Perceived Effects of Cashless Policy on Financial Inclusion in Nigeria: A Study of Kano Metropolis

Prof. Garba Bala Bello[1], Musa Abdullahi Bayero[2]

[1&2]*(Department of Business Administration & Entrepreneurship, Bayero University, Kano- Nigeria)*

Abstract: *This study investigates the link between Cashless policy and financial inclusion in Nigeria with selected respondents within Kano Metropolis. The main objective of the study is to determine the extent to which business models of financial services, increases awareness of electronic channels, enhanced formal financial services and accessibility of payment infrastructure affect financial inclusion. The study was conducted using a sample of 384 adults that were conveniently selected in Kano Metropolis. The collected data were analyzed using Multiple Linear Regression (MLR) analysis using SPSS (Version 19). The Results showed three of the four variables of Cashless policy were significantly related. Specifically, Awareness, Consumer/User Value Proposition, and Infrastructure were found to have strong significant relationship with Financial Inclusion while Business Model of Financial Service Providers did not show any significant relationship with Financial Inclusion. The study recommends that Federal Government should pay adequate attention to the provision of infrastructural facilities across the country. A massive awareness campaign on the benefits of Cashless policy should be embarked upon by the Central Bank of Nigeria and all formal financial service providers and other stakeholders in the country for full and successful implementation of the policy.*

Keywords: *All-Inclusive Financial Access, Cashless Policy, Electronic/Digital Payment, Financial Inclusion*

1. Introduction

Financial inclusion has become a subject of growing interest for researchers, policy makers, and other financial sector stakeholders. Without all-inclusive financial access, individuals and firms need to rely on their own limited resources to meet their financial needs, such as saving for retirement, investing in their education, taking advantage of business opportunities, and confronting systemic or idiosyncratic shocks (Demirguc-Kunt *et al*., 2008).

The definition of financial inclusion that is adopted by the Central Bank of Nigeria (CBN) in the National Financial Inclusion Strategy (2012) is that financial inclusion is achieved when adult Nigerians have easy access to a broad range of formal financial services that meet their needs at an affordable cost. In line with this, the CBN and other stakeholders intend to implement a National Financial Inclusion Strategy (NFIS). The major aim is to reduce the percentage of adult Nigerians that are involuntarily excluded from the main formal financial service streams from 46.3 per cent in 2010 to 20 per cent by the year 2020. That means the number of Nigerians included in the formal sector will increase from 30 per cent in 2010 to 70 per cent by 2020. This goal is to be achieved through a broad range of coordinated interventions such as modifying the Know Your Customer (KYC) regulations, erecting regulatory framework for agent banking, mounting intensive national financial literacy framework, provision of a comprehensive consumer protection framework, promoting mobile payment and other cashless policies, and implementation of a holistic credit schemes.

Effective financial system bridge the gap between demand and supply of financial resources to improve the welfare and wealth creation of the community. However, available evidence from most developing shows that access to banking and other formal financial services is limited largely due to factors which can either be attributed to the demand-side (access and usage) or supply-side (capacity of formal financial service providers) (Sun & Siagian, 2015; CGAP, 2012). Globally, it is estimated that approximately 2.5 billion people have no access to formal financial services (Demirguc-Kunt & Klapper, 2012). For instance, in the United States and Germany, only 9 per cent and 4 per cent of the population respectively

have no access to financial services (Peachy & Roe, 2006). On the other hand, in developing countries like Nigeria about 40 per cent of its population is without access to any formal financial services (CBN, 2014). Review of relevant literatures has shown that little attention has been paid to investigate the perceived effects of Cashless policy on financial inclusion in Nigeria. In line with international precedents, the CBN defines financial inclusion as follows: "Financial inclusion is achieved when adults have easy access to a broad range of formal financial services that meet their needs and are provided at affordable cost. Financial inclusion implies not only access but usage of a full spectrum of financial services including but not limited to payments, savings, credit, insurance and pension products," (CBN, 2012:1).

