Specialised Bank's Credit Provision in Nigeria: Implication on Poverty Reduction

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Abstract

The menace of poverty in developing countries is overwhelming and different policies and programmes have been strategized towards curbing the menace. Among these, is the introduction of the specialised bank's credit provision with the main objective of serving the grassroots people who might probably be vulnerable to falling below the poverty threshold. Thereby, this study set to investigate the implication of specialised bank's credit provision in Nigeria on poverty reduction. Time-series data on the specialised bank were extracted from the Central Bank of Nigeria Statistical Bulletin and regressed on poverty incidence using Autoregressive Distributed Lagged Model (ARDL) as preliminary tests suggest. Per Capita Income and Other (uncategorised loans) reduce poverty by 0.16 and 0.000086 per cent respectively at a 5 per cent significance level. In the short-run, per capita income, manufacturing and food processing, transport and commerce, and microcredit lending to other sectors that are unclassified reduce poverty by approximately 0.30, 0.0008, 0.0002 and 0.0006 per cent respectively and all are statistically significant at 1 per cent except for transport and commerce, which is significant at 10 per cent. Any deviation in the models would be corrected approximately in 1 year 6 month and 3 years and 3 months both Model 1 and 6 respectively. The credit provisions by the specialized banks in Nigeria is not very effective in poverty reduction. Microcredit lending might not be reaching intended borrowers as many of the lending components do not reduce poverty. Check and balance is necessary, especially, in an instance of commercial credit guarantee by the government or donor.

Keywords: Time series, OLS, Poverty, Other Depository Institutions-Micro Finance Institutions
JEL Classification Codes: C22, I3, G21

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1. Introduction

According to the Central Bank of Nigeria (2009), "A Microfinance Bank (MFB) is any company licensed to carry on the business of providing microfinance services, such as savings, loans, domestic funds transfer and other financial services that are needed by the economically active poor"; while "A Microfinance Institution (MFI) is an establishment registered to carry on the business of microfinance services, such as savings, loans and other financial services that are needed by its members". Meanwhile, financial services have been deemed as an effective tool of preventing [any] shock that may expose vulnerable non-poor individual or household to poverty due to the dynamic nature of poverty, and MFIs provide much needed financial services to both vulnerable non-poor and poor individuals or households. The two main concepts of this study, that is, MFIs and poverty rate, has a grounded relationship in both theoretical and practical views.

Poverty is a global phenomenon, and simply implies deprivation of life necessities, such as lack of access to health, education, and means of sustainable livelihood among other necessities. The poverty incidence in Nigeria was estimated at 46% in 2004, 35.6% in 2011 and 36.1% in 2013. The fight against poverty was so important worldwide that the drive to address poverty warranted its institutionalization when the World Bank was established in 1944 (Khan, et al., 2020). Nonetheless, the reduction in poverty in the Mid-19th Century was attributed to better macroeconomic performance, which encompassed inclusive growth (Khan, et al., 2020). The indigent population are those who are facing economic exclusion and mostly reside in the enclave of the informal sector, such as petty trader, food vendor, cobbler, and provision store among others.

Similarly, Microfinance Institutions (MFIs) have been globally reckoned with as an effective means of reducing poverty incidence and promoting economic growth and development through its inclusiveness capability. MFI promotes inclusivity in an economy because it mainly serves those who have been financially excluded from society. Financial exclusion could be a result of geographical location and distance, low-income, cultural practices, family value or position and cost of operating an account among other factors. MFI encourages inclusivity because it takes care of the most factors that inhibit inclusivity and thereby boost the economic status of its clients. Microfinance is a part of the verifiable tool of poverty reduction in developing countries and most relevant in the developing countries context only (Kumari *et al.*, 2019). According to Ledgerwood (1999) the core mandate of Microfinance Institutions are; reducing poverty by empowering women, or other disadvantaged population groups, to create employment; helping and grow new and existing businesses to progress and/or diversify their activities. In the Nigerian context, the Central Bank of Nigeria (2012) asserted that the target client of MFBs "shall include the economically active low-income earners, low-income households, the un-banked and under-served people, in particular, vulnerable groups such as women, physically challenged, youth, micro-entrepreneurs, informal sector operators, subsistence farmers in urban and rural areas". In a nutshell, MFIs are to create social capital with main focus on indigent populace in the society.

The advent of the specialized bank became important because those below the poverty line are either financially excluded or underserved in the society due to certain factors, such as cost of operating an account, geographical proximity to a financial institution, low-income level, and illiteracy among others. Specialized bank is by design meant to serve the financially excluded and underserved individuals who are mostly in the rural and semi-urban areas. Quite disturbing that there are many indigent populaces in the urban and city centre today who are hustling for a living.

Specialized banks, such as (default) People's Bank, Community Bank and now Microfinance Bank as it evolved in the case of Nigeria, are meant to serve people at the bottom of the economic ladder. The bank could as well serve those above the poverty threshold but the bank's supply may not be able to meet up with such demand. More so, the simplicity of the documentation makes the formality in the bank informal, as such the dominant patronage comes from the people who are mostly in the informal sector. Business language is plain and well understood between the two parties. Most credit facilities are advanced without collateral.

Also, the Central Bank of Nigeria (2005) put it forward that commercial banks only provide services to about thirty-five per cent of the population, while others are excluded. Overtime now the statistics have improved (i.e. it is 58.4%) due to the adoption of financial technology in the provision of banking and financial services. However, this development further encouraged the existence of MFBs/MFIs to cater for the unserved and the underserved population (Nwanyanwu, 2011). Specialized banks improve access to financial services and enhance their quality. Also, in an instance whereby the financial services are limited, especially, as it concerns credits and savings, the specialized bank is valid in remedy such anomalies as being an experience in different countries (Palestine Monetary Authority, 2016). Therefore, with the level of financial service outputs from the MFBs/MFIs, which are fully supported by the governments at all level and private individuals, it is expected that poverty incidence should not be increasing as witnessed in the country. It is in the interest of this paper to investigate the impact of specialised banks' credit provision on poverty reduction in Nigeria. The rest of this paper is organised into three section viz-a-viz; literature review, methodology, results and conclusion respectively.

2. Literature Review

2.1 The Trend of Events in Nigeria

Nigeria, like any other country in the world, has operations of different classes of banks, ranging from commercial banks, merchant banks to development banks. As commonly known, the commercial banks in the country provide retail banking services, while, the merchant banks provide wholesale banking services. Large junk of developmental credit, from medium to long-term credits, is expected to come from the merchant banks. Unfortunately, the bank could not play out this intermediation role very well to the point of granting mostly needed medium and long term credit. Considering how the country was lagging in development, the national government intervened by creating development banks as occasioned by the national need to bridge the gap created by the Merchant Banks. Recently, the country established a national bank called Development Banks of Nigeria (DBN). All these categories of banks are supervised and regulated by the apex bank in the country, which is the Central Bank of Nigeria (CBN). Development banks are banks that help to promote the desired socio-economic advancement in a country. As such, Nigeria has different development banks targeted towards different sectors and the category of people in the economy. There are development banks called Nigeria Agricultural and Cooperative Bank (NACB) and The Agricultural Credit Guarantee Scheme Fund (ACGSF), both banks were established in 1973 and 1977 respectively, and they are targeted towards agricultural development in the country. Specialized Bank is under the classification of the Development Bank in Nigeria. The specialized banks of interest to this study, are the ones concerned with the provision of micro-credit to individuals and businesses, without sector restriction.

