



IMPACT OF CAPITAL BASE ON BANK LENDING OF LISTED DEPOSIT MONEY BANKS IN NIGERIA

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Abstract

The study assesses the impact of capital base on bank lending of listed deposit money banks in Nigeria. The objective of this study is to determine the impact of capital base on bank lending to Private enterprises and SMEs in particular in Nigeria. The sample size of the study is arrived at after applying filter to the population. Banks studied are those that have been listed since 2005 whose financial information are up to date by the end of 2017 financial year. Therefore, after applying the filter to the population of the study 13 banks emerge as the sample of the study and filter out Unity and Skye bank. The study found out the coefficient of Capital Base is positive and statistically significant at 5 percent level to influence lending to Private enterprises and SMEs in particular. Capital Base has a significant, positive and moderate impact on Lending to Private enterprises and SMEs in particular and is signified by coefficient value of 0.184, a t-statistics value of 2.08, and a p-value of 0.039 that is less than the f-critical value of 0.05, and is significant at 1%. Furthermore, the findings signify that the determinant of lending measured by capital base of bank has a significant positive impact on lending to Private enterprises and SMEs in particular. The study recommends that DMBs should increase their capital base to advance more loans to the private sector in Nigeria.

Keywords: Capital base, Bank lending, Deposit money banks and Private enterprises

Introduction

In the last three decades there have been growing incidences of restructuring in the form of consolidation in the financial sector of many countries and deposit money banks in particular. Countries in Europe, Asia, Latin America and Africa have all implemented banking Consolidation in one form or the other. The reasons for consolidation among others are the desires to improve the efficiency of the DMBs operating in the sector, increase their geographical spread, and increase in the range and number of products offered by them for more

efficient risk management at lower cost hopefully giving rise to higher incomes. The problematic situation which the reforms are intended to address includes: the shallow depth of the capital market, dependence of financial sector on public sector and foreign exchange trading as sources of funding, relatively inadequate returns submitted to the monetary authorities, apparent lack of harmony between fiscal and monetary policies and above all the poor loans repayment performance as well as bad debt (Balogun, 2007).

It is anticipated that as a result of consolidation, DMBs would have more funds available as a result of increased capital base for lending to the various sectors of the economy. With a more robust supply of investment into the DMBs, they are mandated to make use of the investment for profit making for the investors. The larger the capital base of DMBs the more funds is available for banking activities including the function of lending to the private sector.

With the financial restructuring it is hoped that DMBs would have surplus funds that is hoped will be channelled to the deficit side of the Private enterprises and SMEs in particular who have hitherto been neglected. This study intends to find out if the Private enterprises and SMEs in particular have been accommodated into the banking activities after the banking sector restructuring which has led to surplus from capitalization and deposits, which for optimal operations will need to be utilized in the deficit areas (Private enterprises and SMEs in particular) for maximization of wealth of the shareholders of the banks. This study also intends to find out if the theories of surplus units supplying the deficit units with funds are aligned with the practice of the activities of DMBs.

Most research on capital base have evolved on the relationship between capital base and bank lending such as Avery and Samolyk (2000) and Bonaccorci di Patti and Gobbi (2003) with few studies having been conducted to establish the impact of determinants of bank lending by listed deposit money banks on the Nigeria Stock Exchange calls for increased research in this area.

Also, the review of the existing literature indicates that there are a lot of studies that exist but most of the studies done on the subject matter only covered a short period of time of fewer years and the researcher sees the need to covered 13 years period to see if there will be a reaction to increasing in the period.

Lastly, the existing studies use different aggregate data rather than individual banks data on the variables, (Dogarawa, 2011) among others, this study will use data obtained from the financial statements of the participating banks since only listed deposit banks form the subject of this study which most studies done in the subject matter failed to use as their dependent variables. Due to these gaps, there is a need to undertake further research on the topic to arrive at better and satisfactory findings.

In the light of the above, this study seeks to answer the following research question: Does bank capital base impact on banks' lending to Private enterprises

and SMEs in particular in Nigeria? The specific objectives of this study are to ascertain the impact of capital base on bank lending to Private enterprises and SMEs in particular in Nigeria.

The following hypothesis is developed to test:

H₀₁: Capital base has no significant impact on bank lending to Private enterprises and SMEs in particular in Nigeria.

