Rural-Urban Differentials in Levels and Correlates of Financial Inclusion Among Nigerian Women Aged 18 to 49

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Abstract

Globally, there is a gap in financial inclusion between men and women. Bridging this gap is imperative considering the impact of women's financial inclusion on poverty eradication, household socioeconomic development, and attainment of related Sustainable Development Goals. In line with the Nigerian government's efforts at scaling up financial inclusion and bridging the gender gap, this study assessed the level of women's financial inclusion in Nigeria. It hypothesized that correlates vary between urban and rural Nigeria. Data from 36,601 women aged 18 to 49 were extracted from the 2018 Nigerian Demographic and Health Survey. The data were analyzed at univariate, bivariate, and multivariate levels. Results show the prevalence of women's financial inclusion at 20.7%, 18.5%, and 22.2% at the national, urban, and rural levels, respectively. Women without education, whose husbands also had no education, and the poor were more financially included in rural areas but least in urban areas ($p < 0.05$). Education, wealth, and religion were significant correlates of financial inclusion in rural areas ($p < 0.05$), but not in urban areas. Therefore, strategies to scale women's financial inclusion should be cognizant of the rural-urban differentials.

Keywords

Financial inclusion; gender gap; Nigeria; rural-urban differential

Introduction

Financial inclusion entails extending structured financial services to the adult population. In the Nigerian financial inclusion strategy, financial inclusion is defined as having been achieved when the adult population in the country has access to a broad range of formal financial services that are affordable, meet their needs, and are provided at a reasonable cost (Anyanwu et al., 2018). The primary measure of financial inclusion is the ownership of a bank account in the traditional mode or via a mobile device. Globally, about 1.7 billion adults are still unbanked [not using banking institutions in any manner] despite the leaps in the percentage of adults with a bank account. Global financial inclusion was 51% in 2011, 62% in 2014, and recently at 69% (Demirgüç-Kunt et al., 2018). Despite this progress, there persists a significant global gender gap in financial inclusion. While 65% of men have bank accounts, only 58% of women do (Demirgüç-Kunt et al., 2018). In Nigeria, the percentages were 46 and 33 for men and women, respectively, in 2019 (Enhancing Financial Innovation & Access, 2019). With the recognition that financial inclusion is critical to achieving seven of the 17 Sustainable Development Goals, including those on poverty, hunger, good health, and well-being, and inequalities (World Bank, 2018), several studies have investigated the determinants of financial inclusion and sought to provide pathways for improving the same (Abel et al., 2018; Allen et al., 2016; Demirgüç-Kunt & Klapper, 2012; Demirgüç-Kunt et al., 2014; Fungáčová & Weill, 2015; Napier et al., 2013; Soumaré et al., 2016; Zins & Weill, 2016). However, these studies are few in Nigeria and fewer concerning women's financial inclusion.

Women's financial inclusion is essential given women's role in social and economic development at the household level. Having a bank account increases women's propensity to save, obtain appropriately-priced credit services to expand their businesses, create assets and generate more income, have a say in household decision making, especially over their health and that of their children; and ultimately to combat poverty (Efobi et al., 2014; Hendriks, 2019; Meurs & Ismaylov, 2019; Nieuwenhuis et al., 2018; Sierminska & Girshina, 2017; UN Women, 2019). A former Minister of Finance, Dr. Ngozi Okonjo-Iweala, said that including more women in the financial system could increase a country's gross domestic product by between 10% and 12% (Chima, 2016). According to Innovation for Poverty Action (2017), providing women with effective and affordable financial tools to save and borrow money, and make and receive payments is sacrosanct for women's empowerment and poverty reduction. With widespread poverty in Nigeria, where 40.1% of the population are poor and live on less than US$1.10 a day (National Bureau of Statistics, 2020), scaling up women's financial inclusion provides an avenue for combating poverty and improving the population's socioeconomic status.