Based on the foregoing issues at hand, it could be concluded that the Cashless economy policy was introduced in order to promote increased financial access across the country which is seen as one of the preconditions for financial inclusion. Therefore, this study is carried out in order to ascertain the role of the Cashless economy policy in promoting all-inclusive financial access in Nigeria.

1.1 Research Questions

So, at this juncture, the study attempts to find out how is the Cashless policy relevant for financial inclusion in Nigeria, (with specific reference to Kano Metropolis). In other words, the study examines how Cashless policy based on some selected factors would lead to financial inclusion in Nigeria. Based on the foregoing issues, this study is designed to seek answers to the following research questions:

i. To what extent does change in business models of financial services providers affect financial inclusion in Kano Metropolis?

ii. To what extent does increasing awareness of electronic channels have effect on financial inclusion in Kano Metropolis?

iii. To what extent does the use of enhanced formal financial services have effect on financial inclusion in Kano Metropolis?

iv. To what extent does accessibility of payment infrastructure have effect on financial inclusion in Kano Metropolis?

1.2 Research Objectives

The main aim of this study is to conduct an appraisal of the perceived effects of Cashless policy on financial inclusion in Nigeria by having a study on Kano Metropolis. Therefore, the specific objectives are to:

i. Examine the effects of change in business models of financial service providers on financial inclusion.

ii. Investigate the effects of awareness of electronic channels on financial inclusion.

iii. Assess the effects of using enhanced formal financial services on financial inclusion.

iv. Examine the effects of accessibility of payments infrastructure on financial inclusion.

1.3 Research Hypothesis

In this study, the following null hypotheses are drawn in line with the research questions and objectives of the study. They are:

***Ho_1*: Change in business models of financial service providers has no significant effect on financial inclusion.**

***Ho_2*: Increasing awareness of electronic channels has no significant effect on financial inclusion.**

***Ho_3*: Using enhanced formal financial services by users has no significant effect on financial inclusion.**

***Ho_4*: Accessibility of payment infrastructure has no significant effect on financial inclusion.**

1. Literature Review and Theoretical Framework

The implementation of cashless policy in Nigeria by the CBN is seen as an attempt to reduce cost of cash management, driving financial inclusion and achieving efficiency in payments system in the country. As noted by some scholars that the increased use of cashless payments system leads to prediction of emergence of a cashless society (Humphrey & Berger, 1990; Humphrey et al., 1996; Onley, 1999., Klee, 2004). A growing body of research shows that financial inclusion can have significant beneficial effects for individuals, providing both an economic and a political rationale for policies that promote financial inclusion. For example, a range of models have been used to demonstrate how lack of access to finance can lead to poverty traps and inequality (for example, Banerjee and Newman, 1993; Galor and Zeira, 1993; Aghion and Bolton, 1997; Beck, Demirguc-Kunt, and Levine, 2007). At the same time, the literature has found that providing individuals with access to savings instruments increases savings (Aportela, 1999; Ashraf *et al*., 2010a), productive investment (Dupas and Robinson, 2009), consumption (Dupas and Robinson, 2009; Ashraf *et al*., 2010b), and female empowerment (Ashraf *et al.,* 2010b). There is also evidence that access to credit and to insurance products have beneficial effects, but the results are not as strong or robust (Karlan and Morduch, 2010; Banerjee *et al.,* 2010; Roodman, 2012).

The earlier theories of economic development/growth recognized labour, capital, institutions, etc., as the factors for economic growth, while the importance of finance for economic growth has been frequently ignored by earlier economists due to existence of Modigliani-Miller theorem and efficient market hypothesis. Both the theories assumed that the market is perfect and there are no frictions, that is, the capital market is perfect. The assumption implies that the investors buy and sell the securities freely in perfect capital market situation without any transaction cost.

