The Impact of Deposit Money Banks Credit to Small and Medium Scale Enterprises on the Economic Growth of Nigeria

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Abstract

SMEs has become a popular subject of discuss for developing economy globally, and the present study examined the influence of SMEs bank finance on economic growth of Nigeria. The specific objectives examined in this study were to; (i) to examine the effect of loan and advances to agriculture, forestry and fishing industry on economic growth; (ii) to identify comparison between loan and advances to general commerce industry with that of agricultural related industry. The study analyzed data collected from eleven indigenous deposit money banks in Nigeria from 2010 to 2019. Secondary sources of data were explored to achieve the stated objectives of the study. Fixed and random Effect regression analysis method were adopted for the analysis. The study found that loans and advances to SMEs in agricultural sector have significant positive effect on economic growth with (p-value 0.016, $P < 0.05$). The study also found positive insignificant impact of loan and advances to general commerce sector on GDP. The findings also revealed that inflation rate has significant negative relationship with economic growth. Therefore, we recommend that all stakeholders in Nigeria should ensure that affordable loans are made available to agricultural sector, and the rate of inflation need aggressive measure to reduce it to the barest minimum.

1. Introduction

Background to the Study

Attempts have been made by various national laws, international institutions and industry to define the concept of Small and Medium Enterprises (SMEs). It is important to note that there has been no consensus on the attributes of SMEs, but the size of economy of a country and the perspective of the defining organizations and authors have continued to shape what constitute this important segment of the world's economy. Hence, there is no universal definition of what constitute SME.

In Nigeria, SMEs are very prominent in economic activities within all sectors of the country's economy. Hence, the importance of and access to credit facilities by firms who are operating within

the SMEs sector in Nigeria cannot be overemphasized. The Federal government of Nigeria through the Central Bank of Nigeria and other agencies of government as well as international financial institutions which include Small and Medium enterprises Development Agency of Nigeria (SMEDAN), Small and Medium Industries Equity Investment Scheme (SMIEIS), Bank of Industry (BOI), National Economic Reconstruction Fund (NERFUND), Nigerian Industrial Development Bank (NIDB) and International Financial Assistance Bank (IFAB) as well as deposit money banks in Nigeria have been at the forefront of advancing credit facilities to SMEs in the country. It is worth to note that, when the credit facilities from the government and its agencies is being advanced to SMEs at little or in some cases no costs, that of deposit money banks have always come at higher interest rates depending majorly on the risk involved.

Statement of the Problem

In Nigeria, Small and Medium Enterprises (SMEs) sector has over the years been a major component of the country's economy contributing fairly to the Gross Domestic Product (GDP) of the country since it gained independence in 1960. The country known for its over-reliance on revenue from crude oil export has also relied on importation for every aspect of consumption for its over 200 million population in the last four decades. It got to a stage when the country was importing toothpicks, matches, candles and every little item that were being produced by local cottage industries, this eventually resulted to majority of the local cottage industries in the country being closed down while unemployment hit the roof.

Having realized the importance of this sector to the economic growth in Nigeria, the government and all policy makers in the country has initiated different policies to revamp SMEs sector in Nigeria with the aim of rejuvenating the ailing economy of Nigeria. These acts are also directed towards curbing the rising rate of unemployment in the country.

To complement the efforts of the government and other policy makers, various scholars in Nigeria have conducted series of studies to make policy recommendations for the government and other policy makers. Surprisingly, these studies despite being conducted within the same jurisdiction have resulted to varying findings and this has created gap for further studies to resolve the differences. While studies such as Ayuba and Zubairu (2015); Iloh and Chioke (2015); Johnny and Ayawei (2018) found significant positive effect of commercial banks' credit to SMEs on economic growth in Nigeria measured as gross domestic product (GDP), others which include Sogules and Nkoro (2016); Owolabi and Nasiru (2017) argued that deposit money banks' credit facilities to SMEs exerted negative impact on economic growth in Nigeria.

As a result, based on the non-uniformity of findings from the previous studies, this study finds relevance in probing further in order to form an opinion and make necessary recommendations.

Research Questions

To fully appreciate and understand the importance of this study, the findings of this current study must be able to address certain pertinent questions which are culminated from the research objectives and research hypotheses. As a result of this, the following research questions are expected to be answered with the expected findings of this study:

(i) To what extent do loan and advances to agriculture, forestry and fishing industries affect economic growth in Nigeria?

(ii) Is there exist any comparison between loan and advances to general commerce industry and that of agricultural related industry in Nigeria?

Objectives of the Study

The objective of this study is to examine the influence of banks' credit to Small and Medium Enterprises (SMEs) on economic growth in Nigeria. This overall objective is further narrowed down to the following specific objectives:

(iii) To examine the effect of loan and advances to agriculture, forestry and fishing industry on economic growth.

(iv) To identify comparison between loan and advances to general commerce industry with that of agricultural related industry

Research Hypotheses

To form an opinion on the influence of banks' credit to SMEs on economic growth in Nigeria and with the utmost objective of making necessary recommendations, the data collected for the purpose of this study will be tested for the following hypotheses:

H_{01}: Loan and advances to agriculture, forestry and fishing industries does not have effect on economic growth

H_{02}: There is no comparison between loan and advances to general commerce industry and agricultural related industry

2. Literature Review

Theoretical Literature Review

The Theory of Entrepreneurship

This theory according to Mishra and Zachary (2014a) otherwise known as the entrepreneurial value creation theory, explains the entrepreneurial experience in its fullest form, from the entrepreneurial intention and the discovery of an entrepreneurial opportunity, to the development of the entrepreneurial competence, value creation and the appropriation of the entrepreneurial reward in an uncertain environment. The theory defines the driving attributes which characterizes

an entrepreneur as not only an inventor of business ideas but also someone who is capable of transforming ideas into a stream of income generating venture.

Entrepreneurship is not just an act but a multi-stage process which involves strategic decision making at every point in time. Some of these decisions are mostly influenced by factors which are external and beyond the individual control of an entrepreneur who is incubating the idea. The theory of entrepreneurship provides in sufficient detail the interiors of the entrepreneurial process using a two-stage value creation framework. In the first stage of venture formulation, the entrepreneur driven by a desire for entrepreneurial reward leverages the entrepreneurial resources at hand to identify an external opportunity and effectuate the entrepreneurial competence that is sufficient to move to the second stage. In the second stage, which involves venture monetization, the entrepreneur may acquire external resources such as venture capital or strategic alliance to effect growth (Mishra and Zachary, 2015b)

For an entrepreneur's idea to metamorphosize into a sustainable business venture and achieve the potential level of growth, financing is very crucial to achieve these objectives. While an entrepreneur may have the capability to provide the needed managerial skills to drive the business ideas, the needed funds may be lacking which then requires external influences.

Entrepreneurship Discovery Theory

This theory scientifically explains the processes involved and how entrepreneur discovers new business opportunities which may be accidental and or through a well-organized quest for new opportunities. It theorizes the risk-taking ability of entrepreneurs which gives them competitive advantage over their peers.

