was set up to pursue an agenda for expanding financial inclusion in rural interiors of the country such that by the year 2020 and beyond, rural populace would have significant access to inclusion services at affordable costs that meet their financial needs. The FIS was premised on four strategic areas which included mobile banking, agency banking, linkage models, and empowerment of clients. The major issues that were articulated around these strategic areas revolved around demand, supply, regulations, barriers, targets, key performance indicators (KPIs), implementation, structure etc. Since the inception of the FIS, several positive strides have been made towards expanding financial inclusion across rural Nigeria. Some of these efforts were further highlighted in the responses provided by the study participants.

I think sometime in 2013 or thereabout, I'm not certain, CBN started what we call National Financial Inclusion Strategy because they realized

Basically, the purpose of the strategy is for any Nigerian to be able to have access to financial products at an affordable cost and very easy to *then that we have a lot of people in rural areas that don't have access to financial services.*

KII-2

access. Either you want to deposit or withdraw money or make a transfer.

KII-1

In line with the objectives and importance of the financial inclusion strategy as highlighted by the study respondents, financial inclusion strategies have been known to improve commerce and have a wide scope covering both the public and private sectors (Aduda & Kalunda, 2012). A financial inclusion strategy has several broad focal points as highlighted by Reyes (2011). However, the basic objective of a financial inclusion strategy or action plan is to harmonize all efforts from public and private stakeholders geared towards scaling up and improving financial inclusion while at the same time improving financial stability and integrity within the economy (Sarma & Pais, 2011). Financial inclusion strategies can be wide-ranging, including both public and private sector interventions. They could be implemented as stand-alone policies or made part of a holistic strategy for developing the financial services sector. Such strategies may also be context specific in areas where the need for action is highlighted, such as provision of capital base for SMEs, funding or financial literacy, or broader measures to address various barriers to financial inclusion (Sarapaivanich & Patterson, 2015).

- *Licensing of Payment Service Banks*

More than half of the study respondents made reference to the introduction of licensed Payment Service Banks (PSBs) by the Central Bank of Nigeria (CBN) as a financial inclusion strategy. Given the holistic challenge of effectively reaching out to rural interiors of Nigeria, the CBN decided to license the operation of PSBs in Nigeria. The PSBs are geared towards the use of mobile and digital channels to improve and expand financial inclusion in rural areas while stimulating grassroots economic activity through the accessibility of financial inclusion services. The introduction of PSBs is expected to facilitate high-volume and low-value transactions in remittance services, micro-savings, and withdrawal services in a secure, technology-driven environment, which would further deepen rural financial inclusion. The main objective of establishing the PSBs is to enable small businesses, low-income households, and other financially vulnerable individuals to improve financial inclusion by enhancing access to payment services and remittances within the confines of a secure technology-driven structure. The licensing of PSBs empowered other non-traditional banking corporations to deploy technology-based services in providing and facilitating basic banking operations such as deposits, transfers, savings and other transactions among banked and unbanked persons in rural interiors or places devoid of traditional banking activities.

CBN gave approval to TELCOS (Telecommunications companies) to drive FI and that is the main reason for Payment Service Banks (PSBs). So, the goal of PSBs is to take FI to the rural area especially the far North of the country

KII-4

One of the first ones which is the most recent is the Central Bank of Nigeria (CBN) roll out of license for the Payment Service Banks (PSBs) with the requirement that the PSBs must have the existence of their branches in the rural service area of Nigeria. So, that is a major effort that the CBN has done to try to promote FI in the rural areas.

KII-1

In line with the financial inclusion efforts of the CBN through the licensing of PSBs, Wormald et al. (2021) have anticipated that Nigeria is gradually following similar approaches adopted by some African countries like Kenya to integrate financial services through well-established Telcos companies. This approach allows customers with phone numbers to access financial services through their mobile phones (Olaleye et al., 2018). While the Telcos have led this drive for financial inclusion in many countries, it is a different approach in Nigeria, where Telcos follow the banks' lead (Lepoutre & Oguntoye, 2018).

- *Agency banking and fintech operations*

As further highlighted by the study participants, the licensing of PSBs paved way for the influx of agency banking and fintech operations. Formal banking services have remained out of reach for most Nigerians as most traditional bank branches in Nigeria are located in big cities. This is not an ideal structure in a country with over 100 million people dwelling in rural areas. Results from an initial pilot study conducted by the researchers indicated that distance from rural residents to banking structures was a key factor limiting financial inclusion in rural Nigeria. However, with the rise of agency banking and mobile money model in the country, more Nigerians in rural areas are now involved in financial transactions via technology-based services than a few years ago. Agency banking and fintech startups have been key to expanding access to financial services in a largely impoverished mass market. Agency banking, in particular, has seen significant growth, driven by clusters of fintech startups such as OPay, Paga, Carbon, and Traction as well as major telecom providers such as MTN and

Glo mobile. Additionally, the traditional banking institutions have also taken advantage of the PSB license to participate and compete favorably with other fintechs by introducing mobile money applications and USSD channels to access banking services.