Specialized banks are understood to be supporting private sectors in inclusive economic development. They are considered as one of the important pillars of economic reforms in some countries, especially, developing countries (Shiba & Issa, 2015). The evolvement of the banks in Nigeria had been through different stages. In 1977, the ratio of bank to the population in Nigeria was 1: 170,000 compared to the other contemporary countries like India which has 1: 52,000 as at then; this development prompted the national government to launch the Rural Banking Programme. The programme was targeted towards financial inclusion by way of having at least a bank in each of the local government areas existing in the country at that time (Okoye & Okpala, 2001). The Rural Banking Program was said to have achieved the creation of banking awareness among the rural dwellers, although, the target of at least one bank per local government was only attained in 1991.

Furthermore, the People's Bank of Nigeria was established in 1989 to cater for the needs of the rural and urban poor such as sole-proprietorship businesses, hair-dresser, tailor, electrician, and petty-traders among others. The bank depends on the federal government's subvention and accumulated a lot of bad loans, it was later ceased to exist in the 1990s. Afterwards, the community bank, which was already established in 1990, took over. It was as if it was established to replace the People's Bank of Nigeria. The concept of the community bank is a game-changer in the establishment of the development banks in Nigeria because the ownership now tilted towards private ownership and this enhanced its sustainability compared to what was obtainable before its establishment. The community banks in Nigeria are "privately owned, self-sustaining financial institutions owned by a community, or a group of communities to provide financial services to members of the community" (Okoye & Okpala, 2001; Nwanyanwu, 2011). Community Banks metamorphosed into Microfinance Banks and the transformation was made effective from December 2006 by the Central Bank of Nigeria, which is the apex financial institution in the country and in-charge of banking regulation.

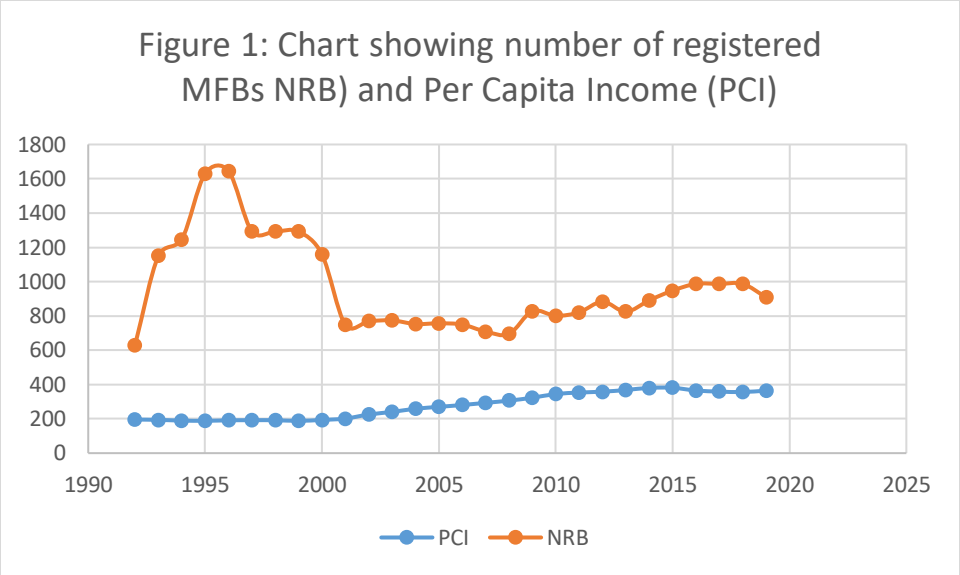
The Federal Government of Nigeria (FGN) recognised and believed in the capacity of microfinance banks in reducing poverty. Thereby, the Central Bank of Nigeria (CBN) made an additional provision of ₦42.02 billion as of December 2007 through the Deposit Money Banks (DMBs) and at the same time ₦ 21.72 billion had been invested in 523 projects across the country. The fund was to ensure the availability of microcredit advances towards meeting the financial services needs of Micro, Small and Medium Enterprises (MSMEs) (Central Bank of Nigeria, 2008). The main objective of making these funds available is to complement the "Microfinance banks in supplying a large but cheap source of finance to the small and micro-entrepreneurs" towards poverty reduction (Central Bank of Nigeria, 2008). Also, the Micro, Small and Medium Enterprises Development Fund (MSMEDF) has a seed capital of N220 billion. In the same vein and around the same time, the Bankers' Committee in Nigeria set up a Micro-Credit Fund (MCF) with an initial amount targeted at N20 billion and expected the amount to increase to N100 billion in the next two years; all the efforts were geared towards enhancing microcredit to the micro-entrepreneurs (Central Bank of Nigeria, 2008). All these interventions were referred to as Microfinance Development Fund, which was set up as a means of providing for wholesale funding requirements of MFBs/MFIs.

Khan et al. (2020) noted that access to financial services through the MFIs is more prevalent with the male compared to the female counterpart. Nigeria has been in the grasp of this position through

the development of the MFIs in the process of poverty reduction. Thereby, provision was made that sixty per cent (60%) of the MCF, which was equivalent to N132 billion, was set aside for the provision of financial services to women (Central Bank of Nigeria, 2009). Also, this provision was incorporated into the Revised Microfinance Policy, Regulatory and Supervisory Framework (Section 4.2,[iv]), and it was categorically noted that the access to financial services by women should increase annually by fifteen per cent (15%), which was targeted towards the achievement of gender parity in access of financial services.

Micro enterprises are classified to be enterprises with less than 10 employees and with a total asset below N5 million excluding land and building and operated as a sole proprietorship (Central Bank of Nigeria, 2009). Similarly, Small and Medium Enterprises (SMEs) are classified to be an enterprise with employees between 11 and 200 ($10 < \text{employees} \leq 200$), with a total asset between N5 million and N500 million (Central Bank of Nigeria, 2009). Also, Women-owned Enterprises refer to Nigerian women (group or individuals) enterprises with women having a minimum of seventy-five per cent ownership and operation (Central Bank of Nigeria, 2008).

There is this belief that among the indigent populace that microfinance enjoys everything that is donors' interest, which includes grants for institutional capacity building, grants to cover operating shortfalls, grants for loan capital or equity, concessional loans to fund on-lending, guarantees for commercial funds, and technical assistance among others. Generally, financial institution, such as specialized banks are meant to benefit their stakeholders, ranging from founders, society and the indigent populace. But these days, when most government institutions, such as, higher institutions, police commission and a lot of others are setting up their own microfinance bank/institution, which has no donor, it is an implication that they are set out for purely profit-oriented business. This development is at the detriment of the indigent population around such bank, which the bank could have happily alleviated their financial constraint issues. Some microfinance banks are becoming unapproachable, especially, if the microcredit seeker is not a member of the founding institution. The argument against subsidized credit started in the 1980s. Also, Ledgerwood (1999) position on the subsidized lending program and its credit accessibility repression for the indigent population, as more elites enjoyed it. Although, the subsidized lending scheme has been criticized for its failure in the past due to habitual ineffective management of the fund by the receiving microfinance institutions and also, occasioned excessive demand. Therefore, borrowing is repressed for the indigent populace at the same time when the cost of borrowing is too high. However, a market-based solution was emphasized for the sustainability of the MFIs, which is equally in the general interest of the national development. Figure 1 shows the number of registered specialized banks and the per capita income in USD. The transition of the specialized banks reflected on the chart. The decline in the number of registered banks was witnessed from 1996 onward as the People's Bank of Nigeria was out of business and the reality of going-concern was already feasible with community banks registration rush. A new era began in 2006/2007 as microfinance banks came on board, and the ownership drive was pioneered with sustainability, failure or bankruptcy rate has declined considerably compared to the experience in the mid-1990s. Commercial credit guarantee from the FGN may equally encourage those who may not survive the business atmosphere to enter the market; thereby, there is an infinitesimal failure rate even as the number is increasing slowly. Per capita income is increasing slowly all through this period of fluctuation in the number of registered MFIs. Although, there is a significant relationship between the two variables but slight (38.32% degree of correlation and significant at 5%).



