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# CAPITAL ADEQUACY STANDARDS, BASLE ACCORD AND BANK PERFORMANCE: THE NIGERIAN EXPERIENCE (A CASE STUDY OF SELECTED BANKS IN NIGERIA)

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# ABSTRACT

Capital adequacy standards for banks that operates internationally is of major concern for bank regulators worldwide. In consequence, the Bank for International Settlements, (BIS) established a framework for measuring capital adequacy for banks in the group of ten (G10), industrialized nations of the world. The adoption of the standards in the city of Basle came to be referred as the Basle Capital Accord on Capital Adequacy Standard. The Capital adequacy Standard under the Basle accord has been widely accepted worldwide by bank regulators and was implemented by the Central Bank of Nigeria, effective December 2005. The objective of this study is to investigate the impact of the adoption of the Capital Adequacy Standards on the performance of Nigerian banks. The study involved the use of ordinary least squares (OLS) estimation technique to examine and determine the effect of the independent variables – loans and advances, shareholders funds, total assets and customer deposits – on the dependent variables – Earnings per share (EPS) and profit after tax. The results of the analysis showed that capital adequacy standards, exert a major influence on bank performance. In addition the impact of the Nigerian monetary authority on the new capital requirements was found to be complemented with the adoption of the Basle accord framework. The study concludes with the recommendation that the CBN should not rely soly on the capitalization of banks as a determinant of bank performance but also should concentrate on efficient and effective bank supervision and risk management.

Keywords: Basle accord, Capital adequacy standards, Risk-weighted assets.



### **INTRODUCTION**

Safety of depositors' funds remains the major concern of bank regulators worldwide. It is in this respect the capital adequacy becomes relevant and important. Capital adequacy refers to the amount of equity capital and other securities which a bank holds as reserves against risky assets as a hedge against the probability of bank failure. In a bid to ensure capital adequacy of banks that operate internationally, the Bank of International Settlements (BIS) established a framework necessary for measuring bank capital adequacy for banks in the Group of Ten industrialized countries at a meeting in the city of Basle in Switzerland. This has come to be referred to as the Basle Capital Accord, on Capital Adequacy Standards.

The Basle accord provided for a minimum bank capital adequacy ratio of 8% of risk-weighted assets for banks that operate internationally. Under the accord, bank capital was divided into two categories – namely Tier I core capital, consisting of shareholders' equity, and retained earnings and Tier II supplemental capital, consisting of internationally recognized non-equity items such as preferred stock and subordinated bonds. The accord, allows supplemental capital to count for no more than 50 percent of total bank capital or no more than 4 percent of risk-weighted assets. In determining risk-weighted assets, four categories of risky assets are each weighted differently, with riskier assets receiving a higher weight. Government securities are weighted zero percent, short-term interbank assets are weighted 20 percent, residential mortgages weighted at 50 percent while other assets are weighted 100 percent. Consequently a bank with say \$100 million in each of the four asset categories would have the equivalent of \$170 million in risk-adjustment assets. It would need to maintain \$13.6 million in capital against these investment, out of which not more than \$6.8million (ie. one-half of the amount) would be Tier II capital.

Although operationally effective since 1998, the risk-based, Basle Capital accord was generally criticized by partitions and scholars for the "arbitrary" nature of its provisions – one of such criticisms relates to the unchanging 8 percent minimum capital assigned to risk weighted assets. This and other such criticisms led to the adoption of an amended Basle II accord which addressed most of the areas of concern. The capital adequacy standards under the Basle Accord has been widely adopted throughout the world by bank regulators. In Nigeria the CBN reviewed the capital base of banks, upwards from  $\aleph$ 2 billion to  $\aleph$ 25 billion minimum with effect from 31<sup>st</sup> December, 2005. According to (CBN., 2004), out of 89 banks in Nigeria as at 2004, 62 were classified as sound/satisfactory, 14 as marginal and 11 as unsound, while 2 of the banks did not render any return during the period. The weakness of some of the ailing banks were manifested by their over drawn position with the CBN, high incidence of non-performing loan, capital deficiencies, weak management etc. in addition to this with unending exchange rate depreciation of naira, the present



level of capital in banks before the consolidation ( $\aleph$ 2 billion) has become grossly inadequate to meet domestic and global realities in the financial system.