> *The other one is just also part of what the CBN has done way back to when the agency banking guideline was released. Agency banking guideline facilitated operational processes which enable banks to offer banking and basic financial services at remote locations. The service is provided by agent operators who are individuals within their locality.*
>
> *KII-1*

> *In addition, the CBN also created a framework called Agency banking because they realized that all the banks in Nigeria cannot be everywhere. No bank may be present in all the 774 Local Government Areas (774) in Nigeria, and even if a bank is in all the LGAs, there is still a huge distance within the LGAs that people have to travel to access a bank office.*
>
> *KII-2*

> *One way or the other, we encourage them to have POS (Point of Sale) machines which they use to make payments such that people don't have to come to the bank. They can pay the customers through the POS which is what the agency banking is all about. I know there are so many agents all over the place.*
>
> *KII-3*

> *License for PSB has enabled Fintechs to help deepen financial inclusion. It's an easy way of spreading financial channels to rural areas and that's why people are leveraging on agency banking*
>
> *KII-4*

Agency banking as an expansion strategy borrows its concept from branchless banking model used for delivering financial services without reliance on bank branches as depicted by Afande and Mbugua (2015). The authors averred that agency banking represents less cost alternative to traditional banking through the use of common delivery channels such as retail outlets, mobile phones, internets, and ATMs. In agency banking, third parties are involved in doing all banking activities usually performed by the banks' officers. The authors further show that agency banking is beneficial to the clients because it lowers transactions cost by bringing services closer to homes to save transport cost to reach bank branches. Lotto (2016), averred that agency banking allows customers to enjoy longer opening hours since this business operates for longer hours than banks and reduces longer queues. Idoko and Chukwu (2022) show that the operations of banking agents help commercial banks from attending to long queues in their branches and, therefore, increase the convenience of serving their customers. In other developing countries' financial institutions, agency banking is used to reach the business segment which is geographically located away from their usual business centers.

- *Introduction of KYC framework accounts*

Another effort to drive financial inclusion in rural interiors of Nigeria was identified in the introduction of KYC framework accounts. KYC is an acronym for 'Know Your Customer/Client' which focuses on a process of customer/client identification at the point of opening an account. Simply put, it entails ensuring that the bank is able to identify and verify the authenticity of the account holder and account operations. The modification of the KYC framework into different tiers was motivated by the need to make opening and owning a bank account less stressful with different categories of documentation. As such, the stringent provision of specific documentation for opening an account has been made more flexible based on the availability of the different tiers of KYC frameworks. For instance, a Tier-1 KYC account may be opened with basic information (e.g., name and phone number) and limited documentation (e.g., utility bill or passport). Such a Tier-1 KYC account may however, be limited to basic financial operations (deposits and transfers) with a specific capacity for these transactions. This tier of KYC account is especially appreciated by many rural dwellers who would not have possessed some of the documentation needed for opening regular bank accounts; and whose financial capacity and operations are relatively limited. Interestingly, customers can update and upgrade their KYC accounts to higher tiers when such necessities arise.

> *Also, CBN introduction of KYC guideline makes it easier for anyone and everyone to open a bank account without necessarily providing complicated documentation to open an account. All they just need is to provide their phone number, their name, Date of Birth, and it's easy to open an account*
>
> *KII-1*

> *So, what the CBN did was to create Tier based account on a KYC framework. They created the Tier 1, Tier 2 and Tier 3 accounts with the latter being the highest of the savings account. For a Tier 1 account, it means an individual can open a bank account with just a passport photograph.*
>
> *KII-2*

> *In times past, we used to have some requirements from customers before an account can be opened. They have to have valid ID, utility bill for address verification but now, to drive financial inclusion, the government has approved the opening of Tier-1 accounts called remote areas accounts which does not actually need any form of ID except your passport photograph*
>
> *KII-3*

KYC is the due diligence that financial institutions must perform to identify their customers and establish applicable information relevant to doing financial business with them. The compliance function by financial institutions has an increasingly important role to play in protecting the corporate values and reputation of the institution. Hopton (2009) stated that KYC covers from “cradle to the grave”; it means knowing the customer throughout the relationship and keeping this knowledge updated over the entire period. This underscores the fact that KYC is not a one-time activity but a continuous process. Lilley (2003) describes KYC as the first line of defense to a bank against criminals. In banking, the KYC model is a structured framework which any prospective bank customer goes through before establishing a contract with the bank and is continuously monitored throughout the relationship. The rules are reviewed from time to time in line with industry dynamics. These reviews among others are meant to provide an environment conducive for a healthy financial system in line with the best banking practices worldwide (Muller et al., 2007). However, the introduction of a tier system in the KYC by the CBN in 2013 was aimed at extending financial inclusion to financially vulnerable populations in the country (CBN, 2013).

- *Introduction of Bank Verification Number*

The Bank Verification Number commonly called BVN is a biometric identification system implemented by the CBN to curb or reduce illegal banking transacti**o**ns and protect customers' banking transactions in Nigeria. However, in recent times, the BVN has begun to serve another purpose in driving financial inclusion in rural Nigeria. The ownership of a BVN by account holders has promoted financial inclusion among rural dwellers who are now able to access and obtain small scale loans from fintech agencies and microfinance banks. Such persons may only need to provide their BVN as documentation for small scale loans which may be awarded after an evaluation of the applicants’ financial transactions. This is a major achievement of the BVN policy in providing rural dwellers with an opportunity to access loans as capital for startup or expansion of their existing small-scale businesses.

