Asian Journal of Economics and Empirical Research
Vol. 7, No. 1, 8-14, 2020
ISSN(E) 2409-2622/ ISSN(P) 2518-010X
DOI: 10.20448/journal.501.2020.71.8.14

Impact of Financial Inclusion on Inclusive Growth: An Empirical Study of Nigeria

Joseph Olarewaju Afolabi

Financial Inclusion and Inclusive Growth in Nigeria.
Email: joeeee001@gmail.com Tel: +2348132741271

Abstract

The study investigates the effect of financial inclusion on inclusive growth in Nigeria covering the periods of 1981 to 2017. It adopts the Auto-Regressive Distributed Lag (ARDL) model, using annual series from CBN statistical bulletin and World Development Indicators (WDI). The variables adopted include; rural loan, number of bank branches, money supply-GDP ratio, private sector credit to GDP ratio and GDP per capita. The study found financial inclusion, in the form of rural loan, number of bank branches and level of liquidity have a positive and significant effect on inclusive growth in the short and long run, while interest rate impede inclusive growth. The study recommends more and improved financial services be made available to rural dwellers and the economy in general to help them participate and contribute more to national productivity. However, these financial services should be carefully monitored to make sure they are used productively. This should help reduce inequality in the country and put the country in a path of inclusive growth.

Keywords: Financial inclusion, Inclusive growth, Short-run, long-run ARDL, Sustainable growth and development.
JEL Classification: E44; G19; G29; P43.

Citation | Joseph Olarewaju Afolabi (2020). Impact of Financial Inclusion on Inclusive Growth: An Empirical Study of Nigeria. Asian Journal of Economics and Empirical Research, 7(1): 8-14.
History:
Received: 12 November 2019
Revised: 16 December 2019
Accepted: 20 January 2020
Published: 4 February 2020

Publisher: Asian Online Journal Publishing Group

Funding: This study received no specific financial support.
Competing Interests: The author declares that there are no conflicts of interests regarding the publication of this paper.
Transparency: The author confirms that the manuscript is an honest, accurate, and transparent account of the study was reported; that no vital features of the study have been omitted; and that any discrepancies from the study as planned have been explained.
Ethical: This study follows all ethical practices during writing.

Contents

Contribution of this paper to the literature
This study contributes to the existing literature by investigating the effect of financial inclusion on inclusive growth in Nigeria covering the periods of 1981 to 2017.

1. Introduction

The attention of the world is gradually shifting from growth and development to [1]sustainable growth and development. This was made clear by the sustainable development goals of the United Nation targeted at 2030 (UNDP, 2015). One of the advocated ways of achieving sustainable growth and development is inclusive growth (Berg and Ostry, 2011). Inclusive growth, although, defined nebulously by various bodies such as UNDP[2], OECD[3], ADB[4] among other, all have a common ground. That is, inclusive growth should ameliorate poverty, inequality and benefit the most marginalized in the society (Chang, 2014). Despite the fact that this violates an already established OKUN's law (Okun, 1975) a lot of theoretical and empirical arguments have been made for inclusive growth (Grammy and Assane, 2006; Ganelli and Aoyagi, 2015; UNDP, 2015).

Some scholars have argued for financial inclusion as a potent antidote to the absence of inclusive growth (Demirgüç-Kunt and Klapper, 2012; Beck and Cull, 2015). While financial inclusion is expressed as the effectual delivery of financial services at an affordable cost to vast cross-section of the disadvantaged and low-income groups who tend to be excluded (Kelkar, 2009) financial exclusion is the in ability to access a suitable financial service (Bayero, 2015). Bayero (2015) laments financial exclusion not only stops people from eluding poverty, it can also lead to people falling deeper into the cycle of poverty. Corrado and Corrado (2017) made a case that financial inclusion can be an important tool in driving economies on a sustainable growth trajectory by empowering people to tap into a wider set of economic opportunities. Shrivastava and Satam (2015) had earlier noted that financial inclusion can contribute to greater socioeconomic equality by reducing poverty and enabling the development of financial services and infrastructure. Conversely, some have argued to the contrary (Robinson, 1952; Miller, 1998).