The scope of the study covers the period of 2005-2017. The choice of this period is because it is the period immediately after the bank consolidation and hence it will provide us with an idea of the impact consolidation has on Private enterprises and SMEs in particular' financing.

Literature Review

A loan is the act of giving money, property or other material goods to another party in exchange for future repayment of the principal amount along with interest or other finance charges. A loan may be for a specific, one-time amount or can be available as an open-ended line of credit up to a specified limit or ceiling amount.

Each party in the transaction before any money agrees to the terms of a loan. If the lender requires collateral, that is outlined in the loan documents that will guide the lending process. Most loans also have provisions regarding the maximum amount of interest, as well as other covenants such as the length of time before repayment is required. Loans can come from individuals, corporations, financial institutions, and governments. They offer a way to grow the overall money supply in an economy as well as open up competition and expand business operations. The interest and fees from loans are a primary source of revenue for many financial institutions such as banks, as well as some retailers through the use of credit facilities.

Capital base is a term used to describe the funds that a company generates as a result of an initial public offering as well as any additional offerings that the entity makes at a later time. Any retained earnings that are generated by the business are often considered part of the capital base. The term can also be used to identify the initial capital used by an investor to secure a given security, or the total of initial capital used to secure all the assets currently contained in the investment portfolio. With either application, the identification of the capital base helps to provide a starting point for evaluating the successful generation of revenue over a period of time. Capital base is important because it provides a benchmark when measuring returns. Without it, investors and companies would be unaware of how they are doing relative to their investments.

The capital base also makes it possible to determine the ROE, or rate on equity, that is generated by each asset over the period of time that has passed between the point of purchase and the current date. Understanding the rate of return as it relates to individual holdings as well as the cumulative worth of the investment portfolio can help the investor refine his or her investment strategies, since the process makes it much easier to know what assets to keep and what assets to sell. Since the process of identifying the capital base is relatively simple, it can easily be used as an effective benchmark in measuring the true rate of return that is generated within a specific period of time. While the capital base remains somewhat consistent over time, it may change due to the buying and selling activity of the individual investor, or additional offerings of stocks that are released by the corporation. Adjusting the capital base to allow for these events is not difficult, and will ensure that the investor always has a reliable base to work with when it comes to assessing his or her return on current investments. As part of its efforts at enhancing the quality of banks and ensuring financial system stability, the CBN is proposing a maximum capital base of ₦100 billion for banks operating in the country.

Under the new regime that replaces universal banking expected to commence next year, three tiers of banks are to come into effect with the lowest capital base – ₦15 billion – set aside for those classified as regional banks. According to the classification, banks with the maximum capital base could operate internationally while national banks whose operations are confined to the country will be required to have ₦25 billion. The capital acquired during an initial public offer or the additional offerings of a company, plus any retained earnings. It could also be seen as initial investment plus subsequent investments made by shareholders who purchased shares in the bank plus retained earnings. Bank capital is the value of the bank's assets minus its liabilities, or debts. Assets include cash, loans and securities, while liabilities cover customer deposits, and money owed to other banks and bondholders.

Rahman, Zheng and Ashraf (2015) examine the concept capital base mainly includes funds from issuing shares and retained earnings. Two concepts of bank capital are mainly used in the literature: actual capital and regulatory capital. Actual capital is also known as physical capital and is composed of owner's equity. It is usually measured as the ratio of equity to total assets and also known as capital ratio. Regulatory capital is the capital measured on the base of bank risk and is maintained in accordance with the rules determined by the banking industry supervisor in a country.

The Supply Leading Theory as cited by Uzonwanne (2015) postulates that the existence of financial institutions like deposit money banks and the supply of their financial assets, liabilities and related financial services in advance of demand for them would provide efficient allocation of resources from surplus units to deficit units, thereby leading the other economic sectors in their growth process (Porter, 1996). This theory performs two functions: first it transfers resources from traditional sectors to modern sectors; and second, it promotes and stimulates an entrepreneurial response (Private enterprises and SMEs in particular) in the modern sectors. The proponents of this theory believe that the activities of the financial institutions serve as a useful tool for increasing the productive capacity of the Private enterprises and SMEs in particular in the economy. They opine that countries with better-developed financial system tend to grow faster in this aspect. Early economist like Schumpeter (1934) has strongly supported the view of finance led casual relationship between financing of small-medium enterprises and a country's economic growth.