The assumption that firms and individual investors can borrow and lend at the same rate is not applicable in real world. However, the early theories of economic development also believed in the need for a developed and extensive financial system that could tap savings and thereby channelize the funds for generating a wide spectrum of business activities. Very little work is available on nexus between finance and economic growth. But modern theories of development strongly advocate that financial development is a must because it creates enabling conditions for economic growth through either a 'supply-leading' (financial development spurs growth) or a 'demand-following' (growth generates demand for financial products) channel (Mohan, 2006). Further, modern development theories also show that the lack of access to finance is a significant factor responsible for persistent income inequality as well as slower rate of economic growth. Moreover, a large body of empirical literature on finance suggests that developing the financial sector and improving access may accelerate economic growth along with a reduction in income inequality and poverty (Kakwani and Pernia, 2000). Financial exclusion prevails more in unequal societies in comparison to those having low inequality (Beck et al. 2007). For example, Burgess and Pande (2004) found that the rural branch expansion policy of India had significantly contributed in removal of poverty from rural areas.

In addition, a developed financial system allows a large access to funds, while in an under developed financial system, access to funds is restricted and people are constrained by the availability of their own funds and have to resort to high-cost informal sources such as moneylenders. It was observed that the rate of interest in informal lending is 18-36 per cent, while in case of formal lending, it lies between 6-20 per cent only. So, without an inclusive financial system, poor individuals and small enterprises have to trust on their own limited savings and earnings to invest in education and entrepreneurship to take advantage of growth opportunities (World Bank, 2008b). Therefore, access to safe, easy and affordable credit and other

financial services by the poor and vulnerable groups, especially in disadvantaged areas and lagging sectors, is recognized as a prerequisite for accelerating economic growth and reducing income disparities and poverty (Kakwani, 2000, RBI, 2008). Gini coefficient is negatively and significantly associated with the financial inclusion and thus, income inequality is negatively associated with the financial inclusion.

Definitely, inclusive finance, including safe savings, appropriately designed loans for poor and low-income households and for micro, small and medium-sized enterprises, and appropriate insurance and payments services can help people to enhance incomes, acquire capital manage risk and come out of poverty (UN, 2006). It has been recognized that access to financial service facilitates making and receiving financial payments and also it reduces transaction costs. The average cost of refinance varies from 8 to 14 per cent, which is largely due to operating cost which is around 10-14 per cent for microfinance institutions (MFIs) as compared with 3-4 per cent incurred by the banks servicing their average borrowers.

3 Research Methodology

The research design for this study is a cross sectional survey. The selection of the research design was based on the nature of the research objectives that involve hypothesis testing and the need to observe the phenomenon in its natural setting. As pointed out by Asika (1991) that lack of control is the major characteristic of all survey designs. Hence, there is no attempt to manipulate or control the variables involved in this research (Adamu, 2006). The unit of analysis (target respondent) in this study is individual user of Cashless channels. Moreover, the choice of the unit of analysis is informed by the definition of financial inclusion given by the CBN in line with international precedents. Based on the review of literature and the research design above, the following relationship is made to guide the conduct of the study:

Independent Variables   Dependent Variable

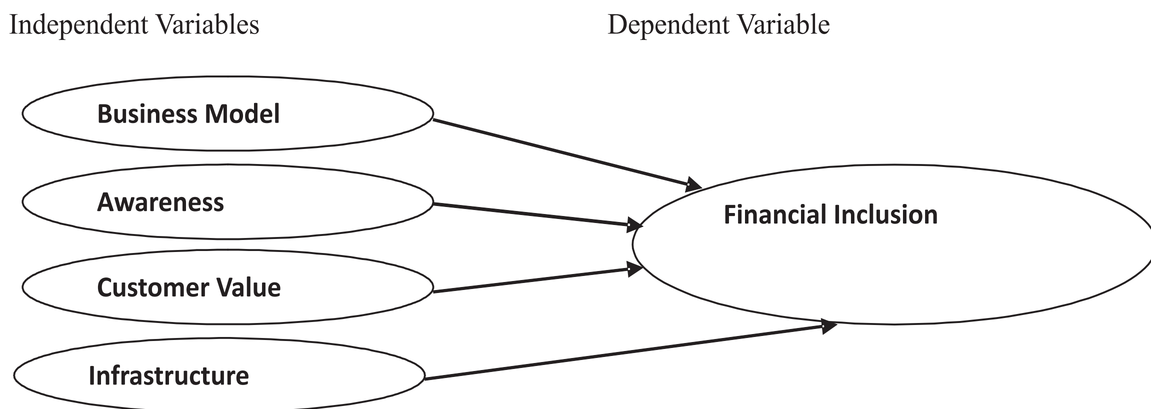

Figure 3.1: *The Research Framework*

In the above research framework, financial inclusion of traditionally excluded groups (usually individuals) is said to be the dependent variable. While the independent variables are: Changing Business Models of Financial Service Providers, Accessibility to Payment Infrastructure, Increasing Awareness of Electronic Channels, and Enhanced Customer Value Proposition. In conducting this study, convenience/accidental sampling method was employed in selecting three hundred and eighty four (384) working age adults proportionately from the sampled areas. Similarly, the selection of 384 is in line with the Research Advisors (2006). According to them, in a population that ranges between 250,000 to 3,000,000 the adequate size of the sample should be 384 at a confidence level of 95 per cent and margin error of 5 per cent. Hence, 384 copies of questionnaire were distributed proportionately among the eight local government areas of Kano Metropolis. See Table 3.1:

Table 3.1: Sample Size of the Study

LGA	Population	Calculation	Proportionate Sample
1. Dala	418,759	418,759/2,826,307*384	57
2. Fagge	200,095	200,095/2,826,307*384	28
3. Gwale	357,827	357,827/2,826,307*384	50
4. Kano Municipal Council	371,243	371,243/2,826,307*384	50
5. Kumbotso	294,391	294,391/2,826,307*384	40
6. Nassarawa	596,411	596,411/2,826,307*384	81
7. Tarauni	221,844	221,844/2,826,307*384	30
8. Ungoggo	365,737	365,737/2,826,307*384	50
Total	**2,826,307**		**384**

Source: *Field Survey, 2015*

This study used linear regression model to assess the level of effect the independent variables have on the dependent variable. The model is specified as follows:

$Yi = \alpha + \beta i\, Xi + \ldots\ldots\ldots\ldots\ldots\ldots\ \beta n\, Xn + ei$ ……………………………….. (equation 1)

Yi denotes the dependent variable and Xi denotes number of the independent variables.

Where:
Yi = Financial Inclusion
X1 = Business Models
X2 = Awareness
X3 = Customer/User Value Proposition
X4 = Payment Infrastructure
α = Constant Value
βi = the Coefficient of Variables
ei = Error term associated with variables

Therefore, the regression equation for the study is:

$FINC = \alpha + \beta i\, X1 + \beta i\, X2 + \beta i\, X3 + \beta i\, X4 + ei$ …………………………………(Equation 2)

The instrument also passed through an internal consistency test which measures the degree to which items that make up the instrument measure the same underlying attribute. It measures the extent to which the items in the instrument 'hang together'. Nunnally (1978) recommends a minimum of .7 Chronbach alpha coefficients. Flyn, Schroeder, & Sakakibara (1994) argued that a Cronbach's alpha of 0.6 and above is considered an effective reliability for judging a scale. The generally agreed lower limit for Cronbach's alpha may decrease to 0.60 in exploratory research (Hair *et al.,* 2010). Additionally, a Cronbach's alpha of 0.50 and higher is considered to be appropriate (Hulland, 1999). Therefore, the instrument for the study has been tested to ensure internal consistency of the measures and the results were obtained:

Table 3.2: Summary of Reliability Analysis of Variables

Variables	No. of items	No of items deleted	Cronbach's Alpha
Dependent Variable			
Financial Inclusion	6	0	0.71
Independent Variables			
Cashless Economy			
Business Models	6	0	0.59
Awareness	6	0	0.60
Value Proposition	6	0	0.65
Infrastructure	5	0	0.74