Murphy (2011) argued that entrepreneurship discovery theory involves both deliberate search and serendipitous discovery, while he posits that deliberate search reflects the degree to which purposeful activity, research, and inquest lead to the discovery of an opportunity, he further explains the serendipity discovery reflects the degree to which the opportunity's discovery is unanticipated and surprising. The study also found that the co-variation between the two dimensions yields four quadrants, which are eureka (accidental and unanticipated), deliberate search (but without much anticipation), legacy (derived from the efforts of others), and serendipitous discovery (based on prior knowledge)

According to Jaime *et al*. (2015), entrepreneurship discovery involves two processes, the first being the set of mechanisms by which the entrepreneur identifies the possibility of combining knowledge and economic activities in the framework of existing market opportunities and develops the idea. On the contrary, the second involves the concretion of the idea in a product or service through a business model, and commercialized by a new company.

Empirical Literature Review

Influence of Bank finance to Small and Medium Enterprises (SMEs) on Economic Growth

Ayuba and Zubairu (2015) argued that banking sector credit facilities has significant positive impact on development of SMEs in Nigeria using annual data from 1985 to 2010. The study reveals that banks' credit to SMEs has positive impact on the growth of micro-economic variables of the country such as; inflation, exchange rates and trade debts. Similarly, Ofeimun *et al.* (2018) in their study on the effects of microfinance credit to SMEs on the economic growth in Nigeria, using annual reports from 1990 to 2015 concludes that credit loan to SMEs have a significant positive relationship with small business growth in Nigeria. They further argued that micro financing of small businesses by micro finance banks have significant impact on Nigeria's economic growth and development measured as GDP.

In a study conducted by Iloh and Chioke (2015) on commercial bank credit availability to SMEs in Nigeria from 1980 to 2010, they argued that commercial banks' credit to SMEs have significant effect on Nigeria economic growth by positively affecting the GDP. The implication of this finding is that SMEs financing by banks is a great catalyst and a driving force for economic growth in Nigeria. This is consistent with the findings of Afolabi *et al*. (2016) who analyzed data from 1981 to 2012 and found that a significant and positive relationship exists between Bank credit to SMEs, and the economic growth of Nigeria, proxied by the growth of GDP. They further argued that the growth in money supply has a negative effect on economic growth. The growth in money supply leads to increase in inflation rate in the country; consequently, they concluded that inflation rate negatively affects the economic growth of Nigeria.

Imoughele and Ismaila (2014) evaluates the impact of Commercial bank credit on the growth of SMEs in Nigeria from 1986 to 2012, the study found that commercial bank credit to SMEs and total government expenditure have direct but insignificant effect on the country's SMEs output and economic growth. They further argued that interest rate has adverse effect on SMEs output. Similarly, Imafidon and Itoya (2014) investigated the contribution of commercial banks' credit to SMEs on the economic growth of Nigeria. They argued that credit financing by commercial banks to SMEs in Nigeria from 1993 to 2012 have insignificant effect on the economic growth measured as GDP. They concluded that the reason for this was predicated on the fact that, SMEs operators do not have access to credit which is the major catalyst for SMEs in Nigeria as a result of reluctance of traditional financial institutions to meet their credit needs.

According to Nwosa and Oseni (2013) who examines the impact of banks finance to SMEs on manufacturing output in Nigeria from 1992 to 2010. They found that banks' loans to SMEs had insignificant impact on manufacturing output of the country both in the long and short run.

Commercial bank loans to SMEs from 1998 to 2017 had a negative and insignificant impact on economic growth of Nigeria measured as GDP (Olaoye *et al.,* 2018). They further argued that inflation rate exerts an insignificant positive effect on the country's economic growth measured as GDP.

Johnny and Ayawei (2018) concluded that, there is positive significant relationship between commercial banks' credit to SMEs and fixed capital formation which is proxy for economic growth, while there exists a significant negative relationship between interest rate on bank credit and economic growth. The results also found an insignificant negative relationship between inflation rate and fixed capital formation (economic growth) in Nigeria during the period under review. Similarly, Ezeaku *et al.* (2017) investigated SMEs financing and its effect on manufacturing sector growth in Nigeria. The findings of their study revealed that, banks' loans to SMEs exerted significant positive impact on economic growth in Nigeria from 1981 to 2014. The results also indicated that bank interest rate and inflation rate on SMEs credit impacted economic growth negatively.

Commercial banks' credit to SMEs has a negative and highly statistically significant effect on economic growth in Nigeria from 1992 to 2015 (Owolabi and Nasiru, 2017). They also found an insignificant but negative relationship between banks' credit to SME and unemployment and a statistically significant negative effect of banks' credit to SMEs on poverty. The study further analyzed the likely factors responsible for the negative relationship between banks' credit to SMEs and economic growth to be high operating costs for SMEs as well as poor risks managerial skills among the SMEs operators. While expressing a contrary opinion through their findings, Nwoko *et al.* (2019) argued that there exists a statistically significant positive relationship between banks' credit to SMEs and economic growth in Nigeria. The study recommends that government should introduce and implement such policies which will enhance Small and Medium Enterprises (SMEs) access to credit from banks and other financial institutions in Nigeria.

Effect of Loans and Advances to Agriculture, Forestry and Fishing industries on Economic Growth

Bada (2017) posited that banks' credits have significant positive impact on agricultural and manufacturing sectors in Nigeria. The study concludes that the significant positive effect of commercial banks' credits on agricultural sector is necessary to boost the ailing GDP in Nigeria thereby reducing unemployment. This is consistent with the findings of Ojiegbe and Duruechi (2015) where they argued that agricultural loans have significant positive impact on food production, hence, an increase in GDP.

Akujuobi and Chima (2012) examined the effect of Bank credit to the production sector on economic growth in Nigeria from 1960 to 2008. The study found that a long-run relationship exists between Bank credit to the production sector (agriculture, forestry and fishery, manufacturing, mining and quarrying) and economic growth. Also, the finding revealed that, there was high evidence of bi-directional causal relationship between two of the explanatory variables and the GDP with only the commercial Banks' credit to the mining and quarrying sub-sector appearing to be a significant contributor at 1% significant level. Hence, the study concludes that, commercial Banks' lending to the production sector has not performed well in relation to contribution to economic growth.

Sogules and Nkoro (2016) examined the impact of bank loans to agricultural and manufacturing sectors on the economic growth in Nigeria from 1970 to 2013. The study found that bank loans to agricultural and manufacturing sector have insignificant negative effect on the economic growth in Nigeria measured as GDP. They recommended that loans and credits to agricultural and manufacturing sectors should be properly monitored by the lending banks to ensure that such funds are not diverted for other purposes.

According to Oyelade (2019) in a study where he evaluated the impact of commercial bank credit on agricultural output in Nigeria found a positive significant relationship between commercial bank credit and; output of crop production, livestock production, forestry and fishing in Nigeria. While the findings of the study also exerted significant negative relationships between interest rates on bank credit and; output of crop production, livestock production, forestry and fishing in Nigeria.

Agunuwa *et al*. (2015) examined the impact of banks' credit on agricultural productivity in Nigeria from 1980 to 2013, they argued that a significant negative relationship exists between interest rate on commercial banks' credit and agricultural output in Nigeria. The study recommends that the government through Agricultural Credit Guarantee Scheme (ACGS) should improve on the conditions of credit guarantee to make agricultural financing more attractive with low interest rates by commercial banks. This is consistent with the findings of Emenuga (2019) who evaluated the effect of commercial banks' credit on agricultural productivity in Nigeria from 1981 to 2017. They posited that commercial banks' credit to agricultural sector and Agricultural Credit Guarantee Scheme are significantly and positively related to agricultural output measured as Agricultural Gross Domestic Product (AGDP) which is the proxy for economic growth in Nigeria as per the study.