Avery and Samolyk (2000) examine the effect between bank consolidation (capital base of the banks) and the availability of small loans to small businesses in local markets. Their prominent hypothesis argues that since the commercial loans made by small banks tend to be smaller and more local (whether because of legal loan limits or the need to diversify) small banks develop expertise with small business customers. This is based on the premise that, as banks get larger and more organizationally complex, their business focus shift to larger commercial customers or more standardised types of loan products. The sample drawn is divided into urban and rural markets and for periods of 1993-1995 and 1995-1997. Multivariate regression tool has been used to measure the effect between local small business loan growth and the nature of the local consolidation activity, controlling the other factors that can explain differences in market level loan growth.

Findings reveal that the effect between merger activity and small business lending differ in both rural markets and in urban markets, and also deferent across the two time periods examined. In the rural sample, the coefficients on the merger activity variables are generally negative, indicating lower average loan growth in markets experiencing consolidation activity. The magnitude of the growth differential is larger in the earlier period- a result that is consistent with bank-level evidence of a negative effect between merger activity and small business lending in the first few years when the small business loan data have been reported. In the later period (1995-1997), only in concentrated rural markets is there a significant negative link between

the overall level of merger activity and local small business loan growth. In the urban markets, no significant differences are found in the small business growth attributable to the overall level of merger activity in either study periods examined.

Charles (2002) uses interview technique to investigate factors that influence the growth, performance and development of Private enterprises and SMEs in particular in Nigeria and other implication on policy and finds that accessibility to finance and good management are central to Private enterprises and SMEs in particular growth and development. Only ₦18.1billion representing 47.3% has been assessed by the Private enterprises and SMEs in particular, which clearly shows that there has always been a gap between the supply capabilities of banks and the demanding needs of the Private enterprises and SMEs in particular.

Avery and Samolyk (2003) examine how bank mergers and acquisition activity affect small business lending in local U.S banking markets between 1994 and 2000, while focusing particularly on the role that community banks play in determining the ultimate effect on consolidation. This study examines the effect between the amount and type of consolidation activity in local banking markets and changes in inflation adjusted small business lending between 1994 and 2000. Regression analysis is used to test the hypothesis. The population from which the sample is drawn is divided into urban and rural markets and for period between 1994-1997 and 1997-2000. Findings for urban markets for the years 1994-1997 show a negative association between overall consolidation activity and small business loan growth, while for rural market; little or no effect is seen. However, in the test of specific types of consolidation activity, evidence of a negative effect associated with consolidation activity involving big organizations and a positive effect associated with community bank consolidation activity are found. These effects appear to cancel each other out, leaving an insignificant effect between overall consolidation activity and small business loan growth. For the period of 1997-2000 in the urban market, a positive association between overall consolidation activity and small business loan growth is seen, while in the rural market, there is little evidence of any significant effect. The general dynamics associated with consolidation activity in small business credit markets appears to have been quite deferent in the 1997-2000 period indicating that consolidation activity involving big organizations is associated with higher local small business loan growth than that associated with community banks.

Samolyk and Richardson (2003) conduct a careful and vigorous analysis of the relatively new CRA

data to see whether bank merger activity has been systematically related to small business lending within local banking markets during the late 1990s. The data is analysed using ordinary least square regression method and the findings show that banks experiencing merger activity including banks that are part of an active company but are not themselves directly involved in a merger or acquisition have systematically lower small business loan growth than inactive banks. Specifically, they find that significant lower small business loan growth is associated with within-market merger activity.

Bonaccorsi di Patti and Gobbi (2003) in Italy, investigate the full effect of bank mergers on the availability of credit for corporate borrowers by examining a large sample of privately owned firms. Using a regression model, they find that corporate borrowers do not only appear to be negatively affected by the involvement of the lender in M&A but they experience an increase in the availability of credit after their lenders are acquired. Evidence shows that acquisitions that preserve the charter of the target bank have expansionary effect on the credit extended to the corporate customers of the target institution. The expansion of credit is consistent with the hypothesis that benefits in terms of increased lending capacity for the target are partly passed on to the bank's customers.