Significant factors associated with financial inclusion established in the literature are gender, education, age, income, religion, residential area, employment status, marital status, household size, degree of trust in the financial institution, financial literacy, internet connectivity, documentation required to open bank accounts, distance to the nearest financial services outlet, as well as deposit and lending rates (Abel et al., 2018; Allen et al., 2016; Demirgüç-Kunt & Klapper, 2012; Demirgüç-Kunt et al., 2014; Fungáčová & Weill, 2015; Napier et al., 2013; Soumaré et al., 2016; Zins & Weill, 2016). These factors are not significantly different in Nigeria (Eze & Markjackson, 2020; Ogunleye, 2017; Ozili, 2020). Specific to gender, Das Barwa (2015) further identified social norms which may constrain women's access to financial services. These include

women's lack of decision-making power, low self-esteem, and customary laws like women's ownership of properties and assets, implying that women would not be able to provide needed collateral for bank credit facilities. The cultural constraints are expressed in the spatial variation in levels of financial inclusion among subnational regions in Nigeria, as shown by the Central Bank of Nigeria (2018) and Enhancing Financial Innovation & Access (2019).

While the above factors broadly affect ownership of bank accounts, knowing how these aspects vary between places matters for addressing policies aimed at scaling-up financial inclusion among women. The Alliance for Financial Inclusion (2017), for instance, suggested that compared to rural women, urban women are most likely to be financially included. The general assumption is that rural women are more likely to have limited access to mobile phones and financial awareness and are less likely to use formal financial services than urban women. As the literature is replete with evidence of marked differences in sociodemographic and economic outcomes between urban and rural areas, this study hypothesizes that the determinants of financial inclusion do not have uniform effects among urban and rural women but are somewhat different based on the locational attributes of both places. An identification of what determines financial inclusion in urban and rural Nigeria will aid the formulation of location-specific, rather than general, strategies for achieving the targets of the national financial inclusion policy. Overall, the vistas provided by this study are expected to positively impact women empowerment and poverty eradication for national development and attainment of cognate Sustainable Development Goals.

Materials and methods

Data source and study population

Data for this study was sourced from the 2018 Nigeria Demographic and Health Survey (NDHS). The NDHS is funded by the United States Agency for International Development (USAID), Global Fund, Bill and Melinda Gates Foundation (BMGF), the United Nations Population Fund (UNFPA), and World Health Organization (WHO). It is a nationally representative survey that employs multi-stage sampling techniques to collect up-to-date estimates of the Nigerian population's fundamental demographic and health indicators (National Population Commission [Nigeria] & ICF, 2019). Using a two-stage stratified cluster sampling technique, the survey sample comprised 42,000 households selected from 74 urban and rural areas in the 36 states and the Federal Capital Territory of Nigeria. To account for disparities in the number of samples from the sampling frame, sampling weights were calculated separately for each sampling stage and cluster-based on sampling probabilities (National Population Commission [Nigeria], & ICF, 2019). This resulted in a total weighted sample of 41,821 women aged 15–49. Financial inclusion is about adult decision-making, and adult age in Nigeria is 18. Accordingly, only 36,601 women aged 18–49 were included in the study.

Variable description

The primary outcome variable for the study is financial inclusion. Broadly conceived, financial inclusion implies the ownership of a bank account. According to the Nigerian financial inclusion strategy (Central Bank of Nigeria, 2018), the broad definition of bank account ownership includes having an account in a traditional bank or being served by other formal and informal financial institutions (e.g., credit and thrift societies, lending institutions, mobile money operators, and other informal service providers). In the 2018 NDHS dataset, the categorization of whether a respondent was financially included covered this broad categorization. Specifically, respondents were asked if they had an account in a bank or any other financial institution they used; and if they owned a mobile phone and used it for financial transactions.

In this study, we concentrated only on account ownership for two reasons. First, it captures the basic definition of financial inclusion. Second, ownership of a mobile phone, a precursor to mobile phone banking, is by choice and affordability. Respondents may choose not to use mobile banking services, even if they had a mobile phone. And for those who did not have a phone, focusing on mobile banking aspects of financial inclusion would have automatically been an exclusion criterion. In the women's individual recode file of the 2018 NDHS datasets, bank account ownership was captured as Variable (V) 170. The two options available for ownership of a bank account in the datasets were Yes or No. The options were adopted as captured in their binary form.