2.2 Status and Concern about MFIs

Unlike before, as it was with the default Peoples' Bank of Nigeria, subvention was no longer available to specialized banks. It was only obtainable in the prior period to the advent of Community Banks and transformation of the same to the Microfinance Banks. Also, subsidies availability is fading out very fast, and the MFIs are resorting to sourcing funds from the other banks in the higher hierarchy of classification to advance the same to the rural and urban poor who are unserved and underserved. The majority of the MFIs are without subsidies and their going-concern depends purely on business and profit motive. Little wonder that decapitalization due to various reasons and high cost of operation among other factors have been identified as part of the factors that necessitate failure of the microfinance banks in the recent past (Nwanyanwu, 2011). Interest rate is determined based on the four categories of costs, which are financing costs, operating costs, loan loss provision and cost of capital. Majorly, as the cost of capital increases due to the absence of subvention and lack or inadequate subsidies, these reflect in loan cost through interest rate charged to the borrowers (Ledgerwood, 1999). Also, microfinance banks are now shifting businesses very fast to urban areas and even cities at the detriment of rural areas, because they are becoming more profit-oriented establishments. Khan, *et al.,* (2020) observed a similar trend in Pakistan and called for the institutionalization of Microfinance Banks in rural areas. Thereby, the concern of poverty reduction is daily becoming at stake, as the institution targeted for microcredit lending is daily becoming profit-oriented –due to its heavier reliance on commercial credit– rather than satisfying its designed objectives. It may not be surprising that a co-movement relationship instead of inverse may prevail between MFIs and poverty incidence in Nigeria, even, as the number of registered MFIs is increasing. Absence of subvention and dwindling subsidy, which jointly translated to cost of capital increment and ebbing away of financial services to the deserved populace by design, further necessitated the need for investigating the specialized banks' credit provision in Nigeria and its impact on poverty reduction.

2.3 Empirical Review

The impact of specialized banks such as microfinance on poverty reduction has been reported to be mixed. The positive empirical evidence is considered first as follows: Khan, et al. (2020) investigated the link between microfinance and poverty reduction in Pakistan. They segregated the microfinance's credit provision into five categories of clients viz-a-viz: Active borrowers, Sector-

wise borrowers, Rural borrowers and Women borrowers, and borrowers based on lending methodology (individual borrowers and group borrowers). A probit model was used in the study. They found that loans for the productive purpose were important in tackling poverty and that MFIs are better accessed by individuals in the urban areas; male counterpart was found to be dominant in access level (Khan, et al., 2020). It is was concluded that there is a need to improve and localize MFIs (Khan, et al., 2020). Kaseva, (2014) investigated the effect of microfinance on poverty reduction in Tanzania, using a case study of African Microfinance Limited (AML) in Dar es Salaam and analysed the primary data obtained with ordinary least squares. She found that microcredit obtained from the bank increased the income of the borrowers but loans were advanced to clients with higher collateral. Also, training on the fundamentals of business management was rendered to the borrowers for the effective management of the loan. A further check showed that the bank operated an inclusive microcredit lending as the lion share of the clients were people with less education (41% with 7 years of education compared to those with 16 years of education, which are only 5%) (Kaseva, 2014).

Other studies have supported the potential of a microfinance institution in reducing poverty and enhanced household income, thereby, making household less vulnerable to poverty (Pimhidzai, et al., 2019; Han, Wang, & Ma, 2019; Sulemana, Naiim, & Adjanyo, 2019). Herath, Guneratne, and Sanderatne, (2015), found that microcredit lending reduces poverty of the socio-economic vulnerable women and empowers them to form social-capital. Similarly, El Hadidi (2020) asserted that microfinance helped in poverty reduction when considered household income of women borrowers in Greater Cairo and rural areas in Egypt. Babarinde et al. (2019) asserted that Microfinance loan contributes positively to the SMEs profitability in the Ilorin metropolis. SMEs are encouraged to patronize financial activities offered by the Microfinance, why they advocated a downward review of the interest rate. Kumah and Boachie, (2016) have identified Microfinance to be playing the role of consumption smoothing and safety-net for its clients. It is essential in sustaining the vulnerable individuals from economic shocks.

On the contrary account, some studies found that Microfinance has not been reducing poverty incidence. Garson (2001) asserted that microfinance failed to reduce poverty when microcredit lending did not easily reach the intended borrowers, which are the indigent populace; and when the indigent populace is too poor to invest what they borrow. The position of Rahman (1999) was evidence of Garson (2001). A part investigation from the Grameen Bank micro-credit program showed that over 60% of the microcredit obtain by women were used by men and that around 78% of the microcredit failed the designed fungibility (Rahman, 1999). Nevertheless, it is feasible that if the demand side of microcredit lending is effectively managed, by preventing diversion of loans and ensure that the target client gets what is due, there is clear evidence that MFIs would reduce poverty incidence based on the reviewed studies.

3. Methodology

3.1 Theoretical Framework

Since, the institutionalisation of poverty by the World Bank, poverty has been reckoned as a result of exclusion, mainly financial exclusion but not limited to finance. Thereby financial services providers could help individuals who are excluded, if such has access to such needed financial services. The relationship between microfinance institutions and poverty reduction is supported by the fact that capital is an essential component of outputs. Individual outputs of the indigent

populace could be enhanced if avail access to financial services. The microcredit idea was part of what succeeded the modernization theorists, which contend that poverty is an issue created internally and it has to be addressed internally (Hirschman, 1958; Schultz, 1980). In the same vein, the proponents of microcredit believe that it could break the vicious circle of poverty and change it to a virtuous circle if the household could have access to credit and other assets (Aryeetey, 2004).

3.2 Data and Sources

The data used for this study is sourced from the Central Bank of Nigeria Statistical Bulletin for the year 2019, covering the period of 1992 to 2019. There was no separation of data, aggregate data for the Specialized Banks were extracted from the bulletin. Table 1 shows the variables of interest, their definition and source as applicable in this study. Besides, poverty incidence, per capita income and deposit, all other variables are the lending categorization of the specialized banks in Nigeria as reported in the CBN Statistical Bulletin. The time-series span of the data could not go beyond this because the CBN started computing data for the specialised banks in 1992, and 2019 happened to be the latest data at the time of this study.

Table 1: Variable Definition

Variable	Definition	Source
LPOV	Natural log of Poverty Incidence	CBN Annual Report and Statements of Account different years
LPCI	Natural log of Per Capita Income	Calculated from the Real Domestic Products and Population, both variables extracted from the CBN Statistical Bulletin
LAGR	Natural log of credit advanced to agriculture and forestry loan	CBN Statistical Bulletin 2019.
LMIQ	Natural log of credit advanced to Mining and Quarrying	CBN Statistical Bulletin 2019.
LMFP	Natural log of credit advanced to Manufacturing and Food Processing	CBN Statistical Bulletin 2019.
LREC	Natural log of credit advanced to Real Estate and Construction	CBN Statistical Bulletin 2019.
LTRC	Natural log of credit advanced to Transport and Commerce	CBN Statistical Bulletin 2019.
LOTH	Natural log of credit advanced to Others (Sector or Businesses that are not classified)	CBN Statistical Bulletin 2019.
LDEP	Natural log of Deposit with the specialized banks	CBN Statistical Bulletin 2019.