Empirically understanding the role of financial inclusion on inclusive growth is germane to this period. Globalization and technological changes have further widened the gap between the rich and the poor over the last decade in both advanced and developing countries, and this threaten social and political stability as well economic development (Ganelli and Aoyagi, 2015). In Nigeria particularly, where this paper is focused, three (3) in every five (5) Nigerian live in poverty, and on the average, over 60% live in poverty (Stear Business, 2017). The Nigerian economy has grown without the enabling environment for equal opportunities for the general population, which has resulted in persistent inequalities across generations and region (SB, 2017) and this has long-term implication for sustainable economic growth and national unity. Understanding the role of financial inclusion on inclusive growth will help shape future policy-oriented research and if it is found to be insignificant, then it will mitigate the intensity of research in this area.

From the literature reviewed, most studies focused on the role of financial inclusion on growth in Nigeria, while to the best of my knowledge, only Odeleye and Olusoji (2018) have worked on the topic and captured inclusive growth, using the real Gross Domestic Product (RGDP) as a proxy for inclusive growth. This study therefore seeks to investigate the short-run and long-run role of financial inclusion on inclusive growth in Nigeria from 1981 to 2017, using real GPD per capital growth rate to capture inclusive growth. While real GDP focuses on production that is bought and sold at constant price in the market, real GDP per capita growth captures improvement in wellbeing or standard of living of the people on the average.

2. Literature Review

This section review both theoretical and empirical literature linking financial innovation with inclusive growth. Levine (2005) stressed that the links between finance and income distribution is independently important for understanding the process of economic growth and development because income distribution affects saving decision, resources allocation, incentives to innovate and public policy. Literature on this issue has provided conflicting prognosis. Scholars like Galor and Zeira (1993); Aghion and Bolton (1997) claim the impact of financial development is disproportionate, because of information asymmetry and non-availability of collateral of the poor, which they refer to as credit constraint. This will consequently restrict the poor from exploiting investment opportunities and their contribution to national output. But, Rajan and Zingales (2003); Morck *et al.* (2005) argue that financial development needs not to restrict growth. That, a well-functioning financial system minimizes financial exclusion and makes financial services available to the larger proportion of the population, rather than making it available only to some sections of the population. They posit that if this is done, financial development may encourage entrepreneurship, industrial growth and engender development. Some scholars, on other hand claim there is a non-linear relationship between finance and development. Greenwood and Jovanovic (1990) present for example an inverted U-curve of financial development and inequality. He made a case that at the early stage of development, only few get access to finance and that it is the process of economic development that financial inclusion is achieved. The empirical findings relating to this study are presented below;

Abor *et al.* (2018) conducted a study on financial inclusion and inclusive growth in Ghana, using a survey large sample of household. They adopted unrelated probit and instrumental variable to test their study and reported that financial inclusion significantly reduces the probability of household becoming poor and increase the per capita household consumption. Otiwu *et al.* (2018) while investigating the influence of financial inclusion on growth in Nigeria, using the Ordinary Least Square (OLS) techniques found that the growth and development of Nigeria is significantly dependent on financial inclusion, claiming that the financially excluded citizens possess untapped and unexplored valuable potentials that will contribute immensely to national prosperity. Similarly, Odeleye and Olusoji (2018) empirically examined financial inclusion and inclusive growth in Nigeria, using the OLS, and their

[1] This is growth and development that attempts to improve the living conditions of humans, however, in a manner that preserves natural resources and the environment for future generations.
[2] United Nation Development Project.
[3] Organisation for Economic Cooperation and development.
[4] Asia Development Bank.

study validate the finance led hypothesis and establish a case that financial inclusion is germane for inclusive growth in the country. Nwafor and Yomi (2018) into the nexus between financial inclusion and economic growth in Nigeria, adopted two-stage least square regression and discover that financial inclusion influence significantly economic growth and that financial industry intermediation has not influenced financial inclusion.