To measure the outcome variable along the rural-urban divide, the type of place of residence, captured as V25 in the 2018 NDHS datasets, was adopted for this study. The two types of places of residence recognized in the datasets were urban and rural. These were also adopted as captured. Other sociodemographic variables employed in the study were age (V13), region of residence (V24), education (V106), religion (V130), ownership of mobile phone (V169A), wealth (V190), marital status (V502), partner's education (V701), and respondent's employment status (V714). Derived variables employed in the study were media exposure and household decision-making. While the former was derived from Variables 120 and 121, which measured whether the respondents had access to radio and television, respectively, the latter was derived from Variables 632, 739, 743A, 743B, 743D, and 743F. These variables measured women's decision-making powers by asking who decided on the respondents' use of contraceptives, who determined how the respondents' earnings were spent, who made decisions on the respondents' healthcare, large household purchases, women's visits to their family and relatives, and who decided how the women's husbands' earnings are spent. The responses were recoded to show three levels of household decision making: 'mostly female,' 'mostly male,' and 'equal decision making.'

Women's autonomy is an essential variable in the study since ownership of a bank account reflects autonomy, social functioning, and financial independence among women (National Population Commission [Nigeria] & ICF, 2019). As shown in the introductory section, all other sociodemographic variables employed have been shown to impact financial inclusion (Abel et al., 2018; Allen et al., 2016; Demirgüç-Kunt & Klapper, 2012; Demirgüç-Kunt et al., 2014; Eze & Markjackson, 2020; Fungáčová & Weill, 2015; Napier et al., 2013; Ogunleye, 2017; Ozili, 2020; Soumaré et al., 2016; Zins & Weill, 2016).

Data analysis

The study employed multi-level analysis using univariate, bivariate, and multivariate statistical techniques. The description of the study population was carried out at the univariate level using frequency and percentages. The analysis was carried out at the national level and further disaggregated by place of residence to urban and rural. The bivariate chi-square test statistics were used to analyze the association between the sociodemographic variables and bank account ownership to determine the association's dimensions in urban and rural areas. The multivariate statistical technique of binary logistic regression was employed, seeing as the outcome variable had binary responses, to determine how each sociodemographic variable was associated with financial inclusion.

The regression equation is the log transformation of the odds (logit) of the dependent variable (Equation 1). It becomes a logistic regression equation (Equation 2) when we include the independent variables. After that, the odds ratio is derived from the exponential values (Equation 3).

$$log(odds) = logit(P) = 1n\left(\frac{P}{1-P}\right) \quad \text{(Equation 1)}$$

$$logit(p) = a + b_1X_1 + b_2X_2 + b_3 + \cdots \quad \text{(Equation 2)}$$

$$P = \frac{exp(a+b_1X_1+ b_2X_2+ b_3+\cdots)}{1+exp(a+b_1X_1+ b_2X_2+ b_3+\cdots)} \quad \text{(Equation 3)}$$

where :

P = the probability that a case is in a particular category
exp = the exponential function
a = the constant (or intercept) of the equation and
b = the coefficient (or slope) of the predictor variables

For the regression analysis, the maximum likelihood estimation technique was used. The maximum likelihood estimation is a probabilistic framework for solving the problem of density estimation in a regression analysis. It involves maximizing a likelihood function to find the probability distribution and parameters that best explain the observed data (Diop et al., 2011). The regression analysis was carried out at the level of places of residence. Therefore, two regression models (urban & rural) were generated to compare the association between financial inclusion and sociodemographic variables among urban and rural women in Nigeria.

Ethical consideration

The 2018 NDHS sought and obtained ethical approval for the survey from the National Health Research Ethics Committee of Nigeria (NHREC) and the ICF Institutional Review Board. The DHS Program gave authorization to use the NDHS datasets for this study.