Source: *Author's* compilation

3.3 Method of Data Analysis and Model Specification

Autoregressive Distributed Lagged Model (ARDL) as proposed by Pesaran, Shin, and Smith, (2001) was applied in investigating the relationship between the specialized banks and poverty reduction in Nigeria. ARDL was used due to the non-stationarity of all the variables in the specified model at the same level. Also, some of the variables are induced stationarity. The specified model in equation 1 is estimated and other parsimonious estimations were carried out.

Model Specification

The model specified as equation 1 is the estimated basis model with other parsimonious models:

$$\Delta LPOV_t = \beta_0 + \sum_{i=1}^{n} \beta_{1i}\ \Delta LPOV_{t-1} + \sum_{i=0}^{n} \beta_{2i}\,\Delta LPCI_{t-i} + \sum_{i=0}^{n} \beta_{3i}\,\Delta \mathrm{LAGR}_{t-i} + \sum_{i=0}^{n} \beta_{4i}\,\Delta LMIQ_{t-1} + \sum_{i=0}^{n} \beta_{5i}\Delta LMFP_{t-1} + \sum_{i=0}^{n} \beta_{6i}\,\Delta LREC_{t-1} + \sum_{i=0}^{n} \beta_{7i}\,\Delta LTRC_{t-1} + \sum_{i=0}^{n} \beta_{8i}\,\Delta LOTH_{t-1} + \sum_{i=0}^{n} \beta_{9i}\,\Delta LDEP_{t-1} + \sigma_1 LPOV_{t-1} + \sigma_2 LPCI_{t-1} + \sigma_3 \mathrm{LAGR}_{t-1} + \sigma_4 LMIQ_{t-1} + \sigma_5 LMFP_{t-1} + \sigma_6 LREC_{t-1} + \sigma_7 LTRC_{t-1} + \sigma_8 LOTH_{t-1} + \sigma_9 LDEP_{t-1} + \mu_t \quad \ldots\ldots\ldots\ldots\ldots \text{(i)}$$

Where; Δ denotes first difference operator,

β_0 = the drift component,

μ_t = the error term,

β_1 - β_9 = the parameters of the short-run dynamics of the model,

σ_1 - σ_9 = corresponds to parameters of the long-run relationship.

4. Results and Discussion

Analysis outputs are reported and discussed under this section, step by step from the preliminary data analysis to the specified model estimation. Descriptive statistics, which comprised mean, standard deviation, minimum and maximum values were reported in Table 2. The standard deviation values as reported in the table suggests the use of natural logarithm to reduce the range value among the variables. Furthermore, all the variables exhibit a similar trend except for Log of Poverty Incidence and Per Capita Income, which are both external to other variables considered in the model. Figure 2 shows that deposits (DEP) are the highest all through the time among the variables on the graph. Also, other forms of advances came up to have a consistent increment after the deposit from 1996 onward. Per capita income is consistently low and exhibited a bit closer gap with the agricultural advances.

Table 2: Descriptive Statistics

	POV	PCI	AGR	MIQ	MFP	REC	TRC	OTH	DEP
Mean	64.2529	276.9780	3710.979	19028.37	10393.33	4672.954	12601.62	16674.93	63187.76
Std. Dev.	10.0720	75.5603	3579.542	47258.24	20489.18	8016.299	17927.97	23546.76	72379.21
Maximum	81.20000	381.0583	11979.58	164408.2	63120.69	29074.80	58821.75	76622.60	260810.5
Minimum	39.0000	188.2391	29.5000	3.7000	19.9000	14.6000	45.6000	22.5000	639.6000

Source: *Author's computation* using *EViews 10*.

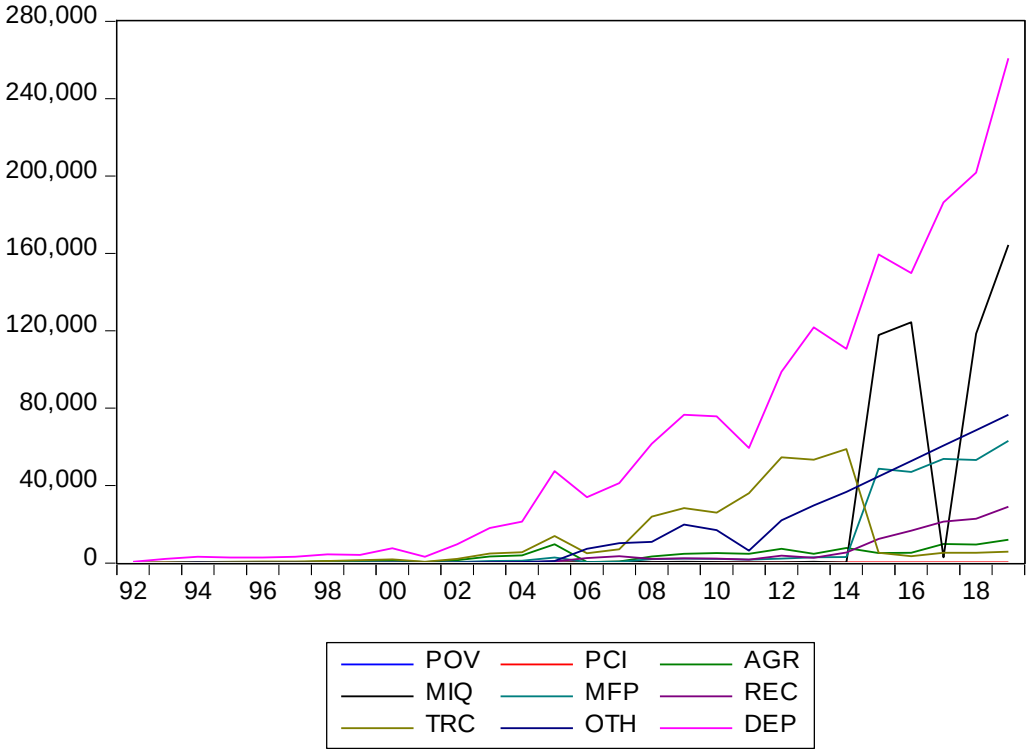


Figure 2: Linear Graphical Representation of the Variables
Source: *Author's* computation using *EViews 10*.

Also, Table 3 shows the correlation matrix among variables in the model. The relationship degrees as revealed in the table indicate no high degree of association between the log of poverty and any other variable in the model, which means the possibility of multicollinearity could be ruled out in the model. More so, only the coefficients for Mining and Quarry, and Transport and Commerce are not statistically significant but minimally related to other variables in the model.

Table 3: Correlation Analysis

Correlation (Probability)	POV	PCI	AGR	MIQ	MFP	REC	TRC	OTH	DEP
POV	1.0000								

PCI	0.4274	1.0000							
	(0.0233)	-----							
AGR	0.6002	0.7879	1.0000						
	(0.0007)	(0.0000)	-----						
MIQ	0.3160	0.4922	0.5347	1.0000					
	(0.1013)	(0.0078)	(0.0034)	-----					
MFP	0.3802	0.5826	0.6778	0.8767	1.0000				
	(0.0459)	(0.0011)	(0.0001)	(0.0000)	-----				
REC	0.3680	0.6375	0.7434	0.8417	0.9675	1.0000			
	(0.0540)	(0.0003)	(0.0000)	(0.0000)	(0.0000)	-----			
TRC	0.2899	0.6325	0.4216	-0.1719	-0.1564	-0.0422	1.0000		
	(0.1345)	(0.0003)	(0.0254)	(0.3817)	(0.4265)	(0.8308)	-----		
OTH	0.4156	0.7833	0.7933	0.7960	0.9170	0.9582	0.196687	1.0000	
	(0.0278)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.3158)	-----	
DEP	0.4649	0.8498	0.8605	0.7731	0.8841	0.9290	0.2913	0.9804	1.0000
	(0.0127)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.1326)	(0.0000)	-----

Source: *Author's* computation using *EViews 10*.