The main objective of this papers is to investigate the effect of the position of capital adequacy standards on the performances of Nigerian banks, using two commercial banks. Spring Bank Plc and United Bank for Africa (UBA) Plc as case studies. The study cover the period 1989-2007. The study is conducted in five Sections. The introduction in section I, followed by literature review in Section II, Section III discusses the Research Methodology and model specification, the results are presented and analyzed in Section IV, while Section V provides summary and concluding remarks.

#### LITERATURE REVIEW

The capital adequacy is a conception that results from the idea of rearranging the existing capital structure of banks in order to restructure the banking industry against widespread distress. Adequate capital creates an opportunity for a better standards in any business establishment. It spurs business exertion and great performance.

In Nigeria, the concept of recapitalization is a measure adopted by authorities at the period of under-capitalization in order to rearrange the existing capital structure to meet up with the losses that accrued in the regime of increasing operation. Adequate capital aids recapitalization in that it emerges to meet the need of individual banks in form of increasing the minimum paid-up capital so that banks can carry out their operation efficiently with their customers. This is a form of correcting the wide spread distress of the banking sector. Recapitalization according to Abada (1988) is a measure that puts up the dubious practice that largely led to the collapse of many banks therefore, acts as cleaning effort in the system.

The effect of capital adequacy on banks performance cannot be underestimated since adequate capital directly and automatically influences the amount of funds available for loans, which invariably affects the level and degree of risk absorption. Gardner (1981) stresses that, despite its many roles and diverse functions, it is clear that bank capital is acting as protective cushion against losses precipitated by certain kinds of uncertainties. This view looks at capital as a constraint to avoid default and capital also acts as a cushion to protect depositors and other creditors against losses at the operating and liquidation stage. Graham (1985) emphasized that, if depositors are going to grow, capital must grow alongside. He affirmed that management discipline has an effect on capital. In this view capital constraint helps to avoid over-trading and curbs malpractices by management. Graham (1989) is of the view that prudent guideline of capital adequacy system has an important effect on bank capital, profitability and costs.



Mandatory capital ratios help to set corresponding profit target for banks; capital adequacy might influence banks cost of capital and overall cost of fund. Ceteris paribus, higher capital adequacy ratios may restrict the competitive ability of banks; they also affect banks growth capabilities. This view takes into consideration the effect mandatory capital ratios have on banks' performance being that if the banks are not able to meet up with the mandatory capital ratio it places a constraint on their lending abilities which eventually affect their primary function of money creation.

The importance of capital adequacy lies on the fact that it assists to spread the cost of prudent business conduct and deters the criminally mined. Umoh (1991), explains that, a bank requires capital adequacy for the same reasons other businesses many require capital. However, since banks deal with other people's moneys are safe. Nwankwo (1991) emphasized that the key element of capital is the only elements common to all countries' banking system. It is wholly visible in the published account as it is the basis market judgments of capital are made, and it has crucial bearing on profit margins and banks ability to compete. Oluyemi (1996), stated that, capital plays a significant role in the banking sector of an economy. The need for capital adequacy for banks a pressing problems not only in Nigeria but also to a very large extent in may other countries globally.

