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## FINANCIAL INCLUSION AND GROWTH OF THE NIGERIA ECONOMY

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### ABSTRACT

Making the economy more financially inclusive has caught global attention due to its significant role in economic growth and development. This paper examined the impact of financial inclusion on economic growth in Nigeria for the period of 2006 to 2015. Bivariate correlation analysis and other descriptive statistical tools were used. The number of Retirement Savings Account (RSA), number of Deposit Money Bank Branches (DMBB) and number of Automated Teller Machines (ATM) per 100,000 people were found to be positively and significantly correlated with economic growth. This implies that more people have access to and usage of financial services and products. Financial inclusion was found to be a positive and significant function of economic growth. Nigerian banks and other financial institutions should be encouraged to increase their number of branches and deploy more Automated Teller Machines and other e-payment services to take financial services to the areas that have not been adequately reached, especially the rural sector. The government and monetary authorities should create the enabling environment for them to do so.

**KEY WORDS:** Financial Inclusion, Economic Growth, Deposit Money Bank, Nigerian Banks and Retirement Savings Account.

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### INTRODUCTION

Financial inclusion literally implies making financial services easily available, accessible and affordable to all classes in an economy. It entails an inclusive financial system where such financial services as

loans, deposits, insurance, and pension and payment mechanism are accessible to greater percentage or generality of the populace.

Globally, financial inclusion has assumed greater level of importance in due to its perceived role in the economic growth and development of an economy. Capital formation as one of the primary ingredients for the growth and development of an economy cannot be achieved if greater percentages of the population are financially excluded. There is currently high energy activity by policy makers in pursuing financial inclusion. This is because it has been shown that countries with higher degrees of financial inclusion tend to post higher economic growth [1]. Many countries and development institutions are moving towards a focus on achieving financial inclusion in their strategies for growth and poverty alleviation. . Unprecedented rates of economic growth in middle income and developing countries over the past decade have raised more than one billion people out of poverty [2].

Making the economy more financially inclusive has caught the attention of the Central Bank of Nigeria in its commitment to sustainable development over the years. However, the disquieting reality is that Nigeria is being run by the fraction of the citizens. CBN (2012), [3], reported that out of about 84.7 million adult populations, a total of 39.2 million adults, representing 46.3% Nigerian adults are financially excluded in the provision of banking and other financial services. In other words, only 45.5 million Nigerian adults have access to financial services. Out of this figure only 31 million adult Nigerians representing 36.5 per cent enjoy formal banking services. This implies that a greater percentage of money in circulation is outside the banking system. As such, any economy where the majority of the citizens are financially excluded and unbanked, the implication perhaps would be a threat to the economy [4].

Measures of financial inclusion abound. However, the existing survey that measures financial inclusion focus on four main components; Access, Quality, Usage, Welfare. Each of these components contains several indicators which includes; having a financial product such as bank account or card, having formal savings or loan, trust in the financial system, cost of the financial services, distance to access points, documentation required, commercial bank branches, automated access points such as ATM [5].

The fact that a lot of studies have been carried out on the relationship between financial inclusion and economic growth is evident. However, emphasis of these studies focus on the relationship between financial aggregates, financial sector development and economic growth [6]. Previous studies in this area concentrated only on the financial services inclusion from the banking sector which is only an aspect of the financial system while disregarding financial inclusion in areas of insurance and pension [7].

This study therefore is an attempt to bridge the gap in this essential area thus complimenting the existing researches designed to achieve holistic and adequate financial inclusion in Nigeria [8]. The study aims at evaluating the impact of financial inclusion on Nigerian Economic growth. The rest of the work is divided into four sections. Section two, deals with the review of related literature, section three focuses on the methodology while section four presents the empirical results and discussion of findings. Section five concludes the study [9].

### **METHODOLOGY**

This research adopted the Ex-post facto research design anchored on correlation analysis and descriptive statistics. The data collected, presented, analysed and discussed in this study were from secondary sources which were extracted from the Central Bank of Nigeria (CBN)

statistical bulletin of various years, past research projects, journals, internet sources, and seminar papers.

### **Research Variables**

The research variables are structured into dependent and independent variables for the purposes of analysis. In this study, the independent variables are the Nigerian economic growth measured in terms of Real Gross Domestic Product (GDP) while financial inclusion is the independent variable proxied by Deposit Money Bank branches, Broad money/ Gross Domestic Product (M2/GDP), Credit to Private sector/Gross Domestic Product (CPS/GDP), Number of ATM per 100,000 adults and Number of retirement savings account.