NB: The plain figures represent the correlation coefficients and the figures inside the bracket represent the probability values.

Stationarity Tests

Augmented Dickey-Fuller and Phillip-Peron stationarity tests were carried out respectively for each of the variables in the model. Both tests indicate the mixed stationarity of the variables of interest. Three of the variables (LPOV, LAGR, LMIQ) are stationary at level, while all others are of induced stationarity at first difference. The mixed level of stationarity informed the use of the Autoregressive Distributed Lagged method. ARDL is possible for the model because the regressand is stationary at the level and other regressors are stationary at the level, so the cancellation of drift in the regressors with the induced stationarity would not drift towards the regressand.

Table 4: Unit Root Tests

	ADF		PP		
Variable	t-stats	5% Critical Value	t-stat	5% Critical Value	Order of Integration
LPOV	-2.9346	-3.7114*	-3.7959	-3.6998***	I(0)
LPCI	-1.6570	-2.6569*	-1.6570	-2.6569*	I(1)
LAGR	-4.3735	-3.5875**	-4.3289	-4.3393***	I(0)
LMIQ	-4.0318	-4.4983**	-8.8241	-4.3560***	I(0)
LMFP	-5.9837	-4.3560***	-5.9883	-4.3560***	I(1)
LREC	-0.6288	-3.7880	-3.2968	-4.3560*	I(1)
LTRC	-4.9178	-4.3560***	-4.9176	-4.3560***	I(1)
LOTH	-4.9423	-4.3743***	-6.1720	-4.3560***	I(1)
LDEP	-7.9479	-4.3560***	-9.6055	-4.3560***	I(1)

Source: *Author's* computation using *EViews 10*.
***, **, and * indicate that the p-value is statistically significant at 1, 5, and 10 per cent significance level respectively.

Model Estimation

Autoregressive Distributed Lagged Model (ARDL) as proposed by Pesaran, Shin, and Smith, (2001) was applied in the estimations because the variables in the model are of different stationarity level, that is, some are stationary at the level and some others at first difference respectively. ARDL approach takes cares of such mixed stationarity variables. Models 1 to 7 were estimated but only the two models, Models 1 and 6 are reported because they are cointegrated in the long-run and short-run, and they happened to be more fit among other models except for Model 7, which most fit but not cointegrated. Model 1 is robust as the regressors could explain 53.65 per cent of the total variation in the regressand, and at the same time jointly significant as suggested by the F-statistics, which is statistically significant at 1 per cent significance level. Also, the Durbin-Watson statistics suggest the absence of serial correlation in the model. Likewise, Model 6 is considerably fit and robust as the regressors account for 78.41 per cent of the total variation in the regressand. Also, the Durbin-Watson statistics suggest the absence of serial correlation in the model and the variable combinations in the model is fit as suggested by the F-statistics, which is statistically significant at 5 per cent.

Considering variables, which are rightly signed from Model 1, only Per Capita Income (LPCI) and Microcredit to Other areas (LOTH) other than the ones captured in the model that are reducing poverty. In calculating the coefficient conversion for this study due to the use of natural logarithm, Gidigbi and Akanegbu (2013) guide on such interpretation used. The unlogged elasticity at 1 per cent increment in the regressand value is considered thus; $\hat{Y}\% = [(c-1)\times 100] \rightarrow \ell^{0.0043\cdot\hat{\beta}} = converted\ coef$ LPCI and LOTH reduce poverty incidence by 0.16 per cent ($e^{(0.0043 \times 0.3893)} - 1 =$ 0.001675391903) and 0.000086 ($e^{(0.0043 \times 0.0002)} - 1 =$ 0.001675391903) per cent respectively and both are statistically significant at 5 per cent significance level. The remaining three estimated coefficients in the model increased poverty. One-period lagged of poverty and per capita income, as well as lending to agriculture, aggravate poverty by 0.15, 0.16 and 0.0010 per cent respectively and these are statistically relevant at 5 per cent significance level.

In Model 6, there are four regressors, which are rightly signed and statistically relevant. Per capita income reduces poverty by approximately 0.30 per cent at a 5 per cent statistically significant level.

Lending to other categories not explicitly stated reduces poverty by 0.0006 per cent, though very infinitesimal but statistically significant at 5 per cent. Also, one-period lagged of lending to the real estate and construction, and one-period lag of microcredit lending to mining and quarry reduce poverty by approximately 0.0059 and 0.00013 per cent respectively at 1 per cent significance level. On the other hand, lending to the manufacturing and food processing, and transport and commerce are rightly signed, that is, relate negatively with poverty but not statistically relevant. Also, one-period lag of poverty and deposit are increasing poverty by approximately 0.30 and 0.0006 per cent, and both are statistically relevant at 5 and 1 per cent respectively.

Table 5: Long-Run Estimation

Variable	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
C	38.9068 (3.7413)	45.5038 (4.5916)	62.6520*** (4.2711)	62.6651*** (4.1611)	77.7369*** (4.2745)	19.9435 (0.6558)	1.8456** (2.3401)
LPOV(-1)	0.3629** (2.6187)	0.2515 (1.5539)	0.2545 (1.6216)	0.2546 (1.5821)	0.2356 (1.4224)	0.6930** (3.0024)	0.6744*** (3.8765)
LPCI	-0.3893** (-2.3963)	---	-0.0818 (-1.5473)	-0.0819 (-1.5059)	-0.1590** (-2.1161)	-0.6949** (-2.4386)	-0.0108** (-2.7084)
LPCI(-1)	0.3904** (2.2522)	---	---	---	---	0.7018* (2.1261)	0.0082* (1.8101)
LOTH	-0.0002** (-2.1097)	-0.0005* (-1.7834)	-0.0005* (-1.9073)	-0.0005 (-1.2792)	-0.0010* (-1.8985)	-0.0014** (-2.2504)	-4.87E-05* (-2.0904)
LOTH(-1)	--	--	--	--	--	0.0037** (3.0082)	2.89E-05*** (2.8937)
LMFP	---	0.0007** (2.1237)	0.0009** (2.6285)	0.0009** (2.4893)	0.0009** (2.2198)	-0.0018 (-1.5809)	-2.76E-05* (-2.779)
LMFP(-1)	--	--	--	--	--	0.0024* (2.2196)	4.90E-05* (1.8802)
LTRC		0.0003** (2.3166)	0.0006** (2.7622)	0.0006* (2.5692)	0.0005* (1.8060)	-0.0004 (-0.9352)	-1.36E-05* (-1.9022)
LREC	--	--	--	-1.61E-05 (-0.0141)	-0.0010 (-0.7842)	0.0012 (0.5196)	5.18E-05 (1.0580)
LREC(-1)	--	--	--	--	--	-0.0137*** (-3.4461)	-0.0002* (-2.0275)
LDEP	--	--	--	--	0.0001 (0.8627)	0.0013*** (3.5554)	2.70E-05** (2.2450)
LMIQ	--	--	--	--	--	-2.36E-05 (-0.3094)	-2.50E-06 (-1.3753)
LMIQ(-1)	--	--	--	--	--	-0.0003*** (-3.0685)	-7.88E-06* (-1.9597)
LAGR	0.0025** (3.7413)	--	--	--	--	--	-9.48E-06 (-0.2717)
LAGR(-1)	--	--	--	--	--	--	-7.52E-05** (-2.3416)
R^2	0.5365	0.4092	0.4697	0.4697	0.5276	0.7841	0.8212
Adj. R^2	0.4880	0.3018	0.3434	0.3106	0.3177	0.4898	0.5774
DW stat.	2.3100	2.4910	2.6338	2.6336	2.7645	2.9313	3.1659
F-stat.	5.9576***	3.8107**	3.7206**	2.9529**	2.5138**	2.6641**	3.3686**

Source: *Author's Analysis Outputs*

***, **, and * indicate that the p-value is statistically significant at 1, 5, and 10 per cent significance level respectively. t-value is indicated in the parenthesis.