> *Between Tier 2 and 3 accounts, a Bank Verification Number is required to operate both accounts. The BVN provides security for high profiled transactions that can be carried out using Tier 2 and 3 accounts.*
>
> *KII-2*

> *Using the BVN framework, fintechs now offer small –scale and short-term loans to account holders with BVN and active bank accounts. This enables persons and entities without collateral access such loans*
>
> *KII-4*

The need for BVN is necessitated by the increasing incidents of compromise on conventional security systems (password and PIN), hence, there is a high demand for greater security for access to sensitive or personal information in the Banking System (NIBSS, 2019). In recent times, biometric technologies have been used to analyse human characteristics as an enhanced form of authentication for real-time security processes. It involves capturing of all ten fingerprints and facial image including other personal details that facilitate identification and location of each bank account holder (Ernest & Amanda, 2018). For authentication purposes, individuals performing banking transactions such as applying for loans shall be required to identify themselves using their biometric features which will be matched against information in the central database. The access to a central identification base for all bank account holders is a valid platform which fintechs and other mobile money merchants take advantage of in providing loans for entities without collateral or specific documentation (Esoimeme, 2015). This is because the owner of a flagged BVN account is easily traced via the central database.

- *Public sensitization via market storms*

One of the participants identified the use of public sensitization via market storms to create and raise the level of public awareness about the availability of financial inclusion products and services within rural areas of Nigeria. Some of the traditional banks have begun to conduct various forms of awareness campaigns on financial inclusion. For instance, between the 24th of November and 16th of December, 2018, First Bank of Nigeria engaged in financial inclusion awareness through its extension of agent banking campaign to various markets and business hubs across Nigeria. The campaign involved an intensive education and engagement period with rural populace on financial inclusion products from both entrepreneurial and consumer perspectives. Generally, the involvement of agency banking and fintech operators in rural areas of Nigeria have been instrumental in raising the awareness levels and knowledge base of various financial inclusion services among the rural populace.

We do what we call "Market Storm." We move to villages and communities that lack access to financial services. We identify businesses situated in good locations and encourage them to open an agent banking service with us by providing POS for them. In some places, we will brand their shops so that people will know that it is an agent of Access Bank. We call it "Access Closer."

KII-2

We still have people that keep money in their house despite all the channels, despite all the options available - for people to still use their bedroom to keep money - but I think with regular awareness campaigns carried out by financial institutions, people are gradually getting to know about financial inclusion services in their areas

KII-3

There are a series of sensitization and mobilization that the CBN is doing to encourage people by providing enough education on financial systems and services in Nigeria. I think it would be worthwhile to include financial system literacy as a civic education subject in the secondary school curriculum.

KII-4

Banking consciousness and activities have been on the rise in rural Nigeria as a result of financial inclusion campaigns. This is also corroborated by Munoru (2016) who attested to the fact that financial inclusion products and services can now be easily accessed in rural areas through various delivery channels as a result of significant knowledge expansion among rural inhabitants. Similarly, Barasa and Mwirigi (2013) provided evidence of the growing impact of agency banking in creating awareness of financial inclusion in developing economies.

4.2 Evaluating the Success and Barriers of the Financial Inclusion Strategy

The objective of the Financial Inclusion Strategy (FIS) in Nigeria was basically to ensure that financial inclusion products and services is available and can be accessed by 80% of its adult populace by the year 2020. The researchers were therefore compelled to gain insight into the achievement of this objective as perceived by the study participants. While all the participants provided positive evaluations on the success rate of efforts in extending and driving financial inclusion across rural Nigeria, the specific objective of the FIS had not been adequately achieved due to various challenges that were identified. For instance, through various policy provisions, every adult (above 18 years) now has the capacity to objectively own a bank account, and the rate of bank accounts being opened has significantly increased; however, the willingness to own a bank account is still a subjective decision. This lends credence to the proverbial illustration that providing a stream for the horse does not always predict its drinking from the stream. Similarly, based on a regional evaluation of the FIS in rural Nigeria, one of the respondents admitted that its success rate in Southern Nigeria had hit 70% inclusion, but admitted that Northern Nigeria could not boast of such figures. The challenges highlighted as barriers to the success of the FIS in rural Nigeria included the economic downturn, low-income earnings, the security challenges in the northern parts of the country, poor literacy rate, low trust in financial service providers, challenges in resolving transaction disputes, epileptic power supply, and limited network coverage.

The literacy level for financial inclusion is low in many rural interiors of Nigeria. So, they may have a phone, but lack the knowledge of how to use it for financial activities

KII-1

Some rural inhabitants don't trust banks. They believe that banks are overcharging them through unnecessary deductions from their account. So, they don't trust bank to sometimes save their money in the bank.

KII-1

The issue of fraud also discourages rural inhabitants from using bank accounts. Stories of defrauded victims, whose accounts were accessed via social engineering or phone theft, create fear of opening bank accounts.

KII-2

Also, many rural inhabitants don't have any economic activity to get a bankable income. They go to the farm, they do subsistence farming, and they sell or maybe trade by barter within their community and they live on less than N200 or

I'm not conversant with the northern part of the country but in the Southwest where I have travelled to including rural communities that border Nigeria with other surrounding countries, I can say there has been about 70%

Nigeria is yet to achieve 100% coverage for GSM networks in all rural interiors within its boundaries. The major channels for financial inclusion services adopted in Nigeria are technology-driven and reliant on telecommunication *maybe N300 (less than $.70 or $.90) everyday. They don't have an income to put in a bank account.*

KII-3

success rate; but there is still a lot to be done because we still have a lot of challenges that people still encounter.

KII-3

networks. So, areas devoid of GSM networks are often excluded from novel services in the financial system.