According to Ajayi *et al.* (2017) who examined the impact of agricultural financing policy and deposit money bank loan on agricultural sector productivity in Nigeria from 1981 to 2015, the study employed time series linear regression for data analysis. They found that bank loan and agricultural financing policy exerted significant positive effect on agricultural productivity in Nigeria during the period. The results of the study also revealed that lending rate exerts significant negative effect on agricultural output.

Ayodele (2019) in a study on impact of agricultural financing on Nigeria economy found that, negative relationship exists between credit size and economy growth measured as GDP. The study also argued that agricultural output also has negative impact on gross domestic product of Nigeria. This is consistent with the findings of Obilor (2013) in a study on impact of commercial banks' credit to Agriculture sector and its effect on the economic development of Nigeria from 1984 to 2007. They argued that commercial banks' credit and agricultural product prices are negatively related to Nigeria's GDP. This is contrary to the findings of Egwu (2016) who investigated the impact of agricultural financing on agricultural output and economic growth as well as poverty alleviation in Nigeria. The study employed Ordinary Least Squares regression technique for the

purpose of analysis, the results of the analysis revealed that commercial bank credit to Agricultural sector and the government's Agricultural Credit Guarantee Scheme Fund loans to the sector have positive linear relationship with agricultural sector output percentage to the nation's GDP. The study further argued that the growth in GDP as result of contribution from agricultural sector output leads to poverty alleviation in Nigeria.

According to Belongia and Gilbert (1990) in a study carried out on the effects of Federal credit programs on farm output, they argued that neither credit from commercial banks nor Federal Land Banks has any significant effect on agricultural output and consequently has no effect on GDP. Contrarily, Iqbal *et al.* (2003) conducted a study on the impact of institutional credit on agricultural production in Pakistan from 1971 to 2002, the results of their studies show that institutional credit significantly and positively affect agricultural GDP which was proxy for economic growth during the period under review.

Seven and Tumen (2020) examined the impact of agricultural credit on agricultural productivity which is proxy for economic growth between developing and developed countries. The study employed Ordinary Least Squares, Fixed Effect panel and Generalized Method of Momentum to analyze the data and found that; developing countries with low levels of credit intervention in the agricultural sector can experience higher growth rates in agricultural productivity by implementing aggressive agricultural credit expansion. They also argued that agricultural credit significantly and positively affects the agricultural component of GDP in the developing countries, whereas such was not observed for the relationship between agricultural credits and GDP in developed countries. The study concludes that the nature of the relationship between agricultural credits and economic growth changes along the development path.

Eburajolo and Aisien (2019) in a study on impact of banks' credit to the real sector on economic growth in Nigeria with time series data from 1981 to 2015. The study employed co-integration and error correction mechanism for the purpose of analysis and based on the findings of the analysis they argued that, commercial banks' credit to agricultural and manufacturing subsectors exerted statistically significant positive relationship with economic growth in Nigeria measured as gross domestic product. The study concludes with a recommendation to the Central Bank of Nigeria to formulate policies that will encourage commercial banks allowing more and affordable credit facilities to agriculture and manufacturing subsectors.

Ayeomoni and Aladejana (2016) investigated the effect of agricultural credit by banks on economic growth in Nigeria from 1986 to 2014. The study employed Autoregressive Distributed Lag (ARDL) to analyze the data collected and the results of the analysis revealed that short run and long rung significant positive relationship existed between agricultural credit and economic growth. The study also found that real exchange rate and private domestic investments have direct relationship with GDP while inflation rate in Nigeria exhibited inverse relationship with economic growth.

Effect of loan and advances to General Commerce Industry on Economic Growth

In Nigeria, general commerce industry is another important sector of Small and Medium Enterprises (SMEs) which has continued to contribute significantly to growth in economic development of the country. This important industry includes small shop owners who engage in wide range of trading activities and service providers on small and medium scales. Akujuobi and Nwezeaku (2015) in a study on bank lending activities and economic development in Nigeria from 1980 to 2013, the study employed Ordinary Least Squares, Stationary test and Co-integration test for the purpose of analysis. They argued based on the findings of the analysis that, bank lending to general commerce and production sectors is positively and statistically significant on the economic growth of the country. The study concludes that there is need for the Central Bank of Nigeria to intensify its supervisory roles on commercial banks to stem the prevalence of insider dealings and poor credit administration which has being the major obstacle for efficient financing of general commerce industry. This is consistent with the findings of Onuorah and Ozurumba (2013) examined the impact of bank credit on economic growth in Nigeria from 1980 to 2011. The study employed Time Series, Diagnostic test, Unit root test, Co-integration Var model and Causality test for the purpose of the analysis. The study found a positive and statistically significant relationship between commercial bank credits to general commerce and economic growth measured as gross domestic product. The study recommends a total overhaul and effective supervision of banks' credit to encourage small and medium enterprise investors in Nigeria.

According to Akpansung and Babalola (2012), the findings of their studies revealed that commercial banks' credit have a positive impact on private sector which is proxy for general commerce and consequently caused growth in economy measured as gross domestic product in Nigeria from 1970 to 2008. They further argued that the interest rates on bank lending to general commerce negatively and significantly affect economic growth. The study recommends an improved financial market development that guarantees adequate credit to general commerce at minimal interest rate. Contrarily, Fapetu and Obalade (2015) examines the sectoral allocation of banks' credit on economic growth in Nigeria from 1960 to 1985 and found that, commercial banks' credit to general commerce industry exerted significant negative impact on the economic growth of the country during the period under review. The study suggests that Nigerian deposit money banks should be more disposed to granting more credits to production subsectors which include agriculture, real estate and manufacturing while government is advised to create an enabling environment for general commerce and service sectors.

Agbanike *et al.* (2018) in their study on analysis of bank lending and economic growth in Nigeria, argued that commercial bank lending to general commerce, agriculture and construction industries have positive and significant impact on economic growth in Nigeria from 1981 to 2014. The study further revealed that bank credit to agriculture with the highest potential to stimulate economic growth was only about 3% of the total commercial banks' credit during the period under review. These findings are consistent with Ogege and Boloupremo (2013) where they evaluated the impact of deposit money banks credit on economic growth and development in Nigeria from 1973 to

2003. The study employed Time Series regression analysis and found that, bank credit to agriculture, real estate, forestry and fishing subsectors is positively and significantly influencing economic growth. Whereas, commercial banks' credit to general commerce and service industries exerted significant negative effect on the economic growth of Nigeria during the period. The study suggests that banks' credit should be channeled to more productive industry such as agriculture to stimulate the economic growth of the country.

3. Research Methodology

Research Design

The study employed panel and correlational research design to determine the relationship between influence of SME bank finance and economic growth in Nigeria. The study used both descriptive and inferential analysis techniques for analyzing the data collected.

Sources of Data

Data for this study were from secondary sources, and they were collected from published financial statements of the selected banks, central bank of Nigeria website, and World Bank fact sheet.