### **Variables Description**

#### *a) Economic Growth :*

Economic growth refers to sustained increase in what an economy can produce over a period of time measured by the Gross Domestic Product (GDP). In this study, it is measured by the Real Gross Domestic Product (Real GDP) in order to make adjustment inflation.

#### *b) Number of Retirement Saving Account(RSA)*

Retirement Savings Account as the name implies is a mandatory account opened with Pension Fund Administrators. The account remains funded to meet the liquidity needs at retirement. In this study it is defined as the total amount of savings generated from the workforce pending retirement and it is measured by the number of RSA registration within the study period to access the usage aspect of financial inclusion.

#### *c) Number Deposit Money Bank Branches (DMBB):*

This is defined in this study as the total number of deposit money bank branches in Nigeria both in the urban and rural areas. The

number of deposit money bank branches is included because it measures the level of financial service availability in Nigeria.

*d) Number of Automated Teller Machine (ATM) per 10,000 people*

Automated Teller Machine (ATM) is defined in this study as a computerized machine that permits bank customers to gain access to their account and perform several banking operations without the help of a teller. It is a measure of availability and accessibility of financial services

- e) *M2/GDP*: this is defined in this study as the ratio of Broad money supply(M2) to GDP
- f) *CPS/GDP*: this is defined as Credit to Private Sector to Gross Domestic product.

### Model Specification

The study adopts an econometrics model for capturing and testing for significance in the stated objective. The focus of the model is to investigate the impact financial inclusion has on the growth of the Nigerian economy measured by the GDP. Bivariate correlation analysis shall be used to test the variables and their level of linear association in pairs. The decision rule shall follow the t-distribution as well as the probability of the f. While t will show magnitude, direction will be shown by the correlation coefficient.

$$r_{XY} = \frac{\sum xy}{\sqrt{\sum x^2 \sum y^2}}$$

where;

$r$  = correlation

Y = The dependent variable represented by Gross Domestic Product

X = the independent variables represented by;

Deposit Money Bank Branches (DMBB)

Retirement savings account ( RSA)

Broad money supply to GDP (M2GDP)

Credit to Private Sector to Gross Domestic Product (CPSGDP)

Number of ATM per 100,000 people (NATM)

### DISCUSSION OF FINDINGS

TABLE 1 Measures of Central Tendency, Spread and Normality

	MEAN	MEDIA N	STD__ DEV_	SKEWNE SS	KURTO SIS	PROBABI LITY	NO__OF_ OBSERV ATIONS
LGDP	10.89 972	10.933 87	0.180 243	- 0.28007 0	1.7725 34	0.68437 0	10
LRSA	15.16 128	15.306 23	0.504 131	- 1.02151 7	3.0262 29	0.41906 7	10
LDMBB	8.528 941	8.6055 69	0.182 644	- 1.72035 0	0.6153 46	0.04730 7	10
LCPS_G DP	3.004 523	2.9679 00	0.295 030	0.61534 6	3.3732 32	0.70852 9	10
LM2_G DP	3.122 204	3.0027 72	0.247 808	1.29017 4	3.0315 34	0.24974 1	10
LATM_ PER_	2.212 431	2.4317 25	0.685 989	- 1.56286 5	4.3433 69	0.08968 8	10

100000	2.212	2.4317	0.685	-	4.3433	0.08968	10
	431	25	989	1.56286	69	8	
				5			

Source: Authors Eviews 9 Computation.

The sample descriptive statistics are presented in table 1 above where the mean, median, standard deviation, skewness, kurtosis and the probability of the data for the variables used in the study are described.

### Measure of central tendency

These measures how closely knit the variables are to produce a dependable result. From table 1 above, the mean and median of both the dependent and independent variables are close to each other.

### Measure of spread

Spread looks at dispersion or variation i.e how far apart the observations are to themselves. In this study, standard deviation was used as a measure of spread. From table 1 above, ATM per 100,000 people has the highest standard deviation of 69% followed by number of Retirement Savings Account (RSA) with a standard deviation of 50%. Deposit Money Bank Branches has a standard deviation of 18.3% very closely to that of Gross Domestic Product (GDP) of 18.9% hence having a lesser dispersion from the GDP. Credit to the private sector/Gross Domestic Product (CPS/GDP) and Broad Money/GDP (M2GDP) has a standard deviation of 29.5% and 24.8 respectively.