Results

Sociodemographic characteristics of study population

The national sample comprised more women within the ages of 18 and 19 (20.0%), in union (69.1%), adherents of Islamic faith (49.7%), those who had at least secondary education (40.0%), from rich households (40.3%), and regularly employed (64.7%). As shown in Table 1, nearly 70% of the women had access to either radio or television, 54.3% owned a mobile phone, and the respondents' husbands made most of the household decisions in 47.8% of the households. More than 59% of the population resided in rural areas, while only 20.7% of the sampled population had a bank account. When the general characteristics of places of residence were disaggregated into urban and rural, the patterns of distribution of the respondents' age, marital status, religion, employment status, media access, and household decision making, were similar among urban and rural dwellers. The characteristics, however, differed considerably concerning education, wealth, ownership of mobile phones, and bank accounts. While urban dwellers were more educated, had more educated spouses, and were wealthier, rural respondents had a higher percentage of phone ownership (56.1%) compared to urban residents (51.5%), and a higher percentage of financial inclusion (22.2%) compared to urban residents (18.5%).

Table 1: Sociodemographic Characteristics of Study Population at National Level and by Place of Residence

Spatial Unit	National (%)	Urban (%)	Rural (%)
Variables	**N = 36,601**	**N = 14,762**	**N = 21,839**
Age			
18–19	20.0	19.7	20.2
20–24	16.3	15.4	16.8
25–29	17.3	17.0	17.4
30–34	14.3	15.1	13.8
35–39	13.0	13.5	12.6
40–44	9.8	9.6	9.9
45–49	9.4	9.5	9.3
Marital Status			
Never in Union	25.4	32.2	20.9
In Union/Living with a man	69.1	61.4	74.4
Formerly in Union	5.5	6.5	4.7
Religion			
Catholic	10.7	13.5	8.7
Other Christian	38.7	42.7	35.5
Islam	49.7	43.2	54.8
Traditional/Others	0.8	0.6	1.0
Highest Education			
No education	34.4	16.0	47.1
Primary	15.3	13.9	16.3
Secondary	40.0	52.3	31.5
Higher	10.3	17.9	5.2
Partner Highest Education*			
No education	23.4	9.5	33.0

Spatial Unit	National (%)	Urban (%)	Rural (%)
Variables	**N = 36,601**	**N = 14,762**	**N = 21,839**
Primary	10.6	9.2	11.6
Secondary	23.4	26.1	21.5
Higher	10.7	15.8	7.3
Wealth Status			
Poor	38.5	12.0	56.3
Middle	21.2	19.6	22.3
Rich	40.3	68.4	21.4
Employment Status			
Employed	64.7	64.2	65.1
Unemployed	35.3	35.8	34.9
Access to Radio/Television*			
Yes	69.1	67.8	70.3
No	29.6	30.8	28.6
Ownership of Mobile Phone			
Yes	54.3	51.5	56.1
No	45.7	48.5	43.9
Household Decision Making*			
Feminine	4.3	5.5	3.5
Masculine	47.8	40.1	53.1
Equal	10.3	11.7	9.3
Region			
North-Central	18.7	15.4	20.9
North-East	18.2	11.0	23.1
North-West	24.0	17.6	28.3
South-East	13.4	21.7	7.8
South-South	12.2	10.5	13.4
South-West	13.5	23.9	6.4
Types of Places of Residence			
Urban	40.3	-	-
Rural	59.7	-	-
Has a Bank Account			
Yes	20.7	18.5	22.2
No	79.3	81.5	77.8

*Note: *Contains missing samples*

Sociodemographic dimensions of financial inclusion

The sociodemographic characteristics of the 2,727 and 4,843 women who had bank accounts in urban and rural Nigeria, respectively, were further analyzed. The results are shown in Table 2. In both urban and rural Nigeria, women within the 18–19 age group, in union, who practiced Islam, who were employed, had access to radio and television, and from households where their husbands made the decisions, were found to be more financially inclusive than other sociodemographic categories. Urban women with secondary education, whose spouses had secondary education, and who were from rich households, were more financially inclusive. Women with no education, whose husbands were not educated, and who were from poor households, were more financially inclusive in the rural areas. Women who resided in urban areas of South-West Nigeria had a higher percentage of financial inclusiveness (34.6%) than urban

women from other regions. Women in the urban South-East had the lowest proportion of inclusiveness (8.8%). The South-East region also had the poorest level of financial inclusiveness among its rural women (3.3%), while rural women in the North-East region were more inclusive (31.4%). The chi-square test analysis of the distribution shows that while age, marital status, and household decision-making were not statistically significant ($p < 0.05$) in their association with financial inclusion in urban Nigeria, only age and wealth were not significant among rural women.