Study Population and Sample Size Determination

The study population of the study was 22 deposit money banks in Nigeria, while the sample size comprised of 11 out of the 22 Commercial banks in Nigeria banking industry. The 11 banks were carefully selected based on criteria such as: (i) indigenous banks owned by Nigerians (ii) public quoted banks; and (iii) data available for the period.

Estimation Techniques

This study used fixed and random regression techniques to examine the influence of SMEs bank finance on Nigeria economic growth by collecting SMEs banks finance data for eleven deposit money banks for a period of 10 years. Data was analyzed using descriptive and inferential statistics to examine the relationship between Banks' credit to Agricultural Industry, General Commerce Industry, Health Sector, and GDP.

Econometric Model

The study adapted the model of Agbanike *et al.* (2018) which measured economic growth with GDP as a function of bank lending. This is specified as:

$$gr_t^A = a_0 + a_1 BNK_t^A + a_2 INTR_t + a_3 EXRATE_t + a_4 HCAP_t + \varepsilon_t$$

Where:

gr = Real Gross Domestic Product, BNK = Bank Lending to Agriculture, $INTR$ = Interest Rate,

$EXRATE$ = Exchange Rate, $HCAP$ = Human Capital, and ε = Error Term.

a_0 = constant parameter/constant term, $a_1 - a_4$ = coefficient of independent variables.

The model was modified for this current study by employing Agriculture loan, general commerce loan health sector loan as independent variables, and interest rate, total loan as control variables, while economic development was measured with real gross domestic product.

Model:

$$GDP_{it} = \beta_1 InLAGRI_{it} + \beta_2 LGCI_{it} + \beta_3 LHHI_{it} + \beta_4 INTR_{it} + \beta_5 TL_{it} + \beta_6 INFLR_{it} + \varepsilon_{it}$$

Where:

GDP: Real Gross Domestic Product, $LAGRI$: Loan to Agricultural Industry, $LGCI$: Loan to General Commerce Industry, $LHHI$: Loan to Private Health Sector, $INTR$ = Interest Rate,

TL : Total Loan to customers, $INFLR$ =Inflation Rate

The contribution of each independent variable to the variation in the dependent variable was evaluated from the regression coefficients β_1 - β_6 and ε is the error term.

Table 3.1 Variables measurement units & apriori expectations

Type of variable	Variable	Indicator	Measurement	Apriori Expectation
Independent variable	Loan to Agricultural Industry	*LAGRI*	Total loan granted to Agricultural sector by banks	Positive
	Loan to General Commerce Industry	*LGCI*	Total loan granted to general commerce industry	**Positive**
	Loan to human health and social work activities industry	*LHHI*	Total loan granted to private health industry	Positive
	Total Loan	*TL*	Total loan granted to customers	Positive
	Interest rate	*INTR*	Bank interest rate	Negative
	Inflation rate	*INFLR*	Inflation rate	Negative
Dependent Variable	Gross Domestic Product	*GDP*	Real Gross Domestic Product	

Source: Authors' computation, 2021

4. Data Analysis and Result Interpretation

Data Analysis
Descriptive Statistic Summary

The dependent variables used was gross domestic product to measure economic growth, while explanatory variables were, inflation rate, loan agricultural industry, loan to general commerce industry, total loan granted to private sector, Interest rate and loan granted to private health industry. Table 4.1 reports the mean, maximum, minimum, standard deviation and number of observations for each variable used in this study.

Table 4.1: Summary Statistics of Variables

Variable	Obs	Mean	Std. Dev.	Min	Max
		'000	'000	'000	'000
GDP $	110	444,000,000.00	63,000,000.00	363,000,000.00	568,000,000.00
Agric =N=	110	29,800,000.00	34,200,000.00	0.00	252,000,000.00
GenCom =N=	110	67,700,000.00	73,900,000.00	0.00	405,000,000.00
PriHealthSec =N=	110	228,455.60	1,151,371.00	0.00	9,678,994.00
TLoan =N=	110	983,000,000.00	886,000,000.00	9,467,163.00	3,690,000,000.00
IntR %	110	16.72	0.62	15.37	17.58
InfRate %	110	11.79	2.76	8.00	16.50

GDP: real Gross domestic product; LAGRI: Loan to Agricultural Industry; LGCI: Loan to General commerce industry; LHHI: Loan to private human health sector; INTR: interest rate; TL: Total Loan.; INFLR: Inflation Rate

Table 4.1 shows the summary statistic of the variables of the models. These variables include gross domestic product, loan to agricultural industry, interest rate, inflation rate, loan to private health industry, loan to general commerce, and total loan granted by banks.

Loan to agricultural sector averaged 29.8 billion naira with standard deviation of about 34.20 billion naira, while the banks with the lowest loan to agricultural sector during the period had zero naira and the bank with the highest loan to agricultural sector during the period has 252.0 billion naira.

The result presented in Table 4.1 also shows that on the average, the country's inflation rate was about 11.79 percent, with standard deviation of about 2.76 percent, the minimum inflation rate was 8 percent, while the maximum inflation rate was 16.50 percent. The average loan to private health sector was 228.45 million naira during the period of study, with standard deviation of 1.15 billion naira, and the minimum loan to private health sector was zero naira, while the bank with maximum

loan to private health sector was 9.67 billion naira during this period. Loan to general commerce averaged 67.7 billion naira with standard deviation of about 73.9 billion naira, while the firm with the lowest loan to general commerce during the period was zero naira and the bank with the highest loan to general commerce during the period reported 405 billion naira.

As to the country's economic growth statistics, the country's GDP average during the study period was about 444 billion dollars with average spread of 63 billion dollars. The lowest GDP was 363 billion dollars during the period under review, while the Nigeria highest GDP during this period was about 568 billion naira.

As regard to the total loan granted by the sampled banks to customers have average of about 983 billion Naira, having a sample spread of about 886 billion Naira, while the sampled banks have as low as 9.4 billion Naira as total loan, a bank has as high as 9.6 trillion Naira as total loan granted to customers. Banks interest rate was averaged about 16.72 percent with standard deviation of about 0.62 and bank with the lowest interest rate during the period under study was 15.37 percent, while the highest interest rate was about 17.58 percent for the period under review.

Correlation Analysis

Correlation analysis was carried out to examine multicollinearity effect among explanatory variables.

Table 4.2 Correlation analysis among independent variables

	GDP	IntR	TLoan	PriHealthSec	GenCom	Agric	InfRate
GDP	1.000						
IntR	-0.349	1.000					
TLoan	-0.022	-0.107	1.000				
PriHealthSec	-0.107	-0.023	-0.067	1.000			
GenCom	-0.024	-0.100	0.620	-0.013	1.000		
Agric	0.098	-0.162	0.391	-0.088	0.322	1.000	
InfRate	-0.843	0.454	0.105	-0.002	0.048	-0.010	1.000

GDP: real Gross domestic product per capital; LAGRI: Loan to Agricultural Industry; LGCI: Loan to General commerce industry; LHHI: Loan to private human health sector; INTR = interest rate; TL: Total Loan.; INFLR=Inflation Rate

In line with correlation results in table 4.2 it shows that none of the control variables have multicollinearity issue, the highest correlation results among the explanatory variables was 0.62 lower than 0.8 threshold for multicollinearity. The correlation results showed that no evidence of multicollinearity using the variables in the models.