Error Correction Model (ECM) Estimation

Table 6 reports ECM regression and cointegration coefficient. The cointegration coefficient for Model 1 as reported in the table shows the model converges in the long-run and that any deviation will normally be corrected approximately within 1 year, 6 months' calendar period. Also, Model 6 as reported in the table shows that four variables are rightly signed statistically relevant in reducing poverty in the short-run. In the short-run, per capita income, manufacturing and food processing, transport and commerce, and microcredit lending to other sectors that are unclassified reduce poverty by approximately 0.30, 0.0008, 0.0002 and 0.0006 per cent respectively and all are statistically significant at 1 per cent except for transport and commerce, which is significant at 10 per cent. Like in the long-run estimation, deposit aggravates poverty by 0.0006 per cent, 1 per cent statistically significant level. The Cointegration coefficient signifies that the model converges and that any deviation in the model will be corrected approximately in 3 years and 3 months.

Table 6: ECM Regression

Variable	Coefficient	Std. Error	t-Statistic
	Model 1		
D(PCI)	-0.3893***	0.1138	-3.4192
CointEq(-1)	-0.6370***	0.0889	-7.1632
	Model 6		
D(PCI)	-0.6949***	0.1128	-6.1578
D(MFP)	-0.0018***	0.0004	-4.1396
D(MIQ)	-2.36E-05	2.85E-05	-0.8288
D(REC)	0.0012	0.0007	1.5933
D(TRC)	-0.0004*	0.0002	-1.8398
D(OTH)	-0.0014***	0.0002	-4.8490
D(DEP)	0.0013***	0.0001	7.6385
CointEq(-1)	-0.3069***	0.0378	-8.1086

Source: *Author's* computation using *EViews 10*.

***, **, and * indicate that the p-value is statistically significant at 1, 5, and 10 per cent significance level respectively.

F- Bounds Cointegration Test

Table 7 shows the output of the F-Bounds test for levels relationship considering both Model 1 and 6. The F-statistic (8.6200) in Model 1 falls outside the I(1) significant value at 1 per cent; this implies the rejection of the null hypothesis of no levels relationship for the variables in the model. Therefore, I conclude that the variables are related in the long-run at a 1 per cent significance level. Similarly, the F-statistic for Model 6 falls outside the I(1) at 5 per cent; this implies the rejection of the null hypothesis of no levels relationship at 5 per cent. I, therefore, conclude that the variables in Model 6 are cointegrated and that there is a level relationship among them.

Table 7: F-Bounds Test for Levels Relationship

Test Statistic	Value	Sig.	I(0)	I(1)	I(0)	I(1)
Model 1			Asymptotic n=1000		Finite sample n=30	
F-statistic	8.62005	10%	2.37	3.2	2.676	3.586
K	3	5%	2.79	3.67	3.272	4.306
		2.5%	3.15	4.08	--	--
		1%	3.65	4.66	4.618	5.966
Model 6						
F-statistic	4.2294	10%	1.92	2.89	2.277	3.498
K	7	5%	2.17	3.21	2.73	4.163
		2.5%	2.43	3.51	--	--
		1%	2.73	3.9	3.864	5.694

Source: *Author's* computation using *EViews 10*.

Post Estimation Diagnostic Tests

Serial Correlation Test

Table 8 shows the output of the Serial Correlation LM test for the estimated model. Both the test's F-statistic and Obs*R-squared statistic values of 1.2242 and 3.0822 with probability values (0.3161 and 0.2141) greater than 5 per cent threshold of significance level implies acceptance of null hypothesis, that, there is no serial correlation in the residual.

Table 8: Breusch-Godfrey Serial Correlation LM Test

F-statistic	1.2242	Prob. F(2,27)	0.3161
Obs*R-squared	3.0822	Prob. Chi-Square(2)	0.2141

Source: Author's Computations, using Eviews 10.

Heteroskedasticity Tests

Table 9 and 10 show the output of both the Breusch-Pagan-Godfrey and ARCH heteroskedasticity test for the estimated model. All the test statistics reported in the two tables showed a probability value approximately greater than the 5 per cent threshold of significance level respectively. This implies acceptance of the null hypothesis, that, there is no heteroskedasticity in the residual. Both Breusch-Pagan-Godfrey and ARCH heteroskedasticity tests reject the presence of heteroskedasticity in the residuals.

Table 9: Heteroskedasticity Test: Breusch-Pagan-Godfrey

F-statistic	0.8392	Prob. F(20,14)	0.6317
Obs*R-squared	14.4091	Prob. Chi-Square(20)	0.4947
Scaled explained SS	5.3337	Prob. Chi-Square(20)	0.9889

Source: Author's Computations, using Eviews 10.

Table 10: Heteroskedasticity Test: ARCH

F-statistic	0.08585	Prob. F(1,32)	0.7720
Obs*R-squared	0.0926	Prob. Chi-Square(1)	0.7608

Source: Author's Computations, using Eviews 10.

Normality Test

Figure 3 below is a graph with statistics that shows the normality test result. The Jarque-Bera statistic (0.6901) with the probability value of 0.70 implies that the standardized residuals are normally distributed. Having skewness statistic around zero (0) and the Kurtosis statistic around three (3) reinforced the position, though, the Jarque-Bera statistic equally premised on the operation of these statistics. Therefore, statistics from the estimation of the covered observations can be validly relied on for inference, since, the residuals are normally distributed.

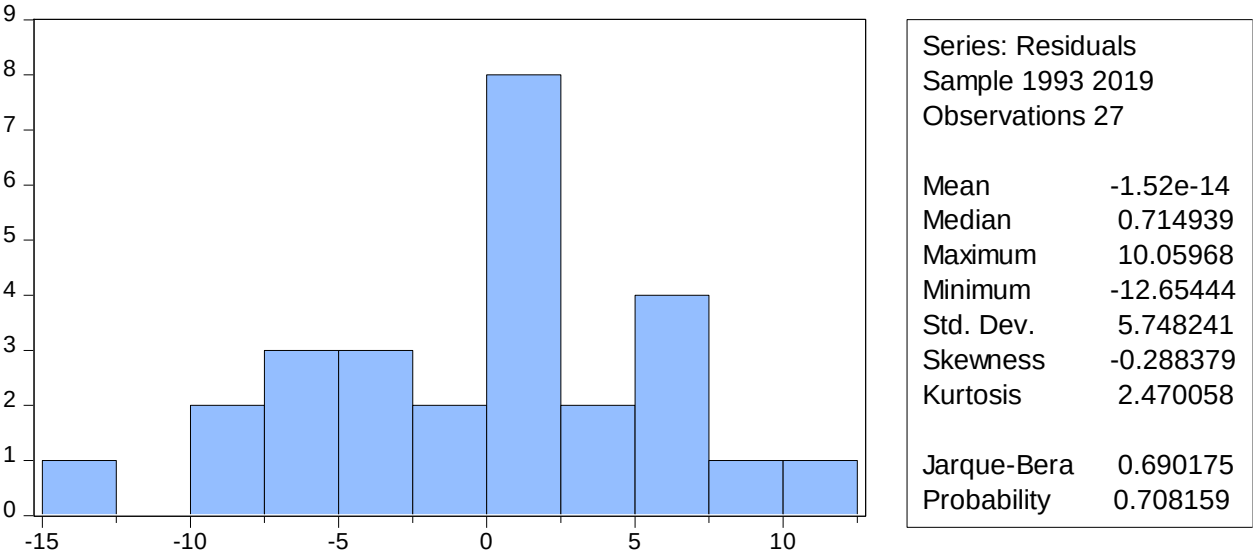


Figure 3: Normality Graph

Stability Tests

Figure 4 and 5 show the graphical stability tests based on CUSUM and CUSUM-Square Tests. In both figures, the cumulative sum of the recursive residuals is within the 5 per cent critical lines; this implies that the parameters in both models are stable. Also, the stability of the cumulative sum of the square residuals implies error variance stability, thereby, parameters are stable as well. Both models are reliable and feasible for a policy decision.