Source: *Field Survey, 2015*

From Table 3.2, the Cronbach's alpha ranges from 0.59 to 0.74, thus indicating that instrument was reliable. The instrument had a good reliability as far as internal consistency is concerned, that is, the instrument can give consistent results on the effects of Cashless economy policy of Financial Inclusion of working age adults in Nigeria. The data obtained for the study was analyzed using inferential statistical technique. Pearson Correlation Coefficient and Linear Regression were employed to test each hypothesis at 95 per cent confidence level. Pearson Correlation indicated direction, strength and significance of bivariate relationship between the dependent variable (financial inclusion) and the independent variables (Cashless Economy Policy). Furthermore, Linear Regression showed R^2 value which indicated how much of variance of financial inclusion (dependent variable) were explained by each of the independent variables (Business Models, Awareness, Customer Value and Infrastructure). Descriptive and basic statistical analyses of the data were performed using SPSS 19 computer software; Multiple Linear Regression (MLR) was used to test the hypotheses. Prior to using the MLR, testing of assumptions which include establishing linear relationship between independent and dependent variables, homoscedasticity (uniform variance) and independence of error terms were conducted.

4. Discussion of Results

A total of three hundred and eighty four (384) copies of the questionnaire were administered to the respondents but only three hundred and twenty nine (329) copies were returned out of which two hundred and ninety seven (297) copies were duly completed while thirty two (32) copies were not properly completed. Hence the total number of duly completed and returned questionnaires is two hundred and ninety seven (297) which represents 77.34 per cent of the sample.

The correlation analysis (Table 4.1) was conducted prior to hypothesis testing in order to determine the extent to which they were related. Having satisfied that the assumptions of linearity, homoscedasticity, normality, independence of the error term, and multi-collinearity were not significantly violated, the results of the hypotheses testing are presented in the next section.

Table 4.1: Inter-Correlation between Variables

		FININCLUSION	BUSMODEL	AWARENESS	CUSVALUE	INFRAST
Pearson Correlation	FININCLUSION	1.000	.292**	.267**	.403**	.494**
	BUSMODEL	.292**	1.000	.201**	.328**	.350**
	AWARENESS	.267**	.201**	1.000	.278**	.207**
	CUSVALUE	.403**	.328**	.278**	1.000	.296**
	INFRAST	.494**	.350**	.207**	.296**	1.000
Sig. (1 - tailed)	FININCLUSION	.	.000	.000	.000	.000
	BUSMODEL	.000	.	.000	.000	.000
	AWARENESS	.000	.000	.	.000	.000
	CUSVALUE	.000	.000	.000	.	.000
	INFRAST	.000	.000	.000	.000	.
N	FININCLUSION	297	297	297	297	297
	BUSMODEL	297	297	297	297	297
	AWARENESS	297	297	297	297	297
	CUSVALUE	297	297	297	297	297
	INFRAST	297	297	297	297	297

***. Correlation is significant at the 0.01 level (1-tailed).*

4.2 Results of Regression Analysis

The results of the study as revealed by the Model Summary below shows $R^2 =$ 0.331. This indicates that 33.1 per cent of the variability in Financial Inclusion (Dependent Variable of the study) has been explained by the Independent Variables identified in the study. The results obtained imply that Business Models of Financial Service Providers, Awareness, Consumer/User Value Proposition, and Infrastructure are good predictors of Financial Inclusion. Thus, this represents a significant contribution made by the Independent Variables in explaining the variability in the Dependent Variable as indicated in Table 4.3:

Table 4.3 : Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.575[a]	.331	.322	2.81081	1.972

a. Predictors: (Constant), INFRAST, AWARENESS, CUSVALUE, BUSMODEL
b. Dependent Variable: FININCLUSION

The ANOVA table shows that the Model is statistically significant at 0.000. Hence, the Model is good and fit for the study.