Inferential Analysis

To establish the influence of SME bank finance on economic growth in Nigeria, a panel fixed and random effects models were conducted. The results of the models are presented in tables 4.3

Results of SME bank finance on economic growth using GDP

The fixed and random effects model results presented in Table 4.4 showed the effect small medium scale enterprise finance on economic growth in Nigeria, the study comprises of 11 listed deposit money banks SMEs finance, examined over a period of nine years. This implies that models that consider heterogeneous panel like the fixed and random effects are also required in this case. Hausman test was also presented in Table 4.3 to make appropriate choice between the fixed and random effects models. The Hausman test shows a Chi-squared value of 6.35 and p-value of 0.386 indicating that the statistic is not significant. This indicates that the null hypothesis that the difference in both models is not systematic is not rejected, which implies that the random effects model is more applicable in this case.

Table 4.3 Hausman test

	b	B	(b-B)	sqrt(diag(V_b-v_B))	p-value
	fe	re	Difference	S.E.	
lnTloan	-0.145	-0.03	-0.115	0.076	
lngencom	-0.024	0.024	-0.048	0.017	
lnprivhealth	-0.606	0.001	-0.616	0.024	0.385
lnagric	0.191	0.055	0.135	0.054	
lntR	-0.031	-0.008	-0.233	0.008	
InfRate	-0.386	-0.0484	0.009	0.007	

GDP: real Gross domestic product per capital; LAGRI: Loan to Agricultural Industry; LGCI: Loan to General commerce industry; LHHI: Loan to private human health sector; INTR = interest rate; TL: Total Loan.; INFLR=Inflation Rate

The results of random effects model exhibit no first-order autocorrelation. This is evident from the Wooldridge test of first-order autocorrelation which shows a value of 4.087 and p-value of 0.292 indicating it is statistically not significant. Its insignificance implies rejection of alternate hypothesis and acceptance of null hypothesis of no first-order autocorrelation; hence, there is no autocorrelation in the model.

The random effects model shows that inflation rate has statistically significant negative impact on gross domestic products, while loan to agricultural sector has statistically significant positive effect on gross domestic products and loan to general commerce have statistical insignificant positive impact on gross domestic products. Total loan granted by banks to customers has insignificant negative relationship with gross domestic products and loan to private health sector has

insignificant negative relationship with gross domestic products. Interest rate also have non-significant negative relationship with gross domestic products

Inflation rate is statistically significant at 0.01 level of significance with p-value of 0.000. This implies that the country inflation rate is an important determinant of gross domestic product. Similarly, loan to agricultural sector is statistically significant at 0.05 level of significance with p-value of 0.016, which also implies that loan to agricultural sector is a major determinant of the country economic growth measured by gross domestic products. On the other hand, the bank total loan to customers, loan to general commerce sector, loan to private health care sector and interest rate have non-significant relationship with economic growth measured by gross domestic products.

In this model, inflation rate, interest rate, loan to private health care sector and total loan to customers by the banks have negative coefficients, indicating that they have negative impact on economic growth measured by gross domestic products, while loan to agricultural sector and loan to general commerce sector have positive effect on economic growth measured by gross domestic products.

One percent increase in total loan will leads to decrease in gross domestic product by about 0.03 percent, and vice versa, while a percentage increase in inflation rate will leads to a decrease in gross domestic product by about 0.039 percent point, and vice versa. Also, a percentage increase in interest rate will leads to a decrease in the country gross domestic product by about 0.031 percent, point and vice versa; a percentage increase in loan to agricultural sector will lead to an increase in gross domestic product by about 0.19 percent, and vice versa. Similarly, a percentage increase in loan to private health sector will leads to a percentage decrease in gross domestic products, as a percentage increase in loan to general commerce sector will increase the country gross domestic product by 0.024 percent

The Wald Chi-squared statistic presented for the random effects model shows a value of 68.10 and p-value of 0.000 which indicates statistical significance of the model. This implies that the overall model is statistically significant at 1 percent level of significance. R-squared shows a value of 0.865, indicating that 86.5 percent of variation in the gross domestic product is determined by the independent variables used in the equation as explained in the model.

This suggests that, to achieve good economic growth, there is need to increase the loan granted to agricultural sector of the economy to increase the country gross domestic product, and to achieve better economic growth Nigeria need to reduce inflation rate in other to increase the nation gross domestic products. Similarly, the result suggests that loan to agricultural sector and inflation are critical to economic development of Nigeria, therefore government policy makers must watch these closes and influences them appropriately. Finally, based on the result above, it is evident that Nigeria needs to influence deposit money banks loan to SMEs in agricultural sector to boost economic growth and development. On the other hand, there is need to reduce inflation rate in the country in other to increase Nigeria's gross domestic product.

Table 4.4: Regression Results of effect of SME bank finance on economic growth.

VARIABLES	-1 Fixed Effects			-2 Random Effects		
	Coefficient	Std. Err.	P-value	Coefficient	Std. Err.	P-value
InTloan	-0.146	0.082	0.120	-0.030	0.030	0.318
Ingencon	-0.024	0.041	0.574	0.024	0.037	0.511
Inprivhealt	-0.061	0.032	0.099	0.001	0.020	0.959
Inagric	0.191	0.059	0.015	0.056**	0.023	0.016
IntR	-0.031	0.033	0.375	-0.008	0.032	0.802
InfRate	-0.039	0.009	0.004	-0.048***	0.009	0.000
_cons	21.783	1.454	0.000	19.807	0.750	0.000
R-Sq.	0.865					
No. of Panelid	11			11		
F/Wald Chi2	12.36***		0.002	68.10***		0.000
F-test of Homogeneity	2.05		0.195			
Hausman Test	6.35		0.386			
Wooldridge AR Test	4.087		0.292			

*** $p<0.01$, ** $p<0.05$, * $p<0.1$. Dependent variable is GDP. The estimated model is as follows:

$$GDP_{it} = \beta_1 InLAGRI_{it} + \beta_2 LGCI_{it} + \beta_3 LHHI_{it} + \beta_4 INTR_{it} + \beta_5 TL_{it} + \beta_6 INFLR_{it} + \varepsilon_{it}$$

Discussion of Findings, Conclusion Recommendations, limitations, Implications, and Suggestion for Future Study

Summary and Discussion of Findings

The study concluded that loans and advances to SMEs in agricultural sector have significant positive effect on economic growth with (p-value 0.016, $P < 0.05$), It also showed that an increase in loan and advances to agricultural sector will increase economic growth of Nigeria. Similarly, inflation rate has significant negative impact on economic growth with (p-value 0.000, $P<0.01$), hence the country needs to work on reducing the inflation rate to boost Nigeria economic growth. Other factors including, loan to health sector, total loan and interest rate have insignificant negative impact on economic growth of Nigeria.

The study also found positive insignificant impact of loan and advances to general commerce sector on the economic growth of Nigeria.