Table 2: Sociodemographic Dimensions of Financial Inclusion by Place of Residence

Spatial Unit	**Urban (%)**		**Rural (%)**	
Variables	**N = 2,727**	**Chi Square Value**	**N = 4,843**	**Chi Square Value**
Age		**3.6**		**2.8**
18–19	20.2		20.8	
20–24	15.1		16.7	
25–29	18.2		17.1	
30–34	14.6		13.7	
35–39	13.3		12.8	
40–44	9.0		9.7	
45–49	9.6		9.3	
Marital Status		**2.1**		**26.2****
Never in Union	32.7		23.0	
In Union/Living with a man	61.1		72.6	
Formerly in Union	6.2		4.4	
Religion		**131.5****		**136.9****
Catholic	7.5		7.2	
Other Christian	45.7		42.5	
Islam	46.5		49.8	
Traditional/Others	0.3		0.6	
Highest Education		**18.9****		**60.6****
No education	14.1		42.3	
Primary	13.2		17.3	
Secondary	53.5		34.5	
Higher	19.2		5.9	
Partner Highest Education*		**18.9****		**59.6****
No education	13.7		39.9	
Primary	14.1		15.4	
Secondary	43.8		33.4	
Higher	28.5		11.4	
Wealth Status		**22.1***		**1.6**
Poor	9.9		55.9	
Middle	18.3		22.9	
Rich	71.8		21.2	
Employment Status		**202.7****		**596.7****
Employed	75.2		78.9	
Unemployed	24.8		21.1	
Access to Radio/Television*		**805.3****		**1296.4****
Yes	90.7		90.8	
No	9.3		9.2	
Household Decision Making*		**4.6**		**6.6****

Spatial Unit	Urban (%)		Rural (%)	
Variables	**N = 2,727**	**Chi Square Value**	**N = 4,843**	**Chi Square Value**
Feminine	9.0		6.0	
Masculine	72.1		79.1	
Equal	19.0		14.9	
Region		**594.8****		**674.7****
North-Central	17.6		25.6	
North-East	14.4		31.4	
North-West	13.5		19.0	
South-East	8.8		3.3	
South-South	11.1		12.8	
South-West	34.6		7.9	

*Note: *Contains missing samples, **Significant at $p < 0.05$*

Correlates of financial inclusion among urban and rural women in Nigeria

In the urban regression model, age, wealth, employment status, media access, and household decision-making were associated with lower odds of being financially inclusive (Table 3). Religion and education were associated with an increased likelihood of having a bank account. Among rural women, age and education increased the odds of having a bank account, while religion, wealth, employment status, media access, and household decision-making lowered the odds. When the statistical significance of the relationships is considered, women with no education, relative to those with higher education, were more likely to have a bank account. Working women, women with media access and from households with more male decision making, were less likely to have a bank account when compared with women who were unemployed, had no media access, and with equal decision-making power with their husbands. Religion, husband's education, and wealth were not significant predictors of financial inclusion among urban women but were statistically significant ($p < 0.05$) in determining financial inclusion among rural women.

Table 3: Summary of the Regression Models on the Predictors of Financial Inclusion by Place of Residence

Spatial Unit	Urban		Rural	
Variable	**Odds Ratio**	**Standard Error**	**Odds Ratio**	**Standard Error**
Age				
18–19	0.975	0.20	1.019	0.10
20–24	0.981	0.12	1.062	0.08
25–29	0.900	0.10	1.014	0.08
30–34	0.990	0.10	0.946	0.08
35–39	0.934	0.10	1.058	0.08
40–44	1.023	0.11	1.001	0.08
45–49	RC		RC	
Religion				
Catholic	1.966	0.47	0.791	0.30
Other Christian	1.062	0.47	0.490**	0.29
Islam	1.082	0.47	0.648	0.29
Traditional/Others	RC		RC	