In a study that examines the implication to the amount of credit available to small businesses from rapid and pervasive changes in the banking sector, Craig and Hardee (2004) raise fear that small business credit, which traditionally has been the province of small banks, will become significantly restricted as a result of consolidation activities. Data from the survey of small business finance is used to ascertain the extent to which credit access varies as attributes of the credit market vary. The statistical analysis using regression tool finds that small businesses receive less credit on average in regions with a large share of deposits held by the largest banks irrespective of how debt is measured.

Degryse, Masschelein and Mitchell (2004) investigate the impact of bank mergers on firm-bank lending using information from individual loan contracts in Belgium. By employing regression analysis, the study reveals that bank mergers generate short-term and longer-term effects on borrowers' probability of losing a lending relationship. Mergers also have heterogeneous impact across borrower types, including borrowers of different size, and borrowers with single verses multiple relationships. Firms borrowing from acquiring banks are less likely to lose their lending relationship, while target banks borrowers are more likely to lose their lending relationship. Similarly, firms borrowing from two of the merging banks are

less likely to lose their lending relationship than firms borrowing from only one of the merging banks or firms borrowing from non-merging banks.

Marsch, Schmieder and Aerssen (2007) agree that, consolidation in the banking industry raises concerns among policy makers that it may lead to a reduced availability of credit for small businesses, primarily due to the number of small banks, which specialized in this type of lending. They add that a decline in small business lending may be harmful for the economy; firstly because of the substantial contribution of Private enterprises and SMEs in particular to national output and job creation. The hypothesis 'if a bank is involved in merger and acquisition activities, its private enterprises and SMES in particular credit financing worsens', is tested. Based on a panel data set comprising merged data of the German credit register and balance sheet data of German firms and banks, the effect between the importance of banking financing for small businesses and bank size is studied. Tests are carried out using regression, data analysis and descriptive data generation. The result of the study shows a significant negative direct effect exists, while the effect one year after the merger is insignificant but turns out positive but significant two years later.

Dogarawa (2011) assess the impact of bank consolidation on credit availability to private enterprises and SMEs in particular in Nigeria. Using an aggregated data for all the Deposit money Bank in Nigeria as at the end of 2008, ordinary least square regression model (using bank capital and loans as variable of the study) shows that so far, bank consolidation in Nigeria has no positive impact on the size of credit availability to private enterprises and SMEs in particular. The study did not subject the data to vigorous tests like normality, multicollinearity and heteroscedasticity test to rule out abnormality and other factors that can lead to bias. The study is also done more than a decade ago and with the time that has lapsed, it will be advantageous to carry out a study that includes more recent years.

Ekin and Elif (2012) in their studies the role of banking sector in monetary policy transmission in Turkey covering the period 1988-2009. The study investigates the impact of monetary policy changes on banks' lending behavior. Given the changes in the policy stance and developments in the financial system following the implementation of structural reforms in the aftermath of the 2000-01 crises, the analysis is further conducted for the two sub-periods: 1988-2001 and 2002-2009, to examine whether there is a change in the functioning of the credit channel. Based on bank-level data, their study reveal cross sectional heterogeneity in banks' response to monetary policy changes during 1988-2009. Regarding the results of the pre-crisis and

post-crisis periods, their study found that an operative bank lending channel existed in 1988-2001, however its impact became much stronger thereafter. Their result reveals significant differences in the distributional effects due to bank specific characteristics in the impact of monetary policy on credit supply between the two sub-periods. While the results indicate an operative bank lending channel due to earnings capability and asset quality in the first period, size, liquidity, capitalization, asset quality and managerial efficiency seem to make a difference in the lending responses of banks to monetary policy in 2002-2009.