The Effect of Loan and Advances to Agricultural Sector on Economic Growth

Based on the regression in table 4.4 the results showed that loan to agricultural sector have positive significant relationship with economic growth of Nigeria. This suggest that there is direct relationship between SMEs bank finance measured by loan to agricultural sector and economic growth measured with gross domestic product in Nigeria. Therefore, increase in bank loan and advances to agricultural sector will increase Nigeria gross domestic product, the reason for this is that, Agricultural sector is almost the only sector in Nigeria that produces goods and that promotes exportation aside from oil sector, which means there is every signal that Nigeria needs to take agricultural finance seriously to boost economic growth. This finding agrees with the study of Seven and Tumen (2020); Oyelade (2019); Emenuga (2019); Eburajolo and Aisien (2019) Bada (2017); Ajayi *et al.,* (2017); with Ogege and Boloupremo (2013); Iqbal *et al.,* (2003) as they all asserted positive significant impact of agriculture on economic growth. This finding is contrary to the study of Belongia and Gilbert (1990); Obilor (2013); Sogules and Nkoro (2016) who asserted insignificant negative effect of bank loans to agricultural sector on economic growth; Agunuwa *et al.,* (2015) revealed that a significant negative relationship exists between interest rate on commercial banks' credit and agricultural output in Nigeria.

The Effect of Loan and Advances to General Commerce Sector on Economic Growth

In line with the regression result in this study, loans and advances to general commerce sector has insignificant positive effect on economic growth when economic growth is measured as GDP. The result implies that loan and advances to general commerce has positive relationship with economic development of Nigeria. The insignificant effect may be true reflection of less commitment of Nigerian banks to granting credit facilities to SMEs in general commerce, and even when they do, such loans are usually channelled towards importation of foreign products that do not promote local production in the country, little wonder why Nigeria is characterized as import dependent nation. This finding agrees with the study of Akujuobi and Nwezeaku (2015); Onuorah and Ozurumba (2013) examined the impact of bank credit on economic growth in Nigeria, the study found a positive and statistically insignificant relationship between commercial bank credits to general commerce and economic growth measured as gross domestic product. This finding is in contrary to the study of Fapetu and Obalade (2015); Akpansung and Babalola (2012) as they concluded that commercial banks' credit to general commerce industry asserted significant negative impact on the economic growth.

The impact of Interest Rate on Economic Growth of Nigeria

The study showed a non-significant negative impact of interest rate on economic development. This implies that an increase in interest rate will reduce economic development of Nigeria that is for a nation to boost her economic growth, a single digit interest rate regime must be pursued. It should be noted that, Nigeria has been operating double digits interest rate for decades. The result

is in line with the findings in Agunuwa *et al.,* (2015); Oyelade (2019); Olowe *et al*., (2013); Johnny and Ayawei (2018); Imoughele and Ismaila (2014); Ezeaku *et al.,* (2017)   that revealed significant negative relationship between interest rate on commercial banks' credit and agricultural output.

The impact of Inflation Rate on the Economic Growth of Nigeria

The study asserted a significant negative relationship between inflation rate and economic development when measured as GDP. This result showed that increase in inflation rate will reduce the GDP and economic growth of Nigeria.

This implied that there is every need for monetary policy makers in Nigeria to ensure that the country inflation rate is significantly reduced to the possible minimum. This result is in agreement with the findings of Ezeaku *et al.,* (2017); Ekpenyong *et al.,* (2016) who concluded that effect of inflation rate on SMEs credit impacted economic growth negatively.

Conclusion

Based on the data analyzed and interpretation of results, the study concluded that SMEs bank finance in agricultural sector and inflation have significant influence on economic growth of Nigeria. The study also revealed that loan to health sector, interest rate, and banks total loan to customers have insignificant negative impact on economic growth of Nigeria, while loan to general commerce sector, and has insignificant positive impact on economic growth of Nigeria. Summarily, loan and advances to SMEs industry in Nigeria have significant impact on economic growth.

Recommendations

In line with the conclusion of the study and the fact that SMEs is crucial for any economy, a number of recommendations were suggested.
   (i)   Nigerian government needs to mandate commercial bank to lend to agricultural sector aggressively to boost the country economic growth.
   (ii)   The central of Nigeria governor and other policy makers should ensure that inflation and interest rates are reduced to the possible minimum to boost the country economy growth
   (iii)   Relevant policy makers need stakeholder's engagement to rejuvenate local production of essential products and bring loan to general commerce to lime light.

Limitations of the Study

This study faced limitation of poor reporting of loans to each sector of the economy by the commercial banks. Findings of this are only applicable to Nigerian commercial banks loans to small medium scale enterprises and such may not be generalized to other institutions like bank of

industry and micro finance banks. The study is limited to 2010 to 2019 and hence the result may not be generalized beyond this scope. This study deals with dynamics variables that is based on business cycle and market factors. Therefore, findings of this study may not show the impact of the examined variables by non-interest making banks on economic growth for period of study.

Suggestions for Further Studies

To further expand the body of knowledge on economic growth of Nigeria the study proposed that similar studies should be done on the influence of SME finance by non-interest banking on economic growth. There is need to examine impact of non-interest finance to SME on economic growth to assist government in making developmental decision in Nigeria.

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Appendix 1: Analysis results

Fig. 1: Descriptive

```
   Variable |      Obs        Mean    Std. Dev.       Min        Max
------------+--------------------------------------------------------
        GDP |      110     4.44e+08     6.30e+07    3.63e+08   5.68e+08
      Agric |      110     2.98e+07     3.42e+07           0   2.52e+08
     GenCom |      110     6.77e+07     7.39e+07           0   4.05e+08
PriHealthSec |     110     228455.6      1151371           0    9678994
      TLoan |      110     9.83e+08     8.86e+08     9467163   3.69e+09
------------+--------------------------------------------------------
       IntR |      110        16.72    .6230481       15.37      17.58
    InfRate |      110       11.791    2.759082           8       16.5
```

Fig.2: Correlation Analysis

```
. pwcorr GDP IntR TLoan PriHealthSec GenCom Agric InfRate

             |      GDP      IntR     TLoan  PriHea~c    GenCom     Agric   InfRate
-------------+---------------------------------------------------------------------
         GDP |   1.0000
        IntR |  -0.3490    1.0000
       TLoan |  -0.0221   -0.1072    1.0000
PriHealthSec |  -0.1065   -0.0225   -0.0671    1.0000
      GenCom |  -0.0236   -0.1003    0.6199   -0.0128    1.0000
       Agric |   0.0978   -0.1619    0.3912   -0.0883    0.3215    1.0000
     InfRate |  -0.8431    0.4535    0.1048   -0.0020    0.0478   -0.0100    1.0000
```

Fig.3: Fixed effect

```
. xtreg InGDP InTloan Ingencon Inprivhealt Inagric IntR InfRate, fe

Fixed-effects (within) regression           Number of obs      =          17
Group variable: panelid                     Number of groups   =           4

R-sq:                                       Obs per group:
     within  = 0.9137                                     min =           2
     between = 0.8298                                     avg =         4.3
     overall = 0.5017                                     max =           7

                                            F(6,7)             =       12.36
corr(u_i, Xb)  = -0.8846                     Prob > F           =      0.0020

------------------------------------------------------------------------------
       InGDP |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
     InTloan |  -.1459341   .0824202    -1.77   0.120    -.3408269    .0489587
    Ingencon |  -.0240601   .0408452    -0.59   0.574    -.1206436    .0725235
 Inprivhealt |  -.0606789   .0319551    -1.90   0.099    -.1362406    .0148828
     Inagric |   .1912072   .0594908     3.21   0.015      .050534    .3318805
        IntR |  -.0314121   .0331491    -0.95   0.375    -.1097973    .0469731
     InfRate |  -.0386129   .0090936    -4.25   0.004    -.0601158   -.0171099
       _cons |   21.78297    1.45409    14.98   0.000      18.3446    25.22135
-------------+----------------------------------------------------------------
     sigma_u |  .28753004
     sigma_e |  .06004215
         rho |  .95821605   (fraction of variance due to u_i)
------------------------------------------------------------------------------
F test that all u_i=0: F(3, 7) = 2.05                     Prob > F = 0.1954
```