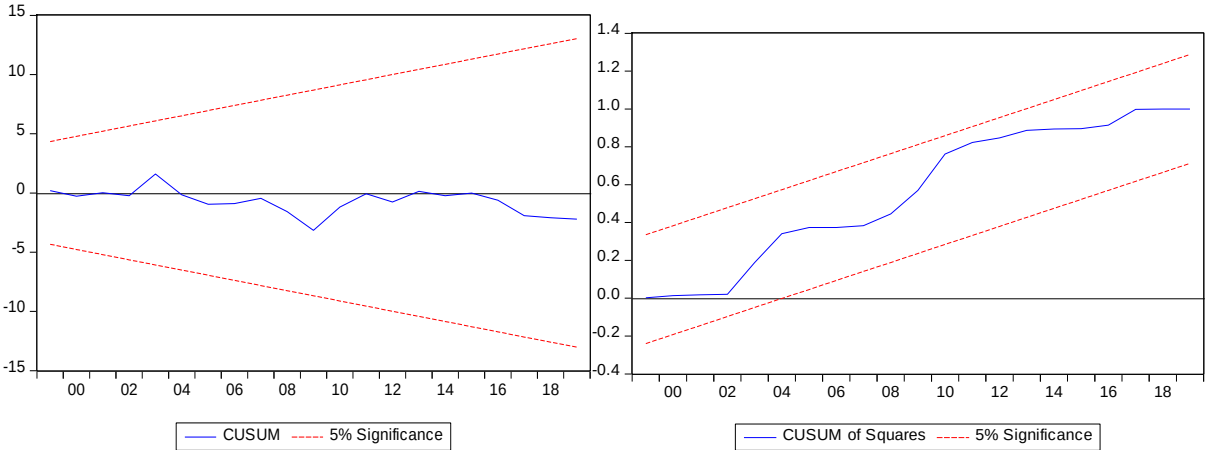


Figure 4: CUSUM and CUSUM Square Charts for Model 1
Source: *Author's* computation using *EViews 10*.

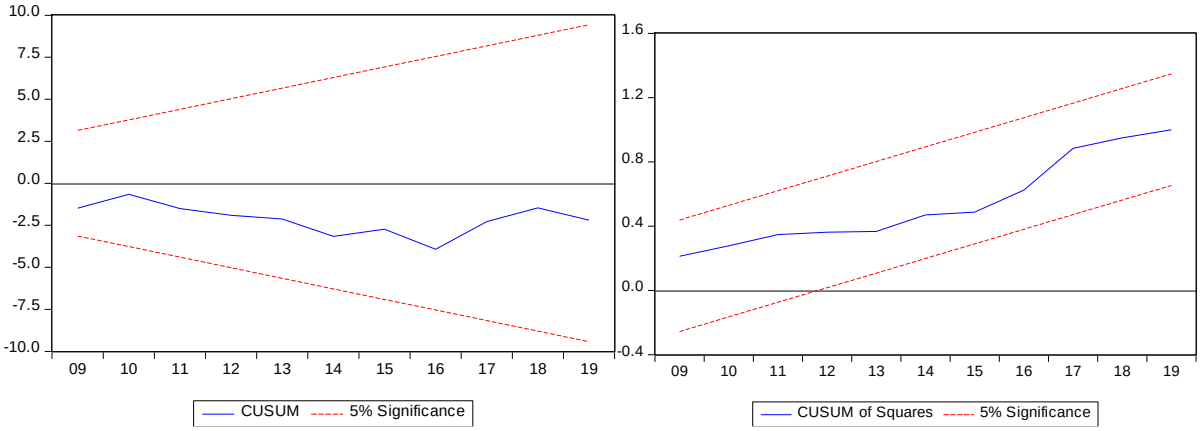


Figure 5: CUSUM and CUSUM Square Charts for Model 6
Source: *Author's* computation using *EViews 10*.

Major Findings and Discussion

Findings from both models considered as robust and suitable among all the estimated model show that Per Capita Income (PCI) is very relevant in the fight against poverty in Nigeria. PCI is reducing poverty at both the long-run and short-run estimations, only that the one-period lag of PCI did not reduce poverty. This finding aligns with economic reality in the country as the inflation rate consistently weaken purchasing power and the income accumulated or saved this year becomes less valuable in the following year due to the inflation. Nevertheless, Per Capita Income is important in tackling poverty at both the present time and over some time. More so, it should be noted that PCI could be increased when an inclusive and sustainable economic activity is taking place in an economy. Also, among the lending categorisation of the specialized banks in Nigeria, microcredit lending to Other (that is, uncategorised microcredit lending) has been effective in reducing poverty all through in models and even in the short-run. This loan component among others might be what is directly going to the target population, while others may not reach the indigent populace. Though in some instances, the effect is very minimal but it reduces poverty. This finding is in line with several studies which asserted that MFIs reduce poverty, studies such as Pimhidzai, *et al.*, (2019), Han, Wang, and Ma, (2019), Sulemana, Naiim, and Adjanyo, (2019). In addition to 'Other' (that is, the uncategorised microcredit lending of the specialized banks), two

of the other categories of microcredit lending categorization of the specialized banks, only reduce poverty in the short-run and not in the long-run. The two categories are Manufacturing and Food Processing, Transport and Commerce.

Poverty begat poverty, the indigent populace could see their paucity aggravated if no drastic action is taken. This further point to the need for microfinance as the institution is established to cater to those who might be vulnerable to fall into the poverty threshold. The two models used show that poverty promotes poverty. In the same vein, Deposit made by the clients aggravate poverty at both the present time and over some time as revealed in Model 6. This is made possible as most of the microfinance institutions take a compulsory deposit (at times, weekly or monthly) from the borrowers as a means of further collateral and to reduce possible loss cost. This arrangement may well aggravate the borrower plight, especially, those who borrowed for investment that takes months as the gestation period. This finding corroborates the work of Kaseva (2014) on the issue of compulsory deposit savings.

The microcredit lending of the specialized banks in Nigeria needs to be thoroughly accessed as some component of the lending could not be seen to reduce poverty. It is time to re-examine the peculiar issue with subsidized credit as identified by Ledgerwood (1999). The non-poverty reduction effect of some lending categories suggest possibly missed target in administering microcredit loan and/or fungibility of the lending. Perhaps, the indigent populace takes up the loan and not deployed it for a productive purpose, thereby, falling or continue in the poverty threshold. More so, the concern of this study is justified, MFIs are becoming more and more market-oriented, thereby, advancing resources to more productive areas to the detriment of the indigent populace. This aligns with the concern of Egboro (2015) when he has the regulatory financial institution to clarify the use of appellation Microfinance "Bank" because MBs are a quasi-financial institution and not like a commercial bank. Like Egboro (2015) concern then, MFIs are only limited by the share capital if not they will soon be venturing into other businesses like commercial banks. There is a need to recheck the microcredit lending business of the MFIs and ensure that the institution is still on the right course.