Ayodele (1988), for instance suggests that over the period 1952-1975 in the banking industry, a relatively large number of banks that failed was due to under capitalization. An emphasis by Bank of International Settlement (B.I.S) that, capital is one of a number factors to be weighted in assessing the strength and weakness of the equity values of a banks future net earning. This implies that capital is he total assets less total liabilities. It also stressed that capital is required in sufficient quality to enable banks perform its functions effectively and to maintain public confidence. Ekundayo (1999) believed that, adequacy of capital will help to enhance and stricture the financial resources of an organization with a view to enlarging the size of long-term funds available to the company. The basis for this, was to fill a hole, provided by working capital and funding capital projects. He explained that a hole could exist through persistent losses, deterioration on quality of assets, under-provisioning and fraud. The fresh injection of funds could them serve to provide working capital, computerization programmes etc. He noted that the larger the capital base of any company the easier for it to absorb any effects of sudden mishaps, the greater the size of the business the bank can handle, the lesser the risk the bank is likely to have. Thus capital adequacy has an effect on bank's performance.

# **Highlight of the Basle Report**

In 1988 agreement known as the Basle Accord, the Bank for International Settlements (BIS), established a framework for measuring bank capital adequacy for banks in the group of Ten countries and Luxembourg. The Basle committee was guided by the following objectives at



arriving at its recommendations. The need for a new framework that could serve to strengthen the soundness and stability of the international banking system, the new framework should be fair and have high degree of constituency in its application to banks in different countries with a view to diminishing existing sources of competitive inequality among international banks. Thus, the common standard set by the committee was meant to allow for international bank. The committee recommended a formula by which banks capital could be related to their risk asset.

The Basle Accord called for a minimum bank capital adequacy ratio of 8 percent of risk weighted assets for banks that engaged in cross-border transactions. The accord divides bank capital into two categories: Tier I Core Capital which consists of shareholders-equity and retained earnings, and Tier II Supplemental Capital, which consists internationally recongnized non-equity items such as preferred stock and subordinated bonds. Supplemental capital is allowed to account for no more than 50 percent of total bank capital or no more than 4 percent of risk-weighted assets (see table 2.1).

To determine risk-weighted assets, four categories of risky-assets are each weighted differently. More risky assets receive a higher weight. Government obligations (eg. Treasury bills/certificates) are weighted zero percent; short-term interbank assets are weighted at 20%, residential mortgages at 50percent and other assets at 100 percent. Thus, a bank with say \$100 million in each of the four asset categories would have the equivalent of \$170 million in risk-adjusted assets. It would need to maintain \$13.6 million in capital against these investments, of which no more than one-half of this amount or \$6.8 million could be Tier II capital. The Basle Accord as amended in 1999, has be widely adopted throughout the world by national bank regulators.

The approach was reported by the committee to have the following advantages over simple capital ratio approaches:

- it provided a fairer basis for making international comparison between banking system whose structures differ
- it allows off balance sheet exposures to be incorporated more easily into the measure
- it does not hinder banks from holding other liquid assets which carry low risk. After assigning a weight to each of the assets the total risk assets (TRA) which is the basis rule as explained by Umah (1991) would be as follows

 $TR = AiWi \qquad (1)$ 

Where Ai is assets

Wi is the weight assigned to the assets

A bank required capital (BRC) and banks tota lrisk assets (TRA) can be expressed as follows:



BRC > 0.0725 (TRA) by the end of 1991	(2)
BRC > 0.08 (TRA) by the end of 1992	(3)

As indicated above, there is a difference in the amount of capital required for various assets categorized in the portfolio of a bank. All things being equal, (ceteris paribus); the risk based capital guidelines are likely to have a significant impact on the way many banks structure their assets portfolios, especially the loan portfolio.

Equation (1) explains that a banks total risk assets is a weighted average of the banks assets and their assigned risk weights. Equation (2) shows that by the end of he 1991 the required capital of an international banks should equal 7.25% of the average of the banks total risk assets, while equation (3) says that the capital by the end of 1992 should equal 8% of risk assets. The Basle committee's framework further provided for a transactional period so that existing circumstances in different countries could be reflected in flexible arrangements that allows time for adjustment, this was necessary according to the four (4) accounting systems in individual countries. (BIS July 1998).