Dixit and Ghosh (2013) look into financial inclusion for inclusive growth in India, using secondary data and analysis of hierarchical grouping cluster, found that states with the highest financial inclusion accounts for high GDP per capita. Luintel *et al.* (2016) invested financial development, structure and growth, using a dynamic OLS, covering 69 countries (33 high income and 36 middle and low income) found financial structure to be irrelevant for economic growth. Harley *et al.* (2017) examined the role of financial inclusion on growth and poverty reduction in developing countries, using panel data analysis and found that bank branches significantly improves growth and reduces poverty.

Okoye *et al.* (2017) still on Nigeria conducted a study on financial inclusion and economic growth and development in Nigeria, and found that credit delivery to private sector has not significantly supported economic growth, but financial inclusion ameliorates poverty in Nigeria through rural credit scheme. Cabeza-Garcia *et al.* (2019) examined female financial inclusion and its impact on inclusive economic development, using instrumental variable analysis for 91 countries and found evidence attesting to the fact that greater financial inclusion for woman has a positive economic impact on inclusive growth. Similarly, Adegbite and Machette (2020) considered bridging the financial inclusion gender gap in small holder agriculture in Nigeria, using mixed method review discovered financial inclusion in a small holder agriculture through targeted strategies like digital financial inclusion and gender responsive agricultural finance motivation would not only advance effort at closing the financial inclusion gender gap but would also reposition the country in attaining sustainable development outcome.

In summary, the theoretical literature present that while some argue that it is finance that facilitates inclusiveness, others argue that it is development that facilitates financial inclusion. The empirical literature on the other hand mostly makes a case for the effectiveness of financial inclusion on inclusive growth. Although, most studies in Nigeria focus on financial inclusion and economic growth, except for the work of Odeleye and Olusoji (2018) on Nigeria, and the study captures inclusive growth using the Real GDP. Real GDP, however is not a good representation of inclusiveness, as it only account for the value of national output at a constant price and not individual contribution to national output.

3. Data Sources and Variables Description

The data for the study were sourced from the Central Bank Statistical Bulletin (2018) and World Bank Development Indicators (WDI) (2018). The study covers the period 1981 to 2017. The variables adopted for the study were;

Real GDP per capita (gdppc): the data on this variable was sourced from the WDI, 2018. It is the annual average of real output in local currency. It is adopted to capture inclusive growth, as it measures the increase in the contribution of the average citizen to national output in real term.

Private sector credit to GDP ratio (PSCGDP): This is the ratio of credit to private sector to the domestic national output. It is one of the variables adopted to caption financial inclusion as it shows the magnitude of credit available to private sector for business activities. The data is sourced from CBN bulletin, 2018.

Money supply to GDP ratio (M2GDP): this is the ratio of the total liquidity in the economy to national output. It adopted to capture the level of liquidity in the economy within the period of study. The data for the variable is sourced from CBN statistical bulletin, 2018.

Rural loan (Ruralloan): this is total credit facilities available to rural dwellers over the period of study. It is one of the variables adopted to capture financial inclusion in the model. The data is sourced from the CBN statistical bulletin, 2018. This is measured in Million Naira

Bank branches (banb): this represents the total number of bank branches available to carry out financial services over the period of study. The data is sourced from the CBN statistical bulletin, 2018.

Maximum lending rate (maxlendingrate): this represent the retail interest rate charged by financial institution on financial services. The data is sourced from the CBN statistical bulletin, 2018.

4. Methodology

This paper adopts the Auto-Regressive Distributive Lag (ARDL) model. The model was developed by Pasaran and Shin (1999) and adjudged efficient in capturing relationships among variables of different order of integration, that is, estimating a model with a mixture of I(0) and I(1) variables. It has the advantages of being just a single-equation model, making it simple to interpret and implement, also, different variables can be assigned different lag length and they enter the mode (Pesaran *et al.*, 2001). Because of its ability to accommodate and estimate variables of different order of integration (i.e. mixture of I(0) and I(1)), it can estimate efficiently both short-run and long-run relationships in a given model. The ARDL as specified by Pasaran and Shin (1999) is presented below, using two variables x and y;

$$y_t = \sum_{k=1}^{p} \gamma_k y_{t-1} + \sum_{j=0}^{q} \varphi_j x_{t-j} + \varepsilon_t \quad (1)$$