Fig.4: Random effect

```
. xtreg InGDP InTloan Ingencon Inprivhealt Inagric IntR InfRate, re

Random-effects GLS regression              Number of obs      =        17
Group variable: panelid                    Number of groups   =         4

R-sq:                                      Obs per group:
     within  = 0.8440                                   min =         2
     between = 0.9981                                   avg =       4.3
     overall = 0.8650                                   max =         7

                                           Wald chi2(6)       =     64.10
corr(u_i, X)   = 0 (assumed)               Prob > chi2        =    0.0000
```

InGDP	Coef.	Std. Err.	z	P>|z|	[95% Conf. Interval]	
InTloan	-.0302227	.0302527	-1.00	0.318	-.0895169	.0290715
Ingencon	.0243568	.0370955	0.66	0.511	-.0483491	.0970626
Inprivhealt	.001021	.0199281	0.05	0.959	-.0380374	.0400794
Inagric	.0555994	.0230106	2.42	0.016	.0104994	.1006995
IntR	-.0080536	.032153	-0.25	0.802	-.0710723	.0549652
InfRate	-.0484388	.0090585	-5.35	0.000	-.0661932	-.0306844
_cons	19.80702	.7503144	26.40	0.000	18.33643	21.27761
sigma_u	0					
sigma_e	.06004215					
rho	0	(fraction of variance due to u_i)				

Fig. 5: Hausman test

```
. hausman fe re
```

	——— Coefficients ———			
	(b)	(B)	(b-B)	sqrt(diag(V_b-V_B))
	fe	re	Difference	S.E.
InTloan	-.1459341	-.0302227	-.1157114	.0766672
Ingencon	-.0240601	.0243568	-.0484169	.0170954
Inprivhealt	-.0606789	.001021	-.0616999	.0249799
Inagric	.1912072	.0555994	.1356078	.0548604
IntR	-.0314121	-.0080536	-.0233586	.0080651
InfRate	-.0386129	-.0484388	.0098259	.0007979

```
                   b = consistent under Ho and Ha; obtained from xtreg
           B = inconsistent under Ha, efficient under Ho; obtained from xtreg

    Test:  Ho:  difference in coefficients not systematic

                 chi2(6) = (b-B)'[(V_b-V_B)^(-1)](b-B)
                         =          6.35
             Prob>chi2 =      0.3856
             (V_b-V_B is not positive definite)
```

Fig. 6: Autocorrelation Test

```
Wooldridge test for autocorrelation in panel data
H0: no first-order autocorrelation
    F( 1,      1) =      4.087
         Prob > F =      0.2924
```

Appendix 2 Extract from financial statements

Banks	Year	Agric	Gen Com	Pri Health Sec	T Loan	Int R	GDP	InfRate

		=N='000	=N='000	=N='000	=N='000	%	=N='000	%
Access	2010	3,547,702	77,229,508	0	403,178,957	17.58	363,359,000	13.7
Access	2011	9,099,023	120,057,703	0	490,877,501	16.02	410,335,000	10.8
Access	2012	10,453,336	88,368,519	0	554,592,199	16.79	459,376,000	12.2
Access	2013	11,435,182	93,962,250	0	735,300,741	16.72	514,966,000	8.5
Access	2014	14,483,622	148,635,603	0	1,019,908,848	16.55	568,490,000	8
Access	2015	15,937,248	133,869,178	0	1,243,215,309	16.85	494,583,000	9.01
Access	2016	16,358,431	139,729,100	0	1,594,562,345	16.87	404,650,000	15.7
Access	2017	33,387,238	202,234,986	0	1,771,282,739	17.55	375,746,000	16.5
Access	2018	15,323,959	197,537,626	0	1,759,037,811	16.9	398,160,000	12.1
Access	2019	31,591,359	301,611,261	0	2,662,623,088	15.37	448,120,000	11.4
GTB	2010	2,998,167	69,089,863	6,793,970	604,099,302	17.58	363,359,000	13.7
GTB	2011	2,912,966	67,714,413	9,678,994	704,609,340	16.02	410,335,000	10.8
GTB	2012	3,295,351	66,155,816	0	1,552,504,562	16.79	459,376,000	12.2
GTB	2013	7,417,120	57,203,752	0	1,902,750,637	16.72	514,966,000	8.5

GTB	2014	20,906,175	77,276,043	0	2,205,861,016	16.55	568,490,000	8
GTB	2015	53,000,525	97,978,853	0	2,363,999,135	16.85	494,583,000	9.01
GTB	2016	25,032,726	61,434,017	0	2,932,266,581	16.87	404,650,000	15.7
GTB	2017	27,712,920	60,242,354	0	3,135,249,246	17.55	375,746,000	16.5
GTB	2018	27,135,378	41,248,675	0	3,053,966,494	16.9	398,160,000	12.1
GTB	2019	19,591,230	87,049,340	0	3,459,965,974	15.37	448,120,000	11.4
Zenith	2010	23,307,000	73,472,000	0	759,239,000	17.58	363,359,000	13.7
Zenith	2011	29,837,000	67,183,000	0	921,665,000	16.02	410,335,000	10.8
Zenith	2012	52,541,000	69,031,000	0	916,791,000	16.79	459,376,000	12.2
Zenith	2013	60,722,000	64,573,000	0	1,148,378,000	16.72	514,966,000	8.5
Zenith	2014	82,453,000	80,759,000	0	1,605,581,000	16.55	568,490,000	8
Zenith	2015	39,698,000	405,396,000	0	1,884,941,000	16.85	494,583,000	9.01
Zenith	2016	66,669,000	319,396,000	0	2,193,224,000	16.87	404,650,000	15.7
Zenith	2017	63,223,000	186,710,000	0	2,117,069,000	17.55	375,746,000	16.5
Zenith	2018	115,303,000	198,412,000	0	1,921,064,000	16.9	398,160,000	12.1

Zenith	2019	161,636,000	269,434,000	0	2,390,651,000	15.37	448,120,000	11.4
Union	2010	18,829,000	30,827,000	0	254,445,000	17.58	363,359,000	13.7
Union	2011	16,265,000	23,974,000	0	154,365,000	16.02	410,335,000	10.8
Union	2012	16,077,000	25,335,000	0	136,982,000	16.79	459,376,000	12.2
Union	2013	15,348,000	18,147,000	0	210,118,000	16.72	514,966,000	8.5
Union	2014	18,226,000	27,261,000	0	302,372,000	16.55	568,490,000	8
Union	2015	26,431,000	29,138,000	0	366,721,000	16.85	494,583,000	9.01
Union	2016	31,711,000	34,322,000	0	507,190,000	16.87	404,650,000	15.7
Union	2017	19,440,000	34,412,000	0	488,555,000	17.55	375,746,000	16.5
Union	2018	20,376,000	43,524,000	0	428,037,000	16.9	398,160,000	12.1
Union	2019	14,720,000	75,590,000	0	550,613,000	15.37	448,120,000	11.4
FBN	2010	12,546,000	188,023,000	0	1,215,531,000	17.58	363,359,000	13.7
FBN	2011	21,057,000	92,239,000	0	1,275,497,000	16.02	410,335,000	10.8
FBN	2012	252,165,000	62,603,000	0	1,541,376,000	16.79	459,376,000	12.2
FBN	2013	65,057,000	94,020,000	0	1,769,130,000	16.72	514,966,000	8.5