Table 4.4: ANOVA[b]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	1140.475	4	285.119	36.088	.000[a]
	Residual	2306.999	292	7.901		
	Total	3447.474	296			

a. Predictors: (Constant), INFRAST, AWARENESS, CUSVALUE, BUSMODEL
b. Dependent Variable: FININCLUSION

Furthermore, the coefficient table below also indicate that three of the Independent Variables, namely: Awareness, Consumer/User Value Proposition, and Infrastructure are significant predictors of the Dependent Variable (Financial Inclusion) as shown in the in the table below:

Table 4.5: Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	95.0% Confidence Interval for B		Collinearity Statistics	
		B	Std. Error	Beta (β)			Lower Bound	Upper Bound	Tolerance	VIF
1	(Constant)	5.298	1.289		4.110	.000	2.761	7.835		
	BUSMODEL	.056	.051	.058	1.092	.276	-.045	.156	.816	1.225
	AWARENESS	.101	.047	.110	2.171	.031	.009	.193	.899	1.112
	CUSVALUE	.231	.051	.241	4.553	.000	.131	.331	.819	1.221
	INFRAST	.436	.060	.380	7.238	.000	.317	.555	.831	1.203

a. Dependent Variable: FININCLUSION

From the above tables, results of Multiple Regression and discussions the overall Model (i.e. Model Summary) show that the Independent Variables succeeded in explaining 33.1 per cent of the variance in the Dependent Variable. The $R^2 = 0.331$ per cent is reasonable and substantial considering the nature of the study which is in social sciences (Cohen, 1988). However, investigating the contribution of individual independent variables in the explanation of the dependent variable revealed that Awareness (β = 0.110, t = 2.171, p = 0.031), Enhancing Consumer/User Value Proposition (β = 0.241, t = 4.553, p = 0.000), and Infrastructure (β = 0.380, t = 7.238, p = 0.000) have a significant unique contribution. Hence, all the hypotheses which state that "Increasing awareness of electronic channels has no significant effect on financial inclusion", "Using enhanced formal financial services by users has no significant effect on financial inclusion", "Accessibility of payment infrastructure has no significant effect on financial inclusion" are not supported. On the contrary, the hypothesis which states that, "Change in business models of financial service providers has no significant effect on financial inclusion" is supported because it has not made a significant unique contribution in the explanation of the dependent variable, it has weak *beta* and *t* values (β = 0.058, *t* = 1.092, p = 0.276).

5.1 Conclusion and Recommendations

Among the three significant variables, infrastructure has the highest contribution in the model; followed

by customer value and awareness in that order. Although previous studies have established links between Cashless economy and financial inclusion in some contexts, these links have not been thoroughly examined with respect to samples drawn from 384 working age adults in Kano metropolis which is one of the 5 states under pilot study. This is one of the first studies to examine self-reports regarding the relationship between Cashless economy and financial inclusion in Kano metropolis. After extensive review of literature, two important research gaps were identified by this study regarding the relationship between Cashless policy and financial inclusion.

First, the relationship between Cashless policy and financial inclusion were explored in a low income country setting (Kano, Nigeria). Second, for the first time variables of Cashless economy were tested on financial inclusion among working age adults in Kano metropolis. As such, the current study has validated the significant relationship between Cashless policy and financial inclusion in a newer context (Nigeria). In general, the present study has found that financial inclusion of the working age adult is partly influenced by variables of Cashless policy. Specifically, the study found awareness, payment infrastructure and enhancing user value proposition to have significant impact on financial inclusion of working age adults. On the contrary, change in business models of financial service providers is found to have an insignificant relationship with financial inclusion. This might not be unconnected with the fact that business model will only be considered as a priority by the working age adults when other variables of the cashless policy are effectively put in place.

Based on the above findings, the study recommended that in order to have effective implementation of the policy there is need for the CBN, money deposit banks, Mobile money operators and other formal financial services providers in the service value chain to individually embark on massive awareness campaign so as to enlighten both the banked and unbanked working age adults on the benefits of the Cashless economy policy. Formal financial service providers should design ways through which they will offer variety of formal financial services to all levels of income earners at negligible cost. The Federal Government and CBN as well as Telecom network service providers together with money deposit banks, and other stakeholders within the industry, should join hands to ensure effective provision of sound infrastructure to enable smooth implementation of the Cashless channels.

5.2 Suggestions for Further Studies

Further research may want to find out under what conditions Cashless policy can better predict financial inclusion. Specifically, future research may need to investigate what mediating and moderating roles of general level of employment; income distribution and religion can play on the relationship between Cashless policy and financial inclusion.