Spatial Unit	Urban		Rural	
Variable	**Odds Ratio**	**Standard Error**	**Odds Ratio**	**Standard Error**
Highest Education				
No education	1.379**	0.12	1.327**	0.12
Primary	1.107	0.11	1.171	0.12
Secondary	1.120	0.08	1.202	0.11
Higher	RC		RC	
Partner Highest Education				
No education	1.112	0.12	1.261**	0.09
Primary	1.098	0.11	1.209**	0.09
Secondary	1.002	0.08	1.012	0.08
Higher	RC		RC	
Wealth Status				
Poor	0.993	0.10	0.690**	0.07
Middle	0.954	0.08	0.789**	0.07
Rich	RC		RC	
Employment Status				
Employed	0.621**	0.06	0.401**	0.05
Unemployed	RC		RC	
Access to Radio/Television				
Yes	0.186**	0.09	0.185**	0.06
No	RC		RC	
Household Decision Making				
Feminine	0.968	0.11	0.828	0.10
Masculine	0.864**	0.07	0.887**	0.06
Equal	RC		RC	

*Note: **Significant at $p < 0.05$, RC – Reference Category*

Discussion

Contrary to reports by Enhancing Financial Innovation & Access (2019) that 33% of Nigerian women have bank accounts, this study also shows that financial inclusion was much lower among Nigerian women at only 20.7%. The sampling techniques and weighting criteria employed by the NDHS were meant to ensure that all the States in Nigeria had equal sample representation against the absolute figure of 750 respondents per State used by Enhancing Financial Innovation & Access. This may account for the disparity in the prevalence of bank account ownership. Yet, the finding from this study suggests that financial inclusion among women remains lower than previously believed. Contrary to general assumptions as well as findings from Allen et al. (2016), Alliance for Financial Inclusion (2017), and Enhancing Financial Innovation & Access (2019), this study shows that women's financial inclusion is higher in the rural areas (22.2%) than in urban areas (18.5%).

Technically, the findings from the Enhancing Financial Innovation & Access study in Nigeria, from which most official pronouncements on financial inclusion are derived, might not have been the case if the sample contained more urban women, and the rural and urban prevalence rates were computed as a proportion of the total sample. In this study, however, the within-group prevalence rates were computed to account for the unequal number of samples from the urban

and rural areas. In effect, our findings show that the prevalence of bank account ownership was higher in rural areas than among urban women.

The higher prevalence of account ownership among rural women may be due to several reasons. First, rural-urban migration in Nigeria is male-dominated. The women are typically left behind to take care of the home front. Remittances from male migrants in urban centers to their spouses in rural areas are through bank accounts. Closely related to this is that most Nigerians have familial ties to rural areas, and financial supports to the families are primarily through the women's bank accounts. More importantly, agriculture is the mainstay of the rural economy. While the men are primarily farmers, rural women are involved in the agricultural value chain, including food processing. With the government's renewed interest in agriculture, many initiatives to support the industry have been instituted. These include financial incentives, credit facilities, and subsidized agricultural inputs, which also creates agricultural desks in microfinance and commercial banks. Having a bank account is a precondition for benefiting from these initiatives. Apart from tying the identification of individual beneficiaries to the banks' Know Your Customer (KYC) due diligence, the funds are also processed through the banks. With their higher engagements in agricultural practices, rural women are the largest beneficiaries of the initiatives. This must have impacted the prevalence of bank account ownership among them.

The agricultural explanation for the higher financial inclusion in the rural areas is more plausible in the context of the educational and wealth dimensions of financial inclusion, as shown in Table 2. Rural women with no formal education were more financially inclusive (42.6%) than those with primary, secondary, or tertiary education. Employment in rural agriculture does not require any formal qualification. Women with no education in urban Nigeria constituted only 13.8% of urban women with a bank account. The same pattern was reflected in the women's spousal educational qualifications. The results also show that while wealthier women in urban areas (71.6%) were more financially inclusive, poor women were more financially inclusive in the rural areas (56.1%). These findings contrast with those by Efobi et al. (2014), Zins and Weill (2016), Allen et al. (2016), Abel et al. (2018), and Lotto (2018) in the rural space but similar in the urban context. This confirms our hypothesis that correlates of financial inclusion vary by place. However, the lower level of bank account ownership in the urban areas may be attributed to a broader acceptance of informal financial services (savings/thrift collectors) more common among urban women engaged in the informal sector.