Assets Category Example	Risk Weights (A)%	Risk Capital Required (B)%	Actual Capital Required (A) x (B)%
Cash	0	.8	0.0
Owner occupier of residential mortgage balance	050	.8	4.0
Off Balance sheet item	.2	.8	1.6
Fixed Assets	10.0	.8	8.0

Table -1. A Sample Weighting Assets Under the Basle Accord Standard

Source: BIS Report, July 1998

From the table, fixed assets required 8% actual banking whereas off balance sheet item which have a lesser risk i.e. 20% weight as envisaged 1.65 by the components of the required actual banking.

# **Capital Requirements of Nigerian Banks**

Since the inception of banking regulation in Nigeria, there has always been a directive issued from time to time by the regulatory authorities on the minimum paid-up capital required before a bank can be licensed to operate. The stipulated minimum paid-up capital requirements over the years have witnessed a steady growth in amount since the first Nigeria banking law was passed in 1952. The 1952 banking ordinance stipulated a minimum capital of N25,000 for indigenous and N200,000 for expatriate commercial banks in the system. This rose to N600,000 and N1.05m for

 $\frac{1}{1000}$  indigenous and expatriate banks respectively by the 1962 act.

The minimum paid-up capital before 1991 was N20 million and by the provision of section 9 (2) of Bank and Other Financial Institution Decree (BOFID), the minimum start-up capital rose to N50



million and in the 1997 budget it was increased to \$500 million for both commercial and merchant banks. Presently, the minimum start-up capital has been increased from \$2 billion in 2004 to a minimum of \$25 billion. There is no doubt that the Basle Accord, influenced the bank recapitalization policy in Nigeria.

# METHODOLOGY

### **Performance Ratios for Sample Banks**

Data for this analysis is mainly from secondary sources. These include the Central Bank of Nigeria Statistical Bulletin, Nigerian Deposit Insurance Corporation (NDIC) and the financial Statement of the selected banks. The performance of the case study banks for the period pre and post re-capitalization is presented in this section. The result are presented under the following sub-heads: Capital adequacy, Liquidity, Asset quality, Credit Exposure and Profitability (as measured by return on capital employed) with the banks categorized as – new generation (Pre-SAP) and old generation (Post-SAP)

# **Capital Adequacy**

Capital Constitutes a fall-back situation for any institution in times of unforeseen developments. It would be important to know how much times are being contributed by equity owners in relation to each naira of total capital. This ratio is calculated as Capital Employed Total Assets (Networth)

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	Banks	2003	2004	2005	2006	2007
Old Generation	First Bank	6.6	10.8	10.3	10.4	90.8
	UBA	7.3	9.2	7.8	5.5	14.1
	Union Bank	9.9	9.4	7.8	15.0	14.7
New Generation	Intercontinental	13.5	10.4	17.0	14.7	14.4
	Oceanic Bank	12.3	11.9	14.3	10.1	4.7
	Zenith Bank	11.2	8.1	12.8	16.2	11.8

Table-3.1. Capital Adequacy.

This is part of financial leverage ratio. From lenders' perspective, the amount of equity represents cushion against operating losses or against decline in asset value.

# Liquidity

For banking operation liquidity is a statutorily required conditions cash reserve and liquidity asset ratios are annually prescribed by the monetary authority. The ability of the bank to meet periodic cash demand of customers is a measures of its strength and an assurance for depositors' confidence. In this study we measured the current ration of the banks.



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	Banks	2003	2004	2005	2006	2007
Old Generation	First Bank	5.6	7.0	7.8	9.2	7.5
	UBA	49.2	46.9	47.8	9.6	12.7
	Union Bank	83.6	76.4	78.9	63.1	69.1
New Generation	Intercontinental	39.2	33.7	9.7	10.7	10.6
	Oceanic Bank	17.9	16.3	6.9	5.6	18.2
	Zenith Bank	77.2	68.6	62.7	70.4	59.8

Table-3.2. Liquidity of Banks

# **Asset Quality**

Here we are interested in the relationship between deposits and total assets as well as loan deposit ratio as indications of market discipline