References

Adamu, A.U. 2006: *Qualitative, Quantitative and Mixed Research Methodologies,* in Adamu, Mohammed and Dandago (ed), Readings in Social Science Research. A Publication of the Faculty of Social and Management Sciences, Bayero University, Kano 59-73

Aghion, P., & Patrick B. 1997: A Theory of Trickle-Down Growth and Development. *Review of Economics Studies* 64: 151–72.

Aportela, F. 1999: Effects of Financial Access on Savings by Low-Income People. *MIT Department of Economics Dissertation* Chapter 1

Ashraf, N., Aycinena, C., Martinez, A. & Yang, D. 2010: *Remittances and the Problem of Control: A Field Experiment Among Migrants from El Salvador*. Mimeo.

Ashraf, N., Karlan, D. & Yin, W. 2010: Female Empowerment: Further Evidence from a Commitment Savings Product in the Philippines. *World Development* 28 (3): 333– 44.

Asika, N. 1991: *Research Methodology in the Behavioural Sciences.* Longman Nigeria Plc: Lagos, Nigeria.

Bankable Frontier Associates, 2013: *What Does the CBN's Cashless Policy Means for Financial Inclusion*

in Nigeria.

Beck, T., Demirguc-Kunt, A., & Levine, R. 2007: *Finance, Inequality and Poverty*. World Bank Policy Research Working Paper no. 3338 Washington D.C.: World Bank.

Beck, T., Levine, R., & Loayza, N. 2000: Finance and the Sources of Growth. *Journal of Financial Economics*, *58*(1–2), 261–300.

Central Bank of Nigeria 2011: Towards a Cashless Nigeria: Tools and Strategies. *Nigerian Journal of Economy*, 3(2), 344-350.

Central Bank of Nigeria 2011: *Understanding Monetary Policy Series. Series No.1* Abuja: CBN publications.

Central Bank of Nigeria 2011: Further Clarification on Cashless Lagos Project. Retrieved from http://www.cenbank.org/cashless/

Central Bank of Nigeria 2012: Towards a Cashless Nigeria: Tools and Strategies. CBN Presentation at the 24th *National Conference of Nigeria Computer Society* Held at Uyo, Nigeria. From Wednesday 25th- Friday 27th July Retrieved from http://www.NCS.org/presentations/

Consultative Group to Assist the Poor (CGAP), 2009: Financial Access: *Measuring Access to Financial Services Around the World.* The World Bank, Washington: USA

CGAP 2012: Measuring Access to Financial Services around the World. *The World Bank*

Demirguc-Kunt, A., & Klapper, L. 2013: *Measuring Financial Inclusion: The Global Findex Database.* Washington, DC: World Bank

EFInA 2013: *What does the CBN's Cashless Policy Mean for Financial Inclusion in Nigeria?* Available via www.EFInA.or.ng

Ejiofor, V.E., & Rasaki, J.O. 2012: Realizing the Benefits and Challenges of Cashless Economy in Nigeria: IT Perspective. *International Journal of Advances in Computer Science and Technology, 1 (1), 7-13.*

Federal Government of Nigeria Official Gazette, 2009: 2(96)

Hair, J.F., Black, W.C., Babin, B.J., & Anderson, R.E. 2010: Multivariate Data Analysis (7th ed.). Prentice Hall, Upper Saddle River, New Jersey

Hoffmann, J.P. 2010: *Linear Regression analysis:* Applications and assumptions (2nd ed.). Electronic Production: Adobe Acrobat Professional United State of America.

Keck, J.A. 2011: *Benefits of Online bill payment.*[Online] Available: http:www.market watch.com/story/benefits-of-online-bill-paying.

King, R., & Levine, R. (1993): Finance, Entrepreneurship and Growth: Theory and Evidence. *Journal of Monetary Economics*, *32*(3), 513–542.

Kumaga, D. 2010. *The Challenges of Implementing Electronic Payment Systems: The Case of Ghana's E-zwich Payment System. Master's Thesis in Business Administration, MBA programme*. BlekingeTekniskaHogskola (BTH), School of Management.