Re-specifying the model, we have;

$$\Delta y_t = \propto_1 y_{t-1} + \propto_2 x_{t-1} + \sum_{k=1}^{p-1} \gamma_k \Delta y_{t-k} + \sum_{j=0}^{q-1} \varphi_j \Delta x_{t-j} + \varepsilon_t \quad (2)$$

$$\Delta y_t = \propto_1 v_{t-1} + \sum_{k=1}^{p-1} \gamma_k \Delta y_{t-k} + \sum_{j=0}^{q-1} \varphi_j \Delta x_{t-j} + \varepsilon_t \quad (3)$$

Where, $v_{t-1} = y_{t-1} + \left(\frac{\propto_2}{\propto_1}\right) x_{t-1}$. This is based on the assumption that in the long-run, $y_t = y_{t-1}$ and $x_t = x_{t-1}$

Equation 1 above shows the baseline ARDL model expressing the dependent variable (y_t) as a function of its lag (y_{t-1}) (AR) and the lag of the dependent variables (x_{t-j}) (DL). Equation 2 simplifies the model to reflect the short-run and long-run relationships between the dependent variable and the independent variables, where parameters $\propto_1$ *and* $\propto_2$ are the long-run parameters, φ_j and $\gamma_k$are short-run parameters. For Equation 3, v_{t-1} =

$y_{t-1}+\left(\frac{\propto_2}{\propto_1}\right)x_{t-1}$. This is based on the assumption that in the long-run, there is convergence such that $y_t = y_{t-1}$ and $x_t = x_{t-1}$.

Re-parametizing, using Equation 3 with the variables for the study;

$$\Delta Lgdppc_t = \propto_1 v_{t-1}+ \sum_{k=1}^{p-1}\gamma_k \Delta Lgdppc_{t-k}+\sum_{j=o}^{q-1}\varphi_j \Delta Lpscgdp_{t-j}+\sum_{l=0}^{r-1}\rho_l \Delta Lm2gdp_{t-l}+\sum_{m=o}^{s-1}\beta_m \Delta Lruralloan_{t-1} + \sum_{n=0}^{t-1}\delta_n \Delta banb_{t-1}+\sum_{n=0}^{t-1}\lambda_z \Delta lmaxlendingrate_{t-1}+\varepsilon_t \quad (4)$$

For Equation 4, $\propto_1 v_{t-1}$, measures the long-run relationships, γ_k, is the parameter that measures the short-run relationship between the previous value of gdppc and the current value, φ_j, measures the short-run relationship between pscgdp and gdppc, ρ_l, measures the short-run relationship be m2gdp and pdgpc, β_m, measures the short-run relationship between ruralloan and gdppc, δ_n, measures the short-run relationship between banb and gdppc and λ_z, the relationship between maxlendingrate and gdppc.

5. Results and Interpretations of Results

Pre-estimation tests: the study conducted stationerity tests using the Augumented - Dickey Fuller (ADF) and the Philips – Perron (PP) test. The tests allow us to examine the behavior of the series overtime. It makes us understand the predictability or otherwise of the variables. The bound test was also conducted to establish whether or not there is a long-run relationship among the variables. These tests are presented below;

Table-1. Descriptive statistics.

Descriptives	Gdppc	Ruralloan	Pscgdp	Maxlendingrate	Banb	M2gdp
Mean	261597.6	65139.31	10.87491	21.62588	3083.622	14.05582
Median	227565.9	11158.6	8.207608	21.3375	2385	12.65026
Maximum	385227.6	988587.9	20.7733	36.09	5803	21.30726
Minimum	198919.5	35.9	5.91727	10	848	9.151674
Std. Dev.	65042.05	198555.8	5.337531	5.977104	1660.038	3.879041
Skewness	0.739389	3.92476	0.969189	-0.01567	0.51466	0.678641
Kurtosis	1.986059	17.17534	2.138632	2.936644	1.788553	1.971016
Jarque-Bera	4.956247	404.7728	6.936369	0.007703	3.895951	4.472415
Probability	0.083901	0	0.031174	0.996156	0.142562	0.106863
Sum	9679112	2410154	402.3715	800.1576	114094	520.0652
Sum Sq. Dev.	1.52E+11	1.42E+12	1025.613	1286.128	99206175	541.6905
Observations	37	37	37	37	37	37