Iloh and Chioke (2015) examine the effect between commercial bank credits indicators and availability of credit facilities to Private enterprises and SMEs in particular in Nigeria. Data are collated from the CBN statistical bulleting for a period of 31 years (1980 – 2010) and the generalised least square estimator's technique is used to test hypothesis. The results shows that DMBs credit to Private enterprises and SMEs in particular have significant effect on Nigeria economic growth by positively affecting gross domestic product. This study even though carried out in 2015, the range of years of data collections stopped in 2010. If the duration of the study is extended to 2017, it may give us a better result. The gap of the study is to examine the effect of capital base of banks on loans to DMBs using firm data rather than aggregate data that have been used by previous studies

Although a number of studies have advanced our understanding of private enterprises and SMEs in particular financing, the effect of the restructuring over a long period cannot be overlooked. This paper tries to fill the void in the literature and to inform policy makers on the best way to effect financial inclusion for the Private enterprises and SMEs in particular. These findings provide the rationale for investigating the structure of the private enterprises and SMEs in particular lending market in Nigeria with particular reference to the determinants of lending to Private enterprises and SMEs in particular. This is of growing interest because, Nigeria is an emerging economy and has implemented a number of financial reforms in recent years, with the banking systems becoming increasingly integrated. These banking reforms include the mandatory reserve of a percentage of profit after tax for loan disbursement to Private enterprises and SMEs in particular only.

Methodology

Research Design

Ex-post facto research design is adopted in estimating the effect of deposit money banks' lending to small and medium scale enterprises. Panel data research design is adopted for this study

because the data collected is in panel form cutting across time series and cross sectional information.

Data Collection Method

The population of this study is all the 15 listed DMBs in Nigeria operating in the Nigerian economy as at 31 December 2017. The sample size of the study is arrived at after applying filter to the population. Banks studied are those that have been listed since 2005 whose financial information are up to date by the end of 2017 financial year. Therefore after applying the filter to the population of the study 13 banks emerge as the banks that qualify for the study filtering out Unity and Skye bank.

Secondary data is used for this study where information obtained from Central Bank of Nigerian Statistical Bulletins and the financial statement of the selected banks (bank capital base and total loans disbursed) is sourced.

The study conceptualizes bank lending to private enterprises and SMEs in particular as a linear function of determinants of bank lending proxy by bank capital base (CAP).

$$LLOAN = f(LCAP) \dots\dots\dots (1)$$

In order to make equation (1) amenable to OLS estimation procedure, we linearize the equation by taking its natural log to derive for the dependent and independent variable:

Where:

i stands for ith bank and t stands for the year.

LOANS stand for bank lending for bank i in period t

CAP stands for capital base for bank i in period t

These are the coefficients estimated and are treated as elasticity's (percentage changes in the tendency for banks to increase funding to Private enterprises and SMEs in particular because there exists a marginal increase in each explanatory variable).

Data Analysis Technique

This study starts its analysis with descriptive statistics. The knowledge of the behaviour of the data used is of immense importance as it gives clue on the kind of result to be expected. Before the

analysis is carried out, it is important to understand how the data behaves over the study period, i.e. from 2005-2017. The behaviour of the trend of the panel data if studied carefully gives a clue on the kind of effect that should be expected between the variables, hence, a priori expectation. Then diagnostic tests are carried out so as to meet the objective of Panel data regression and of the study. These includes test for correlation matrix, normality, Heteroskedasticity and Multicollinearity. This is a determination to comply with the classical assumption of the model of the study in general.

Thereafter the study adopts panel regression model for the analysis and test of hypotheses of the study. Panel regression is chosen for the study because of the number of banks and the period of time that is involved in the study making it a combination of time series and cross sectional data analysis (Panel Data analysis). Appropriate tests such as Breusch and Pagan Lagrangian Multiplier test and Hausman Specification Test are used to arrive at the most suitable model for the study where appropriate.

Results and Discussion

Table 1: Description of variables

Acronym	Variables Definition	M e a s u r e m e n t	S o u r c e s
L L O A N S	Bank lending to Private enterprises and SMEs in particular (DV)	Annual Loans and advances to the private sector	Uremadu, Anik&Ogidi, 2014; Saibu, 2012 and Mwadira, Tamseng&Nyarota 2002.
L C A P	Capital base of Banks (I V)	Natural log of Total annual Equity	Dogarawa, 2011; Emeni&Okafor, 2008 and Saibu 2012

Source: Author's Compilation (2018)

Table 2: Descriptive statistics

V a r i a b l e s	M e a n	S t d . D e v .	M i n i m u m	M a x i m u m
L O A N S	1 1 . 4 1 6 0	. 3 8 4 8	8 . 6 3 3	1 2 . 3 3 0
C A P	1 1 . 0 2 9 0	. 5 6 4 8	0 1 2	1 2 . 4 3 2

Source: STATA 13 Outputs based on study data 2018

Lending to Private enterprises and SMEs in particular denoted by (LLOANS) in table 3 above, has a mean value of 11.416 and a standard deviation value that deviates from the mean by 0.384 that signifies that the data deviates from the mean from both sides by 11.032. LLOANS has a minimum and maximum value of 8.633 and 12.330 respectively. The skewness and kurtosis value of -1.577248 and 8.74273 of LLOANS respectively shows on the average that, the sampled banks during the period of the study have been able to give loans to Private enterprises and SMEs in particular up to 60.49% (See appendix B).