KII-4

There have been some success stories on financial inclusion in a few emerging and developing economies in Sub-Sahara Africa (SSA) according to (Adeniji & Awe, 2018; Hove & Dubus, 2019; Lichtenstein, 2018; Mogaji et al., 2021; Ndung'u, 2018; Okoroafor et al., 2019; Ozili, 2020; Soetan et al., 2021). In spite of these recorded successes, there is still a long way to go for developing and emerging economies to achieve the effective form of financial inclusion obtainable in developed economies. In emerging and developing economies, especially in Africa, there are high levels of institutional adversity (Parente et al., 2019). This is due to the absence of market-supporting institutions, lack of infrastructure and specialised intermediaries, weak government regulations, non-implementation of policies (Centre for Global Development, 2018), high levels of market imperfections, low levels of financial literacy and education (Bongomin et al., 2016; Sashi, 2010; Shah & Dubhashi, 2015; Zins & Weill, 2016), and poor communication and transportation services (Bayero, 2015).

5. Discussion

Financial Inclusion products and services come with attendant costs for accessing and utilizing them. Customers have to pay varying amounts of service charges depending on the type and channel of financial inclusion service being used. As obtained from the outcomes of an initial pilot study conducted before the data collection for this study, the cost implication for accessing and utilizing financial inclusion services is a major limitation which dissuades price sensitive customers in rural areas from contemplating its use. It was found that many rural-based inhabitants cited the cost of financial inclusion services as a reason for not utilizing available channels within their vicinity. In some cases, service charges had to be paid directly by the customer to access financial inclusion services (e.g., via POS channels) while in other cases, service charges are deducted automatically from the customers' finances (via USSD channels). Other insights obtained from the pilot study highlighted the lack of transparency on product pricing which resulted in creating trust issues between customers and service providers.

Consequently, the CBN spearheaded a review of the price guidelines for utilizing financial inclusion services in 2019 which saw a lowering of price caps for e-banking transactions taking effect from January 2020. Additionally, financial service providers were encouraged by the CBN to restructure their fees and limits for financial transactions to be more customer-friendly. This was in response to the increased use of digital channels for financial inclusion during the imposed lockdown and restrictions occasioned by the Covid-19 pandemic in Nigeria which limited physical access to banking halls. However, the consideration of price differentials in financial inclusion services between rural and urban areas in Nigeria has not been given much consideration in the literature. The researchers were therefore prompted to obtain stakeholder-views on the possibility of rural-urban price differentials for financial inclusion services. In their response, all of the respondents were not aware of any current or proposed policies that catered to rural-urban price differentials in financial inclusion services.

Hmmm… What I think is possible is to have pricing differentials for different types of products and services. In terms of low differential pricing by geography, that is what I think might be a bit difficult.

KII-1

Well, currently, I'm not aware that there is an intervention program aimed at making provisions for rural-urban differential in the course of FI services. But some pricing adjustments have been made in recent times. For instance, the SMS charge for notification, was reduced to ₦4 from ₦10.

KII-2

Now, you made a valid point by suggesting rural-urban price differentials. I'm 100% in support of that because people in the metropolis have many alternative channels for financial transactions while people in the rural areas have limited channels. So, in that regard, those customers in the metropolis should pay more for financial services.

KII-3

In theory, that's how it should be because the people in rural areas are those, we are trying to poach to have access to financial services. Those are the set of people that are financially excluded and for you to win somebody over, you have to give them something that is financially attractive to them. That is the theory. But let us also look at the practical side of it. Is it sustainable?

KII-4

The seemingly non-existence of a proposed policy or empirical discourse on rural-urban price differential in the cost of financial inclusion services was therefore considered a major gap by the authors which, if exploited, may yield positive effects in driving financial inclusion in rural Nigeria. Wayne et al. (2020) stated that the use of geospatial technological approaches in exploiting this line of thought is a novel financial intervention which is achievable. For instance, Fibæk et al. (2021) used geodata to measure areas with financial access and financial exclusion as a means to improve financial inclusion in Ghana. They relied on a spatial decision support system which enabled geospatial analysis of financial inclusion services being used via mobile devices in different locations. This provided information on the coverage of financial inclusion across the country. Relying on a similar technology to facilitate the capacity to adopt rural-urban price differentials for financial inclusion services seems realistic. Further consultation with an IT specialist yielded the proposed framework in Figure 2**.**