Table 1 shows the descriptive characteristics of the series in the model. Nigeria records a GDPPC of NGN 261,597.6 annually on the average, with a minimum of NGN198,919.5 and Maximum of NGN 385, 227.6. It therefore means that an average Nigerian contributes about NGN21,799.8 to national output monthly. Rural loan is measured in millions and reveals an average loan of NGN 65 billion is given to rural dwellers, with a minimum of NGN35 billions and maximum of NGN111 billion. In other word, rural dwellers receive loan to the tone of NGN5.42 billion on a monthly basis. The private sector credit to gdp ratio (pscgdp) measures 10.9 percent per annum, with a minimum of 8.2 percent and maximum of 20.8 percent. This indicates only about 10 percent of gdp is given to private sector as credit on the average per annum in the country. The maximum lending rate (maxlendingrate) ranges between 10 percent and 36 percent, with an average of 21.6 percent per annum while the number of bank branches (banb) falls within the range of 848 and 5803, with a mean value of 3084. Given a population of about 200 million in the country, it therefore means that 3084 bank branches provide for the financial services need of about 200 million people in the country. The ration of money supply to GDP ratio (m2gdp) ranges between 9 and 21 percent with an average value of 14 percent. It indicates about 14 percent of annual GDP constitute the level of liquidity in the economy. Given the kurtosis and Jargue-bera statistics, all variables in the model are normally distributed except for rural loan and private sector credit to GDP ratio.

Table-2. Unit root test.

	ADF		PP		
Variables	Levels	First difference	Levels	First difference	I(d)
Lgdppc	-1.4924	-3.7667**	-3.1497	-3.6813**	I(1)
Lruralloan	-3.7292		-3.5472**		I(0)
Lpscgdp	-2.0248	-5.4874***	-1.9841	-8.4825***	I(1)
Lmaxlendingrate	-2.8931	-6.0614***	-2.8156	-7.885***	I(1)
Lbanb	-3.3583*		-2.2303	-4.6739***	I(0)/I(1)
Lm2gdp	-2.4986	-5.68***	-2.6023	-5.9522***	I(1)

***, **, *, signify significance level at 1%, 5% and 10% respectively.

Table 2 shows the unit root test results tests using ADF and PP. these results indicate the series are stationary in mixed order. While Lbanb and lruralloan are stationary at levels (I(0)), other variables as lpscgdp, lruraldeposit, lgdppc and lM2gdp are stationary at first difference (I(1)). The stationarity behavior of the series informs the conduct of the bound test to find out if a long-run relationship exists among the variables. The bound test is presented below;

Table-3. Bound Test.

Critical value bounds			Test statistic	Value	k
Significance	I0 Bound	I1 Bound			
10%	2.26	3.35	F-statistic	18.8158	5
5%	2.62	3.79			
2.50%	2.96	4.18			
1%	3.41	4.68			

From Table 3 above, I0 bound represents short-run relationship and I1, long-run relationship. A long-run relationship exists if the F-statistic exceeds the I1 bound at any significant level, and otherwise if below I0 bound. If the F-statistic falls in between the I0 bound and I1 bound, the relationship is unclear. However, if the variables are stationary in mixed order of I(0) and I(1), and the co-integrating equation (CointEq(-1)) component of the estimate, using ARDL method of estimation is negative, less than one and statistically significant, the long-run relationship among the variables can be justified. From the result obtained above, there exist along-run relationships among the variables as the F-statistics exceeds critical values at all levels.