Capital denoted by (CAP) has a minimum and maximum value of 8.012 and 12.432 respectively. CAP has a mean value of 11.02889 and a standard deviation value of .563 which depicts that the data deviates from the mean from both sides by 10.46589. CAP has a skewness and kurtosis value of -1.044 and 7.230 respectively.

Capital (CAP) has a strong and positive relationship with LOANS at 66.48% confidence level. This can be seen by the co-efficient value of 0.208 and the p-value of 0.0000. CAP has a strong and positive relationship with BDB at 74.98% confidence level. This can be seen by the co-efficient value of 0.8352 and the p-value of 0.0000. Profit after tax (PAT) has a strong and positive relationship with LLOANS at 99% confidence level. This can be seen by the co-efficient value of -0.0077754 and the p-value of 0.0000.

Diagnostic tests are carried out so as to meet the objective of the study also meet certain assumptions underlining panel regression analysis in order to ensure the efficiency and reliability of the parameters of estimates. These includes test for correlation matrix, normality, Heteroskedasticity and Multicollinearity.

Table 3: Shapiro-Wilks Test Results

V a r i a b l e s	O b s	W	V	Z	P r o b > z
L L O A N S	1 6 9 0	. 9 0 5	1 2 . 2 5 4	5 . 7 2 2	0 . 0 0 0 0 0
L C A P	1 6 9 0	. 9 4 1	7 . 6 5 0	4 . 6 4 2	0 . 0 0 0 0 0

Source: STATA 13 Outputs based on study data 2018

Based on the result of Shapiro-wilk as depicted on table 2, the W values of the data under study are close to 1 suggesting that the data is normally

distributed. All the probability of Z of the variables are significant at 1%.

Table 4: VIF and HETTEST

Multicollinearity (VIF)	2	.	5	3
Heteroskedasticity	0 . 9 0	(0 . 3 4 1 8)

Source: STATA 13 Outputs based on study data, 2018

The heteroskedasticity test suggests absence of heteroskedasticity, as the chi2 value is 0.90 and the p-value is 0.3418. The mean VIF result is 2.53 and that of the individual variable are below 5 that shows the absence of multicollinearity in the individual variable and the 1/VIF is consistently less than 1 buttressing the test on absence of multicollinearity.

Panel regression is chosen for the study because of the number of banks and the period of time that is involved in the study making it a combination of time series and cross sectional data analysis (Panel Data analysis). Appropriate tests such as Breusch and Pagan Lagrangian Multiplier test and Hausman Specification Test are used to arrive at the most suitable model for the study where appropriate.

Thereafter the study adopts panel regression model for the analysis and test of hypotheses of the study.

Table 5: Regression Summary

VARIABLES	O L S		RANDOM EFFECT		FIXED EFFECT	
C o n s t a n t	-0.53	(0.597)	-0.75	(0.454)	-1.75	(0.083)
L C A P	2.65	(0.009)	2.60	(0.009)	2.05	(0.039)
Breusch-Pagan LM test	3.31		(0.0345)			
H a u s m a n T e s t			51.35		(0.0000)	
R - s q u a r e / W i t h i n	0.6327		0.6295		0.6223	
R - s q u a r e b e t w e e n			0.7799		0.8055	
Adjusted R-square/ overall	0.6191		0.6181		0.6326	
R o o t M S E	0.3605					
F / W a l d c h i 2	46.52		42.49		275.22	
Prob> F/ Prob> chi2	0.0000		0.0000		0.0000	

Source: STATA 13 Outputs based on study data, 2018

This research estimates the parameters using statistical and econometric software known as STATA 13. Regression analysis is conducted to fully examine the effect between the variables derived from the initial data exploration and analysis (the independent variables) and bank lending to Private enterprises and SMEs in particular (the dependent variable). Panel data regression, is used to identify which of the independent variables best predicted bank lending to Private enterprises and SMEs in particular.