FBN	2014	57,916,000	94,874,000	0	2,178,986,000	16.55	568,490,000	8
FBN	2015	58,350,000	73,843,000	0	1,816,043,000	16.85	494,583,000	9.01
FBN	2016	116,025,000	51,657,000	0	2,083,894,000	16.87	404,650,000	15.7
FBN	2017	55,196,000	65,905,000	0	2,001,222,000	17.55	375,746,000	16.5
FBN	2018	45,870,000	76,108,000	0	1,670,476,000	16.9	398,160,000	12.1
FBN	2019	55,072,000	164,962,000	0	1,852,413,000	15.37	448,120,000	11.4
Unity	2010	5,334,322	15,297,353	125,942	133,242,463	17.58	363,359,000	13.7
Unity	2011	7,571,849	17,099,711	146,431	131,163,274	16.02	410,335,000	10.8
Unity	2012	25,031,257	66,350,740	122538	194,781,168	16.79	459,376,000	12.2
Unity	2013	34,014,577	64,718,143	523358	225,634,959	16.72	514,966,000	8.5
Unity	2014	40,120,018	15,685,596	250483	263,987,974	16.55	568,490,000	8
Unity	2015	47,939,536	86,299,253	326147	311,897,547	16.85	494,583,000	9.01
Unity	2016	63,188,594	102,716,776	642504	378,758,599	16.87	404,650,000	15.7
Unity	2017	163,745	1,062,452	0	9,467,163	17.55	375,746,000	16.5
Unity	2018	32,698,573	1,881,007	0	44,841,156	16.9	398,160,000	12.1

Unity	2019	102,089,891	29,716	0	106,913,813	15.37	448,120,000	11.4
Fidelity	2010	390,000	0	0	205,685,000	17.58	363,359,000	13.7
Fidelity	2011	5,169,000	0	0	279,211,000	16.02	410,335,000	10.8
Fidelity	2012	13,050,000	0	0	345,500,000	16.79	459,376,000	12.2
Fidelity	2013	9,390,000	0	0	442,650,000	16.72	514,966,000	8.5
Fidelity	2014	14,786,000	0	0	559,136,000	16.55	568,490,000	8
Fidelity	2015	11,724,000	0	0	598,978,000	16.85	494,583,000	9.01
Fidelity	2016	9,481,000	0	0	718,401,000	16.87	404,650,000	15.7
Fidelity	2017	12,657,000	0	0	795,315,000	17.55	375,746,000	16.5
Fidelity	2018	17,033,000	0	0	906,624,000	16.9	398,160,000	12.1
Fidelity	2019	32,931,000	0	0	1,178,389,000	15.37	448,120,000	11.4
FCMB	2010	3,969,000	26,695,000	0	342,638,639	17.58	363,359,000	13.7
FCMB	2011	5,816,404	41,585,921	0	332,273,803	16.02	410,335,000	10.8
FCMB	2012	13,655,459	52,382,225	0	364,865,215	16.79	459,376,000	12.2
FCMB	2013	11,405,967	54,177,722	0	462,370,884	16.72	514,966,000	8.5
FCMB	2014	38,153,184	75,760,760	0	633,375,197	16.55	568,490,000	8

FCM B	2015	36,130,698	62,435,107	0	611,059,701	16.85	494,583,000	9.01
FCM B	2016	26,149,656	58,599,844	0	680,483,061	16.87	404,650,000	15.7
FCM B	2017	13,780,364	46,978,899	0	675,101,825	17.55	375,746,000	16.5
FCM B	2018	40,328,080	55,511,043	0	681,326,413	16.9	398,160,000	12.1
FCM B	2019	51,352,053	45,724,909	0	754,390,866	15.37	448,120,000	11.4
WEM A	2010	891,151	20,532,035	0	106,280,272	17.58	363,359,000	13.7
WEM A	2011	301,598	15,696,270	0	67,236,605	16.02	410,335,000	10.8
WEM A	2012	0	30,712,416	0	73,745,718	16.79	459,376,000	12.2
WEM A	2013	0	41,076,571	0	98,631,825	16.72	514,966,000	8.5
WEM A	2014	0	27,247,812	0	149,293,849	16.55	568,490,000	8
WEM A	2015	0	27,894,640	0	185,596,590	16.85	494,583,000	9.01
WEM A	2016	2,260,034	20,490,722	0	227,008,550	16.87	404,650,000	15.7
WEM A	2017	4,313,762	23,154,402	0	215,840,031	17.55	375,746,000	16.5
WEM A	2018	9,038,888	41,995,725	325136	261,583,723	16.9	398,160,000	12.1
WEM A	2019	11,724,163	49,940,660	303610	301,368,302	15.37	448,120,000	11.4

Sterling	2010	552,314	0	0	108,993,464	17.58	363,359,000	13.7
Sterling	2011	4,842,354	0	0	166,885,551	16.02	410,335,000	10.8
Sterling	2012	6,497,158	0	0	236,131,000	16.79	459,376,000	12.2
Sterling	2013	12,326,536	0	0	328,665,000	16.72	514,966,000	8.5
Sterling	2014	16,122,682	0	0	380,924,400	16.55	568,490,000	8
Sterling	2015	13,145,738	0	0	354,474,856	16.85	494,583,000	9.01
Sterling	2016	14,489,000	0	0	476,713,000	16.87	404,650,000	15.7
Sterling	2017	19,243,000	0	0	617,577,000	17.55	375,746,000	16.5
Sterling	2018	22,785,000	0	0	640,678,000	16.9	398,160,000	12.1
Sterling	2019	39,643,000	0	0	631,698,000	15.37	448,120,000	11.4
UBA	2010	39,903,000	47,057,000	784000	952,771,000	17.58	363,359,000	13.7
UBA	2011	35,616,000	46,417,000	1957000	1,133,631,000	16.02	410,335,000	10.8
UBA	2012	37,995,000	43,015,000	2106000	658,922,000	16.79	459,376,000	12.2
UBA	2013	39,935,000	79,755,000	483000	937,619,000	16.72	514,966,000	8.5
UBA	2014	49,416,000	49,580,000	381000	1,071,859,000	16.55	568,490,000	8
UBA	2015	39,265,000	52,076,000	180000	1,947,195,000	16.85	494,583,000	9.01

UBA	2016	40,974,000	100,261,000	0	2,221,528,000	16.87	404,650,000	15.7
UBA	2017	25,585,000	201,594,000	0	2,554,877,000	17.55	375,746,000	16.5
UBA	2018	48,947,000	177,177,000	0	3,170,868,000	16.9	398,160,000	12.1
UBA	2019	36,338,000	232,690,000	0	3,692,728,000	15.37	448,120,000	11.4