Table-4. Short run estimation result.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(Lruralloan)	0.0016	0.0040	0.4096	0.7031
D(Lpscgdp)	-0.3911***	0.0643	-6.0790	0.0037
D(Lmaxlendingrate)	0.1430**	0.0377	3.7981	0.0191
D(Lbanb)	0.1695**	0.0473	3.5828	0.0231
D(Lm2gdp)	0.5865***	0.1086	5.4015	0.0057
Cointeq(-1)	-0.6675***	0.0826	-8.0786	0.0013
R-Squared	0.9900			
Adjusted R-Squared	0.9900			
F-Stat	603.81(0.000)			

From Table 4, the results reveal financial inclusion indices in the form of bank branches, money supply to gdp ratio and rural loans are likely to influence changes in real output per head positively. It shows a one percent increase in m2gdp is likely to increase significantly gdppc by 0.59 percent. This could mean that the level of liquidity in an economy contributes positively to national output, justifying Keynes (1936) postulation that when there are slacks in the economy, increase in liquidity propels more output. Gddpc responds positively to a percent increase in banb by 0.16% and a percent increase in rural loan is likely to improve gdppc by 0.002 percent. Both bank branches (banb) and rural loan (ruralloan) are indices for financial inclusion and explains the importance on financial inclusion in facilitating inclusive growth. This result corroborates the assertion of Demirgüç-Kunt and Klapper (2012) and Beck and Cull (2015) that financial inclusion is a potent antidote to absence of inclusive growth and the findings of Corrado and Corrado (2017) that financial inclusion can be an important tool in driving economies on sustainable growth trajectory by empowering people to tap into a wider set of economic opportunities. The maximum lending rate is shown to positively influence inclusive growth in the short-run invalidating the classical postulations of a negatively relationship between interest rate and investment, and consequently output and validating Keynesian assertion that the main drivers of investment and growth is not necessarily low interest rate but investor confidence and aggregate demand level. The adjusted r-squared which measures the weight of the independents variables on the dependent variables shows 99 percent of changes in gdppc are captured by the explanatory variables (in rural loan, number of bank branches, private sector credit to GDP ratio, money supply to GDP ratio and the maximum lending rate) and the F-stat depicts the variables are jointly significant. The Coint Eq(-1) reveals that for every disequilibrium, about 66 percent of such disequilibrium is corrected each year.

Table-5. Long run estimation result.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
Lruralloan	0.1106***	0.0181	6.0984	0.0037
Lpscgdp	-1.2075***	0.2171	-5.5622	0.0051
Lmaxlendingrate	-0.6778***	0.0854	-7.9417	0.0014
Lbanb	0.5294***	0.1047	5.0543	0.0072
Lm2gdp	1.8307***	0.2534	7.2234	0.0019
C	7.3230***	0.6141	11.9251	0.0003

Cointeq = LGDPPCN - (0.1106*LRURALLOAN -1.2075*LPSCGDP -0.6778 *Lmaxlendingrate + 0.5294*LBANB + 1.8307*LM2GDP + 7.3230).

Table 5 presents the long run effect of financial inclusion on inclusive growth in Nigeria. It reveals financial inclusion have a statistically significant effect of inclusive growth, while interest rate affects inclusive growth negatively. Gddpc is likely to increase by about 0.12%, for every one percent increase in rural loan, meaning, for every NGN1 given out as loan to rural dwellers, GDP per capita increases by about N0.12kobo. For number of bank branches (banb), a one percent increase in the number of banks available to render financial services, increases GDP per capita by 0.53%. It could be inferred that for every one additional bank branch, GDP per capita increases by NGN0.53kobo. Also, a percent increase in liquidity level in the form of m2gdp ratio increase GDP per capital by about 1.83 percent, indicating that for every NGN1 increase in liquidity, GDP per capital would increase by about NGN1.83 kobo. Contrary to the relationship between maximum lending rate and GDP per capital in the short-run, a negative relationship is found between maximum lending rate and GDP per capital in the long-run. It is shown that a one percent increase in maximum lending rate would likely reduce GDP per capita by about 0.68 percent.

Post estimation test: The study conducted post-estimation test on the estimated model in the form of Normality test, Heteroscedasticity test and serial correlation test and Ramsey test. The tests show that the

variables in model are normally distributed, no heteroscedasticity in the model, no serial correlation and there is parameter stability in the model. These results are presented below;

Table-6. Post estimation test.