5. Conclusion and Recommendations

I investigate the specialized banks' credit provision in Nigeria and its implication on poverty reduction using annualized data from the Central Bank of Nigeria Statistical Bulletin and analysing the same with the Autoregressive Distributed Lagged Model (ARDL). Per Capita Income and Other (uncategorised microcredit) lending of the specialized banks are consistently relevant in reducing poverty at both the present time and over some time. Also, microcredit lending in Manufacturing and Food Processing and Transport and Commerce reduce poverty mainly in the present period. On the contrary, microcredit lending to Agriculture, Real Estate and Construction, and Mining and Quarry did not reduce poverty at the present period. Furthermore, the deposit did not reduce poverty, and poverty promotes poverty. The credit provisions by the specialized banks in Nigeria is not very effective in poverty reduction. I, hereby, recommend that inclusive and sustainable economic development should be encouraged by policies and actions. Auditing of microcredit lending especially government-guaranteed commercial credit should be encouraged to ensure that the targeted population are the ones receiving the loan facilities.

Acknowledgement
Special thanks to all individuals who have helped in one way or the other to see the improved version of this paper. Also, I appreciate Dr Duncan Elly Ochieng for making the presentation of this paper possible during the 2nd Annual Development Finance Conference (ADFC, 2020) at the University of Nairobi, Nairobi, Kenya. I sincerely appreciate the efforts put in by the anonymous reviewers who did their job without any form of prejudice. Your comments and suggestions have indeed improved the paper. Thank you all.

REFERENCES

Aryeetey, E. (2004*). Household Asset Choice among the Rural Poor: Paper presented at authors' workshop of the project on 'Understanding Poverty in Ghana*' organised by ISSER, University of Ghana, Legon, Accra.

Babarinde, G. F., Amdulmajeed, T., Gidigbi, M. O., and Ndaghu, J. T. (2019). Impact of Microfinance Banks ' Services on the Profitability of Small and Medium Enterprises : Evidence from Ilorin, Kwara State. *European Journal of Applied Business Management*, ***5***(3), 98–112.

Central Bank of Nigeria. (2005). *Micro Finance Policy, Regulatory and Supervisory Framework for Nigeria*. Abuja: CBN.

Central Bank of Nigeria. (2008). *Guidelines for the Operations of the Micro Credit Fund*. Abuja: Central Bank of Nigeria.

Central Bank of Nigeria. (2009). *Enterprises Development Fund for Nigeria* (pp. 1–24). pp. 1–24. Abuja: Central Bank of Nigeria.

Central Bank of Nigeria. (2012). *Central Bank of Nigeria Revised Regulatory and Supervisory Guidelines for Microfinance Banks (MFBs) In Nigeria*. Abuja: Central Bank of Nigeria.

Egboro, E. M. (2015). Creation of Microfinance Banks in Nigeria : What is Their Main Object ? *British Journal of Economics, Management & Trade*, ***7***(3), 158–174. https://doi.org/10.9734/BJEMT/2015/15107

El Hadidi, H. (2020). The Impact of Microfinance on Poverty Reduction in Egypt: An Empirical Study. *Arab Journal of Administration*, **40**(2), 303-310. Retrieved from https://doi.org/10.21608/aja.2020.88344

Garson, J., (2001). *Microfinance and Anti-Poverty Strategies. A Donor Perspective*, s.l.: UNCDF. Retrieved from http://www.undp.org/uncdf/pubs/mf/mf-chap1.htm#a

Gidigbi, M. O. and Akanegbu, B. N., (2013). Interpreting transformed variable coefficient (Unlogged coefficient/percentage) in a logged regression model. *Research Journal of Economics & Business Studies*, **2**(12), pp. 22-25. Retrieved from www.theinternationaljournal.org>RJEBS

Han, J., Wang, J. and Ma, X., (2019). Effects of Farmers' Participation in Inclusive Finance on their Vulnerability to Poverty: Evidence from Qinba Poverty-Stricken Area in China. *Emerging Markets Finance and Trade,* **55**(5), pp. 998-1013.

Herath, H. M. W. A., Guneratne, L. H. P. and Sanderatne, N., (2015). Impact of Microfinance on Women's Empowerment: A case Study on Two Microfinance Institutions in Sri Lanka. *Sri Lanka Journal of Social Sciences,* **38**(1), pp. 51-61.

Hirschman, A. O. (1958). Interregional and international Transmission of Economic Growth. The Strategy of Economic Development, Yale University Press, Yale.

Kaseva, J. M. (2014). Effect of Microfinance on Poverty Reduction in Tanzania : A Case Study of the African Microfinance Limited. *Tanzanian Economic Review,* **4**(2), pp. 91–100.

Khan, A. A. et al., (2020). Microfinance and poverty reduction: New evidence from Pakistan. *Int. J. Fin. Econ.,* June, Volume **2020**, pp. 1-11.

Kumah, A. and Boachie, W. K. (2016). An Investigation into the Impact of Microfinance in Poverty Reduction in Less Developed Countries (LDCs): A Case of Ghana. *American Scientific Research Journal for Engineering , Teaching and Sciences*, **26**(3), pp. 188–201. Available at: http://asrjetsjournal.org/.

Kumari, J. A. P. *et al.* (2019). The Effect Of Microfinance Services On Poverty Reduction: Analysis of Empirical Evidence In Sri Lankan Perspectives. *European Journal of Economic and Financial Research*, **3**, p. 109. doi: 10.5281/zenodo.3541412.

Ledgerwood, J., (1999). *Microfinance Handbook,* Washington D. C.: The World Bank.

Nwanyanwu, O. (2011). Micro Finance in Nigeria: Problems and Prospects. *African Research Review*, **5**(2), pp. 87–103. doi: 10.4314/afrrev.v5i2.67307.

Okoye, C. U. and Okpala, A. O. (2001). 'The history of community banking and its role in Nigerian rural economic development', *Review of Black Political Economy,* **28**(3), pp. 73–87. doi: 10.1007/bf02717271.

Palestine Monetary Authority (2016). *The role of Specialized Banks in the economy and the financial stability in light of international experiences and the possibilities of application and success in the Palestinian economy*.

Pesaran, M. H., Shin, Y. and Smith, R. J., (2001). Bounds testing approaches to the analysis of level relationships. *Journal of Applied Econometrics,* **16**(3), pp. 289 - 326.

Pimhidzai, O. *et al*., (2019). *Microfinance and Household Welfare,* s.l.: Combodia Policy Note.

Rahman, A., (1999). Micro-credit Initiatives for Equitable and Sustainable Development: Who Pays?. *World Development,* **27**(1), pp. 67 - 82.

Schultz, T. W. (1980). Noble Lecture: the Economics of Being Poor. *Journal of Political Economy*, **88**(4). Universisty of Chicago Press, Chicago.

Shiba, O. M. and Issa, K. M. (2015). The Role of Specialized Banks in Economic Development with Emphasis on the Agricultural Banks. *Beograd*, **10**, pp. 213–217.

Sulemana, M., Naiim, F. M. and Adjanyo, C. (2019). Role of microfinance in poverty reduction in the Ashaiman Municipality, Ghana. *African Research Review*, **13**(3), pp. 1–14. doi: 10.4314/afrrev.v13i3.1.