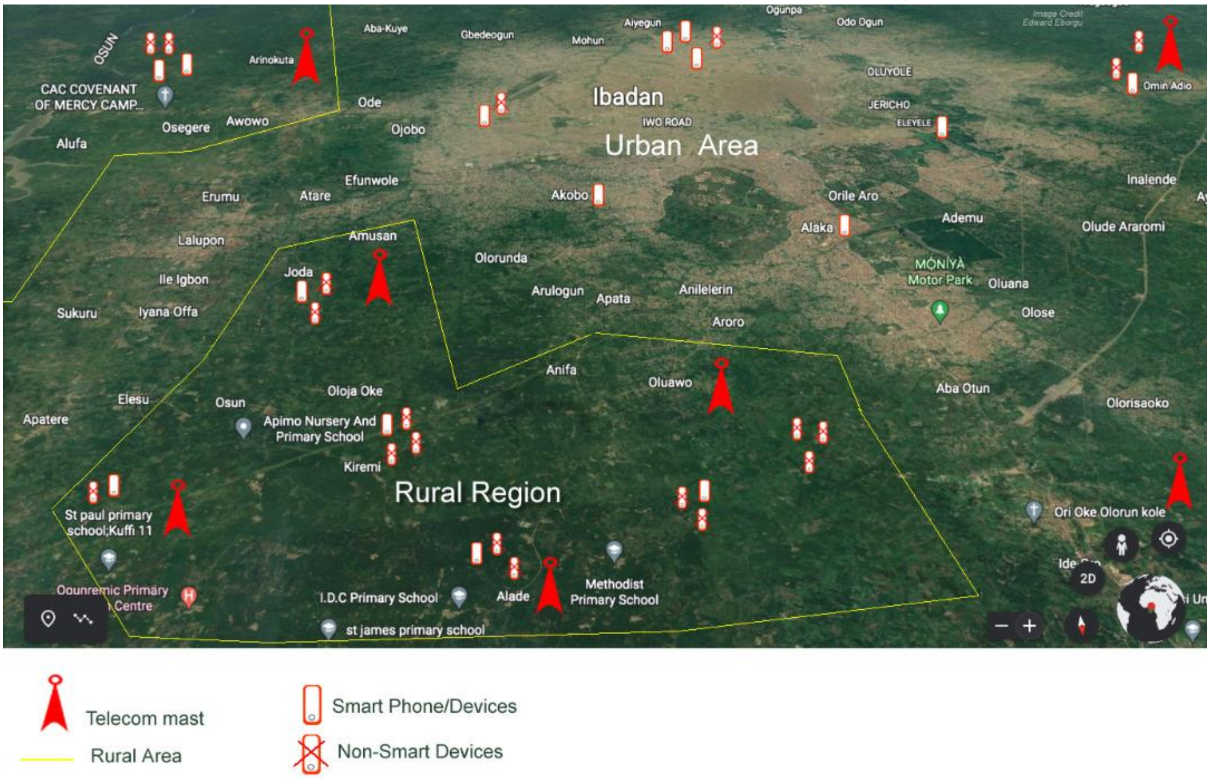

Figure 2. Proposed framework for Geospatial Pricing Differentials

The framework provides a theoretical approach towards achieving rural urban pricing differentials in financial inclusion services. The framework is based on a GIS mapping of transactions carried out via GSM-based mobile devices. All the telecommunication masts within the country would be designated as being situated in rural or urban areas. The location of the transaction-initiating mobile device would then be obtainable via its inbuilt GPS locator or proximity to the nearest telecommunication mast. This implies that smart phone users relying on mobile app channels for financial transactions would need their in-built GPS locator to be enabled in order to benefit from pricing differentials while non-smart phone users relying on USSD channels for financial transactions would be identified by their proximity to the nearest telecommunication mast. This proposed framework is an offshoot of related interests in the geospatial aspects of financial inclusion (UK Space Agency, 2020; Wayne et al., 2020).

A major finding from related financial inclusion studies is the clear division of financial services provided to urban, semi-urban, and rural residents. This is known as the "proximity gap" or "proximity challenge". The availability and accessibility of channels for financial inclusion services decreases rapidly with increasing distance from urban centers (Peachy & Mutiso, 2019). In Wamba et al.'s (2021) study, it was found that important considerations are needed to measure the social and physical distance when evaluating proximity gaps in financial inclusion. It is highly unlikely that customers would go beyond existing social barriers in order to utilize financial inclusion services. Therefore, contextual information, such as the socio-economic profile of the area where the access points are located, should be used to further qualify the socio-physical distance for a more accurate capture of the level of financial inclusion. Furthermore, encouraging the target populace to utilize the available financial inclusion channels can be realized through cost-benefit approaches in the provision of rural-urban price differentials for financial inclusion services.

6. Conclusion

The rural populace in Nigeria is largely excluded from financial products and services due to a variety of factors. They include individuals with limited access to banks. Due to their geographical locations, they seldom have access to bank branches. Due to their personal and economic situation, they may choose not to have a bank account and not integrate into the financial system. These are some of the issues that have been explored under the context of financial inclusion. However, facts support the widespread availability and ownership of mobile phones among a larger percentage of rural inhabitants. Therefore, it is imperative to understand how financial inclusion can be driven through telecommunication companies for these unbanked customers, albeit without the physical structure of a bank. If adequately motivated to access financial inclusion services through their mobile phones, it will become easier to integrate them into the financial system, allowing them to receive money through their mobile phones and mobile number. Undoubtedly, the financial and economic characteristics of these individuals vary, and their level of education and attitude to technology also varies; but this proposed framework for rural-urban geospatial pricing differentials for financial inclusion services via mobile phones offers an entry-level for these customers to access financial services, unlike ever before.

This study makes a significant contribution to existing body of work on financial services provision, financial literacy, and financially vulnerable individuals towards enhancing financial inclusion in today’s global market. Specifically, the study highlights the inherent challenges of financially excluded consumers and the huge benefits through financial services design and innovation that can alleviate these challenges (Mogaji et al., 2021, Soetan et al., 2021). In addition, with a focus on financial services and inclusion in Nigeria, the study has provided theoretical and empirical insights into financial services provision and inclusion from a developing and emerging economies’ perspective. While it is acknowledged that there are people in the developed world who are still excluded in spite of the abundance of services around them, customers in Nigeria and possibly other developing and emerging economies have a unique characteristic that shapes their experience of financial inclusion. Importantly, banks and other financial service providers have a role to play in engaging with financially vulnerable individuals and providing services that meet their needs. Findings of the study confirm the notion that if consumers are financially included, they are empowered to make financial decisions which can enhance their lives and those of their immediate family (Beck et al., 2015, Mogaji et al., 2020; MP & Pavithran, 2014, Ozili, 2018, Salampasis & Mention, 2018, and Soetan et al., 2021).