Post estimation test		
Test	**F-Stat**	**PROB**
Serial Correlation	3.6792	0.2137
Heteroscedasticity	2.9746	0.1488
Ramsey	0.0092	0.9296
	Jarque-Bera	
Normality	0.5799	0.7483

From Table 6, the null hypothesis is that there is no serial correlation, no heteroscedasticity, the variables are normally distributed and there is parameter stability in the model. From the results obtained (F-Stat and Prob), the null hypothesis is to be accepted. We can therefore conclude that the estimated model is void of serial correlation, no heteroscedasticity, there is parameter stability in the model and the series are normally distributed.

6. Conclusion and Recommendation

The empirical investigation into financial inclusion and inclusive growth provides an interesting result. It shows that financial inclusion does have both short-run and long-run positive effect on inclusive growth in Nigeria. the finding shows high interest rate impede inclusive growth, but number of bank branches, level of liquidity in the economy, loans to rural dweller facilitate a more inclusive growth in the economy. This study therefore, recommends that more and improved financial services be made available at a reasonable cost to rural dwellers and the economy as a whole at a reasonably low interest rate so as to help them participate and contribute to national productivity. However, these financial services should be carefully monitored to make sure they are used productively as loan to private sector is revealed to affect inclusive growth negatively. This will help reduce inequality in the country and put the country in a path of inclusive growth.

References

Abor, J.Y., M. Amidu and H. Issahaku, 2018. Mobile telephony, financial inclusion and inclusive growth. Journal of African Business, 19(3): 430-453.Available at: https://doi.org/10.1080/15228916.2017.1419332.

Adegbite, O.O. and C.L. Machette, 2020. Bridging the financial inclusion gap in small holder agriculture in Nigeria: An untapped potential for sustainable development. Worls Development, 127(1): 1 – 10.

Aghion, P. and P. Bolton, 1997. A theory of trickle-down growth and development. The Review of Economic Studies, 64(2): 151-172.Available at: https://doi.org/10.2307/2971707.

Bayero, M.A., 2015. Effects of cashless economic policy on financial inclusion in Nigeria: An exploratory study. Procedia-Social and Behavioral Sciences, 172: 19 - 56.Available at: https://doi.org/10.1016/j.sbspro.2015.01.334.

Beck, T. and R. Cull, 2015. Banking in Africa in: Berger, A.N., Molyneux, P.,Wilson, J.O.S. (Eds.), The Oxford Handbook of Banking. UK: Oxford University Press, England. pp: 913–937.

Berg, A. and J.D. Ostry, 2011. Inequality and unsustainable growth: Two sides of the same coin? IMF Working Paper No.11/08 Washington: International Monetary Fund.

Cabeza-Garcia, L., B.E. Del Biro and M.L. Oscanoa-Victorio, 2019. Female financial inclusion and its impacts on inclusive economic development. Women's Studies International Forum, 77: 1 -8.

Central Bank Statistical Bulletin, 2018. Annual publications. Available from https://www.cbn.gov.ng/documents/statbulletin.asp.

Chang, C., 2014. What is "inclusive growth"? Cafod Discussion Paper. Available from https://cafod.org.uk/content/download/172231/133621/file/inclusiveGrowthfullpaper.pdf.

Corrado, G. and L. Corrado, 2017. Inclusive finance for inclusive growth and development. Current Opinion in Environmental Sustainability, 24: 19-23.Available at: https://doi.org/10.1016/j.cosust.2017.01.013.

Demirgüç-Kunt, A. and L. Klapper, 2012. Measuring financial inclusion: The global findex database. Policy Research Working Papers, No. 6025, World Bank, Washington DC. Available from http://elibrary.worldbank.org/doi/abs/10.1596/1813-9450-6025.

Dixit, R. and M. Ghosh, 2013. Financial inclusion for inclusive growth of India-A study of Indian states. International Journal of Business Management & Research, 3(1): 147-156.

Galor, O. and J. Zeira, 1993. Income distribution and macroeconomics. The Review of Economic Studies, 60(1): 35-52.

Ganelli, G. and C. Aoyagi, 2015. Asia's quest for inclusive growth revisited. Journal of Asian Economics, 40: 29-46.Available at: https://doi.org/10.1016/j.asieco.2015.06.005.

Grammy, A. and D. Assane, 2006. The poverty-growth-inequality triangle hypothesis: An empirical examination. Journal of Policy Modelling. Amsterdamm, Netherlands: Elsevier Science Publishing.