At the level of regression analysis, the association between education and wealth and financial inclusion also varied between urban and rural areas. While the partner's educational qualifications were associated with a higher likelihood of having a bank account in both places, the association was only statistically significant in rural areas. In a similar pattern and relative to the rich wealth category, being poor or in the middle wealth category was associated with a lower likelihood of having a bank account among urban and rural women. But the associations were only significant in the rural area. Age also had contrasting outcomes on financial inclusion among urban and rural women in this study. Urban women were mainly associated with lower odds of financial inclusion, whereas it was associated with increased odds among rural women. While wealth status was associated with lower odds of financial inclusion in this study, it was found to be associated with increased likelihood of financial inclusion in other studies just as age was associated with increased odds of financial inclusion in those studies (Abel et al., 2018; Allen et al., 2016; Kaur & Kapuria, 2018; Peña et al., 2014; Soumaré et al., 2016).

The relationship between education and financial inclusion among rural and urban women, where rural women with no formal education were more financially included than their urban counterparts, suggests two things. Firstly, rural women with no education were more proportional (47.1%) than their urban counterparts (16.0%). Therefore, it is logical to have more uneducated rural women embracing banking services. Secondly, uneducated rural women's embrace of financial services is a way of connecting to their families and relations in the urban centers, who mainly send home remittances through the financial outlets. On the other hand, urban women with no formal education would possibly not want to be financially included to avoid associated financial losses. According to the Nigeria Inter-Bank Settlement System (NIBSS), financial fraud related to technology in banking increased by 330% between 2018 and 2020 in Nigeria (NIBSS, 2021). Most of this fraud occurred in the urban landscape where phone, internet banking, and other cashless banking channels are higher. An uneducated urban woman would rather avoid being prey by choosing to be excluded from financial services.

Religion was associated with a higher likelihood of financial inclusion among urban women, while it lowered the odds in rural areas. Olaniyi and Adeoye (2016) and Adeola and Evans (2017) discovered that religion increased the likelihood of having bank accounts. Adeola and Evans also notably suggested that this may be due to the operational presence of the interest-free Islamic banking system in Nigeria. Catholics had the lowest inclusion rate of 7.2% in urban and rural areas. This might explain why financial inclusion is lowest in the South-East region of Nigeria, where Catholicism is the dominant religion. Among urban and rural women in the South-East region, inclusion rates were 8.4% and 3.6%, respectively. The highest level of inclusion among rural women was in the North-East region. Agriculture employed 44.5% of the women in rural North-East region (National Population Commission [Nigeria], & ICF, 2019). The study also showed that women exposed to media, employed, and from households where the men made most of the decisions were more financially included.

The spatial differentials in levels and correlates of financial inclusion between urban and rural women in Nigeria, as found in this study, are essential pointers to scaling up financial inclusion among women as contained in the country's financial inclusion strategy (Anyanwu et al., 2018). As shown in previous studies (Bhatia & Singh, 2019; Clarke & Kumar, 2016; Dimova & Adebowale, 2018; Ofreneo, 2005), not only are these findings critical to empowering women and increasing their level of autonomy in household decision making, but they are also crucial for achieving gender equality.

Conclusion

Scaling-up women's financial inclusion is imperative. Among other reasons, financial inclusion can increase women's empowerment, allow them to control their health and their children and families, eradicate poverty, and serve as an enabler towards attaining seven of the 17 Sustainable Development Goals. But place matters. This study has shown variation in the levels and correlates of financial inclusion between women in urban and rural Nigeria. This analysis implies that to achieve the targets of the national financial inclusion policy, strategies that take into cognizance the uniqueness of the rural-urban dichotomy should be employed for meaningful outcomes.

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