There are key managerial implications for stakeholders, especially the banks and financial services providers, policy makers, social enterprises, and charity organizations working on improving the financial literacy and financial wellbeing of people. Bank managers are expected to intensify their efforts in ensuring consumers are integrated into the financial system. This involves creating banking products that are targeted toward individuals and prospective customers who are financially excluded. It is also necessary to educate prospective customers about different products and services, to streamline their account opening processes, and use technology to ease their business operations. The effort of the CBN is recognized in reducing the number of financially excluded persons, but there is more to be done with regards to policies that will align the efforts of the banks, fintech developers, and other stakeholders within the industry.

Specifically, considerations should be made around bank charges that discourage people from using banking services, and ideas for open banking which allows customers to explore service offerings from other banks, and a streamlined database which can be the basis of credit file and records. Social enterprises and charity organizations also have a role to play in creating awareness about the inherent challenges around financial inclusion. By working in partnership with banks, fintech developers, and policymakers, they can educate people about financial inclusion, financial education, and financial management. Consumers need to be educated about different bank accounts, different forms of borrowing, and credit facilities that are available. This education can start from secondary schools in both rural and urban areas which would allow consumers to make an informed decision about their finances. This will further highlight the transformative role of financial literacy in improving lives.

This study provides some tentative support to the argument that financial inclusion has a positive impact on individuals who reside in both the rural and urban areas of an emerging economy. This positive impact also contributes to the economic development of the country since financial inclusion makes a significant contribution to the financial empowerment of individuals. Furthermore, this study provides a tentative support to the assertion that residents of urban areas experience a higher level of financial literacy and ultimately financial inclusion compared to residents in rural areas due to the low or limited presence of financial services providers in rural areas. While there are several other factors apart from the presence of financial services providers that may influence financial inclusion, the evidence in this study lends support to a significant relationship between presence of financial services providers, financial literacy, and financial inclusion (Soetan, 2014). Since this study took place in one of the South-Western states of an emerging economy, Nigeria, it will be important to see if other studies that are extended to other parts of the country will come up with similar findings.

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Authors' Contributions

Dr. TOS was responsible for drafting and revising the manuscript while Dr. OSU was responsible for the data collection and analysis for the study. Both authors read, revised and approved the final manuscript.

Competing Interests

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

References

Accion International, Center for Financial Inclusion. (2009). *Financial Inclusion: What's the vision?* Retrieved from http://www.centerforfinancialinclusion.org/publications-aresources/browse-publications/216-financial-inclusion-whats-the-vision

Adesanya, O. O. (2017). *Financial inclusion in Nigeria: The challenges of banks and mobile money operators (MMOs)*. Retrieved on March 9, 2021, from https://www.bis.org/ifc/publ/ifcb47k.pdf

Aidis, R., Welter, F., Smallbone, D., & Isakova, N. (2007). Female entrepreneurship in transition economies: the case of Lithuania and Ukraine. *Feminist Economics*, *13*(2), 157-183. https://doi.org/10.1080/13545700601184831

Allen, F., Demirguc-Kunt, A., Klapper, L., & Martinez-Peria, M. S. (2016). The Foundations of Financial Inclusion: Understanding Ownership and Use of Formal Accounts. *Journal of Financial Intermediation, 27*, 1-30. https://doi.org/10.1016/j.jfi.2015.12.003

Asuming, P., Osei-Agyei, L. G., & Mohammed, J. I. (2018). Financial Inclusion in Sub-Saharan Africa: Recent trends and determinants. *Journal of African Business, 20*(1), 1-23. https://doi.org/10.1080/15228916.2018.1484209.

Bako, M. J., & Syed, J. (2018). Women's marginalization in Nigeria and the way forward. *Human Resource Development International, 21*(5), 425-443. https://doi.org/10.1080/13678868.2018.1458567

Baradaran, M. (2012). How the poor got cut out of banking. *Emory Law Journal, 62*, 483-548. Retrieved from https://scholarlycommons.law.emory.edu/elj/vol62/iss3/1

Baradaran, M. (2015). *How the other half banks: Exclusion, exploitation, and the threat to democracy.* Cambridge, MA: Harvard University Press. https://doi.org/10.4159/9780674495425

Barasa, D. A., & Mwirigi, F. M. (2013). The role of agency banking in enhancing financial sector deepening in emerging markets: Lessons from the Kenyan experience. *European Journal of Business and Management, 5*(21). Retrieved from https://www.iiste.org/Journals/index.php/EJBM/article/view/7438

Bayero, M. A. (2015). Effects of cashless economy policy on financial inclusion in Nigeria: An exploratory study. *Procedia – Social and Behavioral Sciences, 172*, 49-56. https://doi.org/10.1016/j.sbspro.2015.01.334

Beck, T., Senbet, L., & Simbanegavi, W. (2015). Financial inclusion and innovation in Africa: An overview.

Journal of African Economies, *24*(suppl_1), i3-i11. https://doi.org/10.1093/jae/eju031

Bongomin, G. O., Ntayi, J. M., Munene, J. C., & Nabeta, I. N. (2016). Financial inclusion in rural Uganda: Testing interaction effect of financial literacy and networks. *Journal of African Business, 17*(1), 106-128. https://doi.org/ 10.1080/15228916.2016.1117382

CBN Circular. (2013). *Introduction of Three-Tiered Know your Customer (KYC) Requirements.* Retrieved from https://www.cbn.gov.ng/out/2013/ccd/3%20tiered%20kyc%20requirements.pdf

CMA. (2019). *Consumer vulnerability: Challenges and Potential Solutions*. London: Competition and Market Authority.