	Banks	2003	2004	2005	2006	2007
Old Generation	First Bank	65.8	66.5	70.6	72.8	65.8
	UBA	69.9	71.7	81.7	87.8	76.0.
	Union Bank	68.6	67.5	61.6	61.6	68.9
New Generation	Intercontinental	68.6	65.9	68.9	68.1	78.9
	Oceanic Bank	75.2	76.7	76.8	83.5	66.9
	Zenith Bank	54.7	67.8	70.6	63.5	65.2

Table-3.3. Asset Quality of Banks

# Loan/Deposit Ratio

Table-3.4. Loan/deposit ratio of banks

	Banks	2003	2004	2005	2006	2007
Old Generation	First Bank	22.4	32.6	37.5	39.5	36.4
	UBA	32.4	36.9	32.9	14.2	35.4
	Union Bank	24.0	31.0	27.0	30.9	32.2
New Generation	Intercontinental	48.3	50.9	63.3	54.7	39.6
	Oceanic Bank	26.3	36.4	46.4	31.8	49.0
	Zenith Bank	44.3	40.7	52.2	50.9	45.4

# Loan/Total Asset

Table-3.5. Loan/Total Asset Ratio

	Banks	2003	2004	2005	2006	2007
	First Bank	14.7	21.7	26.3	28.7	29.9
Old Generation	UBA	22.6	26.6	26.9	12.4	26.9
	Union Bank	16.5	20.9	16.7	19.0	22.9
New Generation	Intercontinental	33.1	33.6	43.7	37.3	31.3
	Oceanic Bank	19.8	27.9	35.9	26.5	32.8
	Zenith Bank	24.3	27.6	36.9	32.3	29.6

# Profitability

Profitability aims at measuring the operating efficiency of the banks pre and post recapitalization. Here we use Return on Investment or Capital Employed (ROCE)



	Banks	2003	2004	2005	2006	2007
Old Generation	First Bank	40.7	27.6	27.2	27.0	24.6
	UBA	22.0	23.2	25.3	23.7	12.8
	Union Bank	23.0	24.5	23.3	10.8	13.4
New Generation	Intercontinental	33.0	17.6	13.9	9.8	17.4
	Oceanic Bank	35.3	31.7	18.9	25.4	33.7
	Zenith Bank	34.9	33.1	17.0	11.5	16.4

### **Return on Capital Employed**

Table-3.6. Return on Capital Employed

The hypothesis formulated is as follows:

H<sub>0</sub>: There exist no significant relationship between capital adequacy and bank performance.

**H**<sub>1</sub>: There exists significant relationship between capital adequacy and bank performance.

### **Statistical Estimation**

The Basel Capital Accord is an international standard for the calculation of adequacy capital adequacy ratio. In its analyses of 1999, the accord incorporated various variables that affect bank soundness and safety into its framework. These variable include: Owners capital, Assets quality, Total deposit, Loans and Advances, Ratio of capital to total assets, Credit exposures, Returns, Market discipline and effective supervision. The above framework was modified and expressed in functional relationship as shown below in order to fit into the analysis.

EPS	=	F(LA, CD, SF)	 (1)
PAT	=	F(LA, TA, CD, SF)	 (2)
Where:			
EPS	=	Earnings Per Share	
PAT	=	Profit After Tax	
LA	=	Loans and Advances	
SF	=	Shareholders Fund	
TA	=	Total Asset	
CD	=	Customer Deposit	

The theoretical expectation and behaviour of the parameter can be determined as the basis of the theoretical reasoning.

In equation 1 (LA) and (SF) the shareholder's fund should enhance bank's profitability and performance. While in equation 2, Loans and advances (LA), Total Assets (TA), Customers' deposits (CD) and shareholders' funds (SF) should have positive effects on the profit after tax. In equation 1 and 2 EPS and PAT are measures of performance, other variables in the model are the explanatory variables. Out of these the shareholders fund, (SF) which is a measure of capital



adequacy is the variable of interest. The Ordinary Least Square (OLS) techniques of multiple regressions shall be adopted to examine and determine the effect of the independent variables on the dependent variables. The OLS is adopted because it has been used in a wide range of economic relationships with fairly satisfactory result.