Levine, R., & Zervos, S. 1998: Stock Markets, Banks, and Economic Growth. *Economic Review*, *88*(3), 537–558.

McKinsey & Co. 2010: *Inclusive Growth and Financial Security*: The Benefits of E- Payment to India

Mohan, R. 2006: Economic Growth, Financial Deepening and financial inclusion. Address at the Annual Bankers' Conference, Hyderabad. Retrieved from http://rbidocs.rbi.org

Nambisan, S., Agarwal, R., & Tanmiru, M. 1999: Organizational Mechanisms for Enhancing User Innovation in Information Technology. *MIS Quarterly,* 23 (3), 365-395. Doi: 10.2307/249468

Nigeria Vision 20:2020 2009: *Economic Transformation Blueprint.* Nigeria: National Planning Commission.

Nunally, J. 1978: Psychometric Theory. New York: McGraw-Hill

Okoye, P.V.C., & Ezejiofor, R. 2013: An Appraisal of Cashless Economy Policy in Development of Nigerian Economy. *Research Journal of Finance and Accounting,* 7 (4), 237-252.

Ondrus, J., & Pigneur, Y. 2006: Towards a Holistic Analysis of Mobile Payments: A Multiple Perspectives

Approach. *Electronic Commerce Research and Applications,* 3 (5), 246-257.

Ovat, O.O. 2012: The Central Bank of Nigeria's Cashless Policy in Nigeria: Benefits and Challenges. *Journal of Economics and Sustainable Developments,* 3 (14), 128-133.

Porter, B. 2011: National Strategies: *Where do they Get us? A Roadmap for Financial Inclusion; Global Microcredit Summit; Commissioned Workshop Paper, Valladolid, Spain*

Radcliffe, D. & Voorhies, R. 2012: *A Digital Pathway to Financial Inclusion* (December 11, 2012). Electronic copy available at: http://ssrn.com/abstract=2186926

Rajan, R., & Zingales, L. 1998: Financial Dependence and Growth. *American Economic Review*, *88*(3), 559–587.

Reffat, R. 2003: *Developing a Successful E-government.* Paper Presented at the Symposium on E-Government: Opportunities and Challenges. Muscat Municipality, Oman.

Reserve Bank of India (RBI) 2008: *Report on currency and finance*. Mumbai: RBI.

Rogers, E.M. 1995: *Diffusion of Innovations:* Simon and Schuster

Peachy, S., & Roe, A. 2006: *Access to Finance – What Does It Mean and How Do Savings Banks Foster Access?* World Savings Banks Institute & European Savings Banks Group

Sekaran, U. 2003: *Research Methods for Business:* A Skill Building Approach (2nd ed.). New York: John Willey & Sons, Inc.

Sekaran, U., & Bougie, R. 2010: *Research Methods for Business.* A still Building Approach (5th ed.). John Willey: Uk

Sun, Y., & Siagian, P. 2015: Financial Inclusion in Indonesia and Its Challenges. *Pertanika Journal of Social Sciences and Humanities*, 23(S), 85-96.

World Bank, *The Little Data Book on Financial Inclusion* 2012, available at: http//data.worldbank.org/sites/default/files/the-little-data-book-on-financial- inclusion-2012.pdf. Retrieved on: 16th June, 2014

World Bank 2002: *World Development Report: Building Institutions for Markets* Washington, DC: Oxford University Press, World Bank Office of the Publisher.

———. 2007: *Finance for All: Policy and Pitfalls in Expanding Access*. Policy Research Report Retrieved from http//go worldBank.org/4YSZ5KS6CO

World Bank 2008a: *Access to Finance and Development: Theory and Measurement*. Washington, DC: World Bank.

———. 2008b: *Banking the Poor: Measuring Banking Access in 54 Economies.* Washington, DC: World Bank.

Zango, I.M. 2006: Sampling in Social Science Research, in Adamu, Y.,Mohammed, H., Dandago, K.I. (ed). *Readings in Social Science Research;* A Publication of the Faculty of Social and Management Sciences, Bayero University, Kano, Nigeria, 120-129.