Coppack, M., Raza, Y., Sarkar, S., & Scribbins, K. (2015). *Consumer Vulnerability* (Financial Conduct Authority [FCA] Occasional Paper No. 8). FCA, London, Retrieved from https://www.fca.org.uk/publications/occasional-papers/occasional-paper-no-8-consumer-vulnerability

Dawar, N. D. N., & Chattopadhyay, A. (2002). Rethinking marketing programs for emerging markets. *Long Range Planning*, *35*(5), 457-474. https://doi.org/10.1016/S0024-6301(02)00108-5

Demirgüç-Kunt, A., & Klapper, L. (2013). Measuring financial inclusion: Explaining variation in use of financial services across and within countries. *Brookings Papers on Economic Activity*, 2013(1), 279-340. https://doi.org/10.1353/eca.2013.0002

Demirguc-Kunt, A., Klapper, L., Singer, D., Ansar, S., & Hess, J. (2018). *The Global Findex Database 2017: Measuring financial inclusion and the fintech revolution.* Washington, DC: The World Bank. https://doi.org/10.1596/978-1-4648-1259-0

Dev, S. M. (2006). Financial inclusion: Issues and challenges. *Economic and Political Weekly*, 4310-4313. https://doi.org/10.2307/4418799

Drinkwater, S. (2017). *Why does unemployment differ for immigrants?* https://doi.org/10.15185/izawol.376

Dupas, P., Green, S., Keats, A., & Robinson, J. (2012). Challenges in banking the rural poor: Evidence from Kenya's western province. *National Bureau of Economic Research Working Paper*, 17851. https://doi.org/10.3386/w17851

Ernest, N., & Amanda, P. (2018). *E-government Development in Nigeria*. Bank Verification No (BVN) Anti-Corruption Tool. Retrieved from https://www.Easychair.org

Esoimeme, E. (2015). *A Critical Analysis of the Bank Verification Number Project Introduced by the Central Bank of Nigeria*. https://doi.org/10.2139/ssrn.2544934

Fibæk, C. S, Laufer, H., Keßler, C., & Arsanjani, J. J. (2021). Geodata-driven approaches to financial inclusion – Addressing the challenge of proximity. *International Journal of Applied Earth Observation and Geoinformation, 99,* 1-15. https://doi.org/10.1016/j.jag.2021.102325

Financial Inclusion Insights. (2021). *Nigeria.* Retrieved on March 9, 2021, from http://finclusion.org/country/africa/nigeria.html#overview

Hegerty, S. W. (2016). Commercial bank locations and “banking deserts”: A statistical analysis of Milwaukee and Buffalo. *Annals of Regional Science, 56*, 253-271. https://doi.org/10.1007/s00168-015-0736-3

Hove, L. V., & Dubus, A. (2019). M-PESA and Financial Inclusion in Kenya: Of Paying Comes Saving? *Sustainability, 11*(3), 568. https://doi.org/10.3390/su11030568

Lichtenstein, J. M. (2018). *Financial Inclusion in Rwanda: Examining policy implementation and impact on community and household lives* (Doctoral dissertation, University of Cambridge).

Liu, G., Huang, Y., & Huang, Z. (2021) Determinants and Mechanisms of Digital Financial Inclusion Development: Based on Urban-Rural Differences. *Agronomy, 11*, 1833. https://doi.org/10.3390/agronomy11091833

Mende, M., Nenkov, G. Y., Salisbury, L. C., & Scott, M. L. (2019). Improving financial inclusion through communal financial orientation: How financial service providers can better engage consumers in Banking Deserts. https://doi.org/10.1002/jcpy.1103

Mia, M. A., Sangwan, S., Hussain, A. H., Abdula, N., & Malim, K. (2021). Rural–urban financial inclusion: Implications on the cost sustainability of microfinance lenders. *Managerial and Decisional Economies, 43*(6), 1889-1911. https://doi.org/ 10.1002/mde.3498

Mogaji, E., Adeola, O., Hinson, R. E., Nguyen, N. P., Nwoba, A. C., & Soetan, T. O. (2021). Marketing bank services to financially vulnerable customers: Evidence from an emerging economy. *International Journal of Bank Marketing, 39*(3), 402-428. https://doi.org/10.1108/IJBM-07-2020-0379

Mogaji, E., Soetan, T. O., & Kieu, T. A. (2020). The implications of artificial intelligence on the digital marketing of financial services to vulnerable customers. *Australasian Marketing Journal, 29*(3), 235-242. https://doi.org/10.1016/j.ausmj.2020.05.003

Morgan, D., Pinkovsky, M., & Yang, B. (2016). *Banking deserts, branch closings, and soft information.* Liberty Street Economics, Federal Reserve Bank of New York. Retrieved from https://libertystreeteconomics.newyorkfed.org/2016/03/banking-deserts-branch-closings-and-soft-information.html.

Munoru, M. K. (2016). Effect of agency banking on financial inclusion in Kenya. *International Journal of Science and Research (IJSR), 5*(10), 1380-1397. Retrieved from https://www.ijsr.net/archive/v5i10/ART20162465.pdf

Ndung'u, N. (2018). The M-Pesa technological revolution for financial services in Kenya: A platform for financial inclusion. *Handbook of Blockchain, Digital Finance, and Inclusion, 1*, 37-56. https://doi.org/10.1016/B978-0-12-810441-5.00003-8

Nigeria Inter-Bank Settlement System. (NIBSS, 2019). *Objectives of Bank Verification Number.* Retrieved from http://www.nibss-plc.com on the 19th February 2019

Okoroafor, D., Adeniji, S. O., & Awe, E. (2018). Empirical Analysis of the Determinants of Financial Inclusion in Nigeria: 1990-2016. *Journal of Finance and Economics, 6*(1), 19-25. https://doi.org/10.12691/jfe-6-1-3