The Breusch Pagan Lagrange multiplier (LM) test helps to decide if a simple Ordinary Least Square (OLS) regression can be used for analysis of panel data or if there is need to go further with random effect or fixed effect models. Results shows the probability is below 0.05 at 0.035. Hence we reject null hypothesis at the 5% significance level and conclude that there is significant evidence of differences across entities. This indicates that Ordinary Least Square model is not appropriate and random effect model is more fitted for the study. With this results the study need to compare the random effect and fixed effect models for best-fit using Hausman test.

The Hausman specification test shows that the fixed effects model is a better estimator than the random effects model since the Hausman test result shows a chi-square value of 51.33, with a p-value of 0.000 at 1% significance level. Therefore is has become apparent that the best fit estimator for the data is fixed effect which will be used to interpret the results for further discussion.

The value for F statistics/Wald chi2 and probability of F statistics indicates whether or not the regression model is significant. It is an F test that tests the null hypothesis that all of the regression coefficients are equal to zero. The result of Prob> F is equal to 0.0000, which means that we can reject Ho and conclude that the model is significant and all coefficients are different from zero.

R-square measures the explanatory power of the model. Thus R-square tells us how much the variance in the lending to Private enterprises and SMEs in particular can be explained by independents variables. The R-square values in table 13 above indicate that the variation in lending to Private enterprises and SMEs in particular is better explained by the independent variables.

The regression gives an R^2 (within) of 0.6295, R^2 (between) of 0.7799 and R^2 (overall) 0.6181 for FE model that means that 61.81% of the variation on the lending to Private enterprises and SMEs in particular can be explained by independents variables while 38.19% captured outside the model. This shows that the independents variables are able to explain variation in the model. The coefficients of the independent variables have been inputted into the model and show the functional relationship between dependent and independent variables as follows:

Data collected were fit to the regression model of random fixed effect that measure the relationship between the dependent variable of loans to SMEs and independent variables. Table 8 above reveals that there is impact of the explanatory variable on the dependent variable. It shows that the independent variables (LBDB) is positively related to the dependent variable. The coefficient of Capital Base is positive and statistically significant at 5 percent level to influence lending to Private enterprises and SMEs in particular. Capital Base has a significant, positive and moderate impact on Lending to Private enterprises and SMEs in particular and is signified and is signified by coefficient value of 0.184, a t-statistics value of 2.08, and a p-value of 0.039 that is less than the f-critical value of 0.05, and is significant at 1%. This signifies that the determinant of lending measured by capital base of bank has a significant positive impact on lending to Private enterprises and SMEs in particular. The implication of this finding is that for every proportionate increase in capital base of

bank, the lending on Private enterprises and SMEs in particular increases. Therefore, for every 1% increase in capital base, the lending to Private enterprises and SMEs in particular will increase by 0.184.

The Hypothesis states that Bank capital base has no significant effect on bank lending to Private enterprises and SMEs in particular in Nigeria. The variable bank capital base had shown to be statistically significant. Since the individual probability is statistically significant, it suggests that the null hypothesis be rejected and the conclusion be drawn that Bank capital base has significant effect on bank lending to Private enterprises and SMEs in particular in Nigeria.

Conclusion and Recommendations

The result shows that capital base has statistical significant impact on loans, which implies an increase in the capital base will significantly increase the amount of loans disbursed. Therefore

from this study capital base does increase the amount of loans given to the private sector. This result is in line with the findings of Gupta (2003), and Emeni and Okafor (2005) who also find that increase in CAP can lead to an increase in credit to Private enterprises and SMEs in particular. The findings contradicts the studies of Dogarawa (2011), Schimtz (2005) which show that increase in capital base of banks has not translated into increase in lending to Private enterprises and SMEs in particular.

The study recommends that DMBs should increase their bank capital base to advance more loans to the private sector. This is because the private enterprises sector is important in terms of job creation and economic development of any country. Therefore, Nigeria government through its apex bank must formulate policies concerning variables like capital base of banks that likely affect the supply of finance to the private sector which in turn can lead to country's economic growth significantly.

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