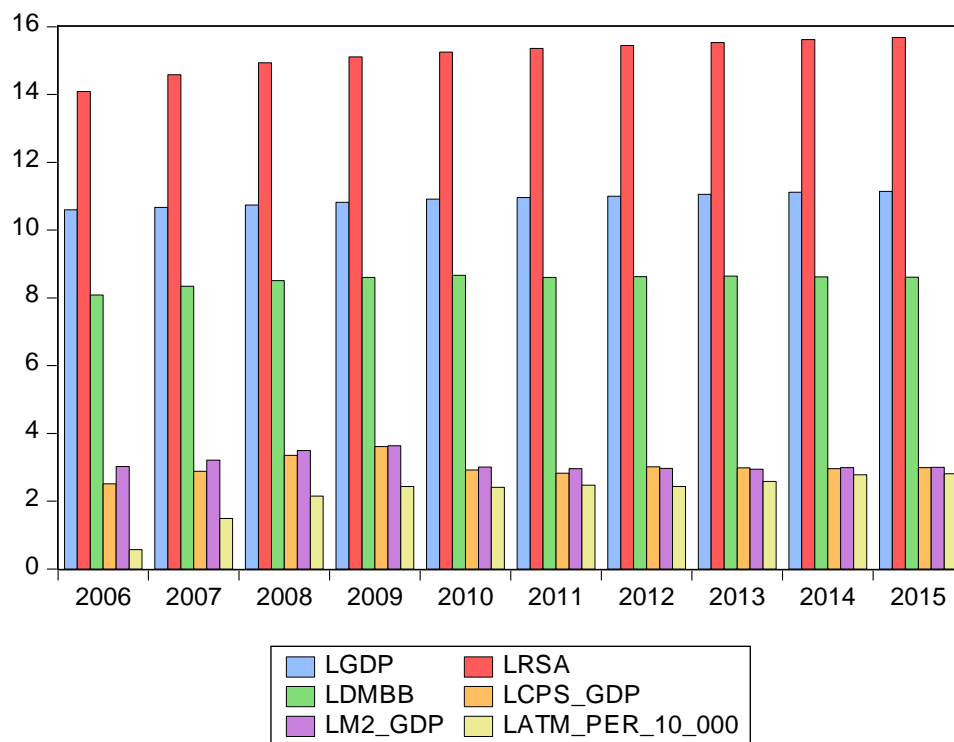
### Normality

Normality is a test of skewness and kurtosis of the data set. From table 1 above, number of Retirement Savings Account (RAS), Deposit Money Bank Branches and ATM per 100,000 people are negatively skewed in line with the GDP while the financial deepening indicators (M2GDP and

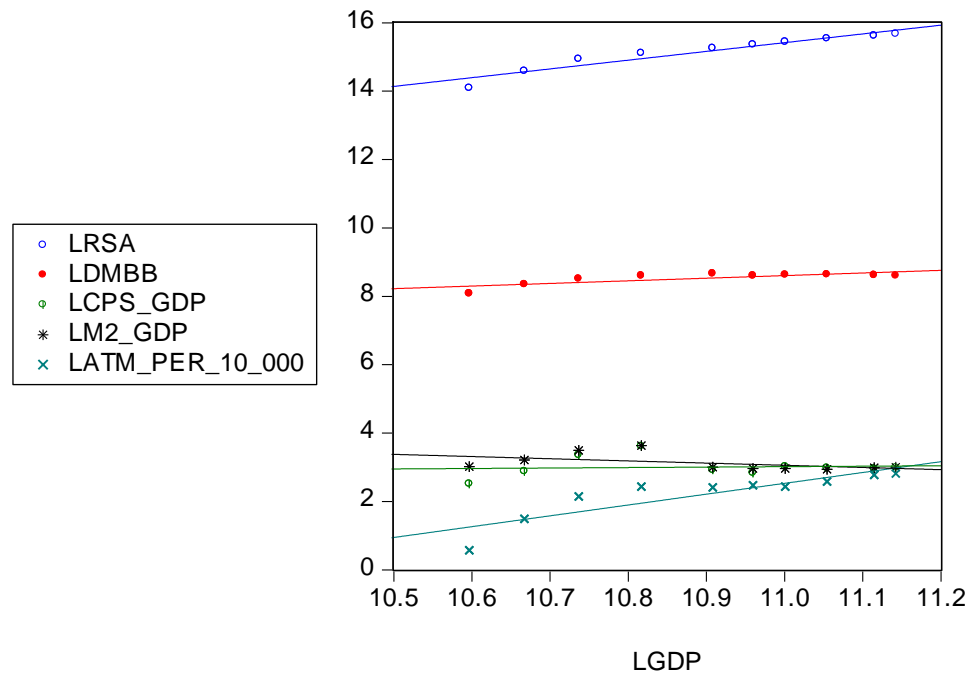
CPS/GDP) are positively skewed. This indicates that both M2gdp and CPS/GDP are not normally distributed.