Oluwoyo, J. T., & Peter, A. (2019). Informal Financial Institution and Sustainable Development Goal of Poverty Reduction in Kogi State, Nigeria. *South Asian Journal of Social Studies and Economics*, 1-15. https://doi.org/10.9734/sajsse/2019/v3i230102

Otioma, C., Madureira, A. M., & Martinez, J. (2019). Spatial analysis of urban digital divide in Kigali, Rwanda. *GeoJournal, 84*(3), 719-741. https://doi.org/10.1007/s10708-018-9882-3

Ozili, P. K. (2018). Impact of digital finance on financial inclusion and stability. *Borsa Istanbul Review, 18*(4), 329-340. https://doi.org/10.1016/j.bir.2017.12.003

Ozili, P. K. (2020). Theories of Financial Inclusion. In E. Ozen, & S. Grima (Eds.), *Uncertainty and Challenges in Contemporary Economic Behaviour* (*Emerald Studies in Finance, Insurance, and Risk Management*) (pp. 89-115). Emerald Publishing Limited. https://doi.org/10.1108/978-1-80043-095-220201008

Parente, R., Rong, K., Geleilate, J. M. G., & Misati, E. (2019). Adapting and sustaining operations in weak institutional environments: A business ecosystem assessment of a Chinese MNE in Central Africa. *Journal of International Business Studies*, *50*(2), 275-291. https://doi.org/10.1057/s41267-018-0179-z

Raihanath, M. P., & Pavithran, K. B. (2014). Role of commercial banks in the financial inclusion programme. *Journal of Business Management & Social Sciences Research*, *3*(5), 75-81. Retrieved from https://www.scirp.org/(S(vtj3fa45qm1ean45vvffcz55))

Sahoo, A., Pradhan, B. B., & Sahu, N. C. (2017). Determinants of financial Inclusion in tribal districts of Odisha: An empirical investigation. *Social Change, 47*(1), 45-64. https://doi.org/10.1177/0049085716683072

Salampasis, D., & Mention, A. L. (2018). Fintech: Harnessing Innovation for Financial Inclusion. *Handbook of Blockchain, Digital Finance, and Inclusion, 2*, 451-461. https://doi.org/10.1016/B978-0-12-812282-2.00018-8

Sarma, M., & Pais, J. (2011). Financial inclusion and development. *Journal of International Development, 23*(5), 613-628. https://doi.org/10.1002/jid.1698

Sashi, C. M. (2010). The make-buy decision in marketing financial services for poverty alleviation. *Journal of Services Marketing, 15*(2), 296-308. https://doi.org/10.1057/fsm.2010.25

Shah, P., & Dubhashi, M. (2015). Review paper on financial inclusion: The means of inclusive growth towards financial inclusion. *Chanakya International Journal of Business Research, 1*(March), 37-48. https://doi.org/10.15410/cijbr/2015/v1i1/61403

Soetan, T. O. (2014). Microfinance institutions and the core poor in Bangladesh: A review of their operations. *Advances in Economics and Business, 2*(1), 14-21. https://doi.org/10.13189/aeb.2014.020103

Soetan, T. O. (2019). Poverty and undernutrition in Nigeria: Some programs and policies. *International Journal of Business and Social Science, 10*(4), 39-47. https://doi.org/10.30845/ijbss.v10n4p5

Soetan, T. O. (2020). Addressing the funding challenges of higher education in Africa: The role of African governments, development banks and business corporations. *Strategic Marketing of Higher Education in Africa*, 51-67. https://doi.org/10.4324/9780429325816-6

Soetan, T. O., Mogaji, E., & Nguyen, N. P. (2021). Financial services experience and consumption in Nigeria. *Journal of Services Marketing, 35*(7), 947-961. https://doi.org/10.1108/JSM-07-2020-0280

Song, X. (2017). Empirical Analysis of Digital Inclusive Finance Bridging the Urban-rural Residents' Income Gap. *Finance Econ.*, *6*, 14-25. Retrieved from https://www.en.cnki.com.cn/Article_en/CJFDTotal-CJKX201706003.htm

Umukoro, O. S., & Efevogho, O. D. (2017). Culture-Specific Perspectives of Age and Gender Disparities in Entrepreneurial Intuition. *Global Journal of Human Social Sciences, 17*(8), 12-21. Retrieved from https://socialscienceresearch.org/index.php/GJHSS/article/view/2395

Wamba, S. F., Queiroz, M. M., Blome, C., & Sivarajah, U. (2021). Fostering Financial Inclusion in a Developing Country: Predicting User Acceptance of Mobile Wallets in Cameroon. *Journal of Global Information Management (JGIM), 29*(4), 195-220. https://doi.org/10.4018/JGIM.20210701.oa9

Wayne, T., Soetan, T. O., Bajepade, G., & Mogaji, E. (2020). Technologies for Financial Inclusion in Nigeria. *Research Agenda Working Papers*, 2020(4), 40-56. https://doi.org/10.13140/RG.2.2.35554.89287

World Bank. (2021). *The World Bank in Nigeria*. Retrieved on March 9, 2021, from https://www.worldbank.org/en/country/nigeria/overview

Yawe, B. L., & Prabhu, J. (2017). Innovation and financial inclusion: A review of the literature. *Journal of Payments, Strategy & Systems, 9*(3), 215-228.

Zins, A., & Weill, L. (2016). The determinants of financial inclusion in Africa. *Review of Development Finance, 6*(1), 46-57. https://doi.org/10.1016/j.rdf.2016.05.001