Greenwood, J. and B. Jovanovic, 1990. Financial development, growth, and the distribution of income. Journal of Political Economy, 98(5, Part 1): 1076-1107.

Harley, T.W., A.J. Adegoke and D. Adegbola, 2017. Role of financial inclusion in economic growth and poverty reduction. Internal Journal of Research in Economics and Social Sciences, 2(1): 265-271.

Kelkar, V., 2009. Financial inclusion for inclusive growth, administrative staff college of India, first N. P. Sen memorial lecture held at ASCI, Hyderabad, on 13 January 2008. ASCI Journal of Management 39(1): 55-68.

Keynes, J.M., 1936. The general theory of employment, interest, and money. The Royal Economic Society, 1973 Edition. Available from <http://etext.library.adelaide.edu.au/k/keynes/john_maynard/k44g/chapter23.html>.

Levine, R., 2005. Finance and growth: Theory, mechanism and evidence. In: Aghion, P., Durlauf, S.N. (Eds.), Handbook of Economic Growth. North- Holland: Elsevier. pp: 865–934.

Luintel, K.B., M. Khan, R. Leon-Gonzalez and G. Li, 2016. Financial development, structure and growth: New data, method and results. Journal of International Financial Markets, Institutions and Money, 43: 95-112.Available at: https://doi.org/10.1016/j.intfin.2016.04.002.

Miller, M.H., 1998. Financial markets and economic growth. Journal of Applied Corporate Finance, 11(3): 8–14.

Morck, R., D. Wolfenzon and B. Yeung, 2005. Corporate governance, economic entrenchment, and growth. Journal of Economic Literature, 43(3): 655-720.Available at: https://doi.org/10.1257/002205105774431252.

Nwafor, M.C. and A.I. Yomi, 2018. The nexus between financial inclusion and economic growth in Nigeria. International Journal of Research and Innovation in Social Sciences, 2(4): 143 - 149.

Odeleye, A.T. and M.O. Olusoji, 2018. Financial inclusion and inclusive growth in Nigeria. African Development Review, 30(1): 19 – 32.

Okoye, L.U., K.A. Adetiloye, O. Erin and N.J. Modebe, 2017. Financial inclusion as a strategy for enhanced economic growth and development. Journal of Internet Banking and Commerce, 22(s8): 1- 12.

Okun, A.M., 1975. Equality and efficiency: The big trade-off. Washington: Brookings Institution Press.

Otiwu, K., P. Okere, L. Uzowuru and P. Ozuzu, 2018. Financial inclusion and economic growth of nigeria (the microfinance option). International Journal forIinnovation Education and Research, 6(2): 61-74.

Pasaran, M.H. and Y. Shin, 1999. An autoregressive distributed lag modeling approach to cointegration analysis. Chapter 11 in Storm, S. (Ed.), Econometrics and Economic Theory in the 20th century: Ragnar Frisch Centennial Symposium. Cambridge University Press, Cambridge. (Discussion Paper Version).

Pesaran, M.H., Y. Shin and R.J. Smith, 2001. Bounds testing approaches to the analysis of level relationships. Journal of Applied Econometrics, 16(3): 289-326.Available at: https://doi.org/10.1002/jae.616.

Rajan, R.G. and L. Zingales, 2003. Saving capitalism from the capitalists. New York: Random House.

Robinson, J., 1952. The generalization of the general theory. In: The rate of interest and other essays. London: Macmillan.

Shrivastava, V. and M. Satam, 2015. Financial inclusion of rural women in India- a case study of mana dechimahila bank. Journal of Contemporary Research in Management, 8(1): 51 - 58.

Stear Business, 2017. Inequality in Nigeria. Available from https://www.stearsng.com/article/inequality-in-nigeria-is-worse-than-it-looks.

UNDP, 2015. Sustainable development goals booklet. Available from https://www.undp.org/content/undp/en/home/librarypage/corporate/sustainable-development-goals-booklet.html.

World Bank Development Indicators (WDI), 2018. Nigerian economic data. Available from https://datacatalog.worldbank.org/dataset/world-development-indicators.