On the other hand, Gross Domestic Product which is the dependent variable is platykurtic while all the dependent variables are leptokurtic.

Table 2 Descriptive Statistics of the Variables







Source: Authors Eviews 9 Output.

Table 3 Correlation analysis

Covariance Analysis: Ordinary					
Date: 11/12/16 Time: 07:32					
Sample: 2006 2015					
Included observations: 10					
Correlation					
t-Statistic					
Probability					
	LGDP	LRSA	LDMB B	LCPS_G DP	LM2_G DP
					LATM_P ER_10_0 00
LGDP	1.00000 0				
	-----				
	-----				

LRSA						
	0.96053	1.0000				
	6	00				
	9.76719	-----				
LDMBB	5					
	0.0000	-----				
	0.79261	0.9235	1.000			
LCPS_GDP	9	70	000			
	3.67689	6.8128	-----			
	0	47				
	0.0062	0.0001	-----			
LM2_GDP						
	0.08568	0.3065	0.510	1.0000		
	5	96	744	00		
	0.24324	0.9110	1.680	-----		
LATM_PER_1	9	62	290			
	-	-	-	0.8037	1.0000	
	0.48794	0.2952	0.062	88	00	
	2	08	510			
	-	-	-	3.8214	-----	
	1.58110	0.8739	0.177	77		
	4	22	150			
	0.1525	0.4076	0.863	0.0051	-----	
			8			
LATM_PER_1	0.87389	0.9706	0.967	0.4946	-	1.00000

0_000	5	94	282	94	0.0791	0
					53	
	5.08469	11.424	10.78	1.6100	-	-----
	9	65	376	08	0.2245	
					82	
	0.0009	0.0000	0.000	0.1461	0.8279	-----
			0			

Source: Authors Eviews 9 Computation.

From table 2 above, all the variables except M2GDP positively correlated with GDP. However, though CPSGDP is positively correlated with GDP, it is non-significant. Retirement savings account, ATM per 100,000 people and number of Deposit Money Bank Branches are positively and significantly correlated with Economic Growth. RSA which is of primary interest has a 96% correlation rate with GDP

Deposit Money Bank Branches is positively and significantly correlated with the number of Retirement Savings Account (RSA). CPS/GDP, though positively correlated with RSA and DMBB is insignificant. ATM per 100,000 people is positively and significantly correlated with RSA and DMBB. This implies that they are in stronger association with Economic growth and is also in line with the a priori expectation that as Deposit Money Bank Branches increase, so will the number of ATM increase. M2GDP is positively and significantly correlated with CPS/GDP. This equally meets the a priori expectation.

### CONCLUSION

This study evaluated the impact of financial inclusion on the growth of the Nigerian Economy. It was found that the number of Retirement Savings Account (RSA), ATM per 100,000 people and Deposit Money Bank Branches (DMBB) are positively and significantly correlated with

Economic growth proxied by Gross Domestic Product (GDP). M2GDP is negatively related to Economic growth whereas CPS/GDP is positively but non-significantly related to Economic growth. The RSA, which is of primary interest in this paper in bridging the gap in the previous studies, has a 96% correlation with Economic growth. The study therefore suggests that financial inclusion extending beyond the banking industry to pension funds will impact more positively on the Nigerian Economy if given the necessary and required pull and push. Enhanced government effort through the appropriate monetary authorities aimed at mainstreaming every economic unit to allow for the plucking of leakages that makes financial inclusion less effective is recommended.

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