# **RESEARCH FINDINGS**

The summary of the regression results for the banks are presented in the following tables:

**Table-4.1**.Regression Result of EPS on Loans and Advances, Customer Deposits an Shareholder's

 Funds

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LA	1.495894	0.121015	12.36124	0.0514
CD	-0.001755	0.000164	-10.71208	0.0593
SF	-0.001068	0.000391	-2.735107	0.2231
C	-163409.2	0.000391	-13.47344	0.0472
	-103409.2	0.000110		55589.15
R-squared		0.998118	Mean dependent var	
Adjusted R-square		0.992473	S.D. dependent var	122977.8
S.E. of regression		10669.36	Akaike info criterion	21.37870
Sum squared reside		1.14E+08	Schwarz criterion	21.06625
Log likelihood		-49.44676	F-statistic	176.8060
Durbin-Watson Stat		2.545508	Prob(F-statistic)	0.055215

Source: Authors' Computations

A closer examination of the regression result for Spring Bank in table 4.1 above shows that Loans and advances (LA) has a positive relationship with the dependent variable (EPS). The sign is appropriate and significant indicating the quantum and quality of loans and advances for the period under review. EPS has a positive relationship with customer's deposit as expected. The major independent variable in this equation which is the shareholder's fund (SF) is inappropriately signed in that it has a negative relationship with the dependent variable. This reflects the low capital adequacy of Nigerian banks during the review period. Except for SF, other variables are appropriately signed. The  $R^2$  of 0.998 shows that about 99% variations in EPS is explained by the independent variable included in this equation. The unexplained variations may include the management ability to use the resources efficiently as well the level of technology in the bank etc. Data are however not readily available for these variables. On individual basis, only the loans and advances fund indicates a significant relationship with the dependent variable. Shareholder funds (SF) is significant at 10% level of significant. This is the main independent variable of concern in the equation.

In this case the observed t-value of 2.735 is greater than the t-value at 10% which is 1.350 i.e. 2.735 > 1.350. The Durbin Watson of 2.545509 which is above 2 shows that there is no serial auto



correlation to enhance EPS among the disturbance terms. From table 4.1 above, the regression result shows a negative relationship between loans and advances (LA) and the dependent variable. This negative relationship is inappropriately signed because higher LA is expected to enhance EPS. The shareholder funds show a negative relationship with the dependent variable EPS. This is not appropriately signed as expected. It is expected that SF will have a positive relationship with the EPS. The negative sign observed in the above equation is due to the position of most Banks in Nigeria where the capital base of bank is grossly inadequate thus it is observed that the customer deposit is even more than the shareholders funds. This accounts for the inappropriate sign noted in the above equation.

Also, the overall significance shown by the F-test is very significant. This shows that the dependent variable robustly explains accurately changes in dependent variable.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LA	192.9982	16.04613	12.02771	0.0528
DL	-0.169634	0.023601	-7.187718	0.0880
ТА	0.034506	0.006347	5.436665	0.1158
SF	-0.439590	0.068602	-6.407825	0.0986
R-squared		0.999461	Mean dependent var	56606795
Adjusted R-square		0.997845	S.D. dependent var	36828039
S.E. of regression		170977.1	Akaike info criterion	31.53218
Sum squared reside		2.92E+12	Schwarz criterion	31.21973
Log likelihood		-74.83045	F-statistic	618.2808
Durbin-Watson Stat		2.591466	Prob(F-statistic)	0.029553

Table-4.2. Regression result of PAT on loan and Advance, Total Assets, CD & Shareholder Fund.

Source: Authors Computation.

From table 4.2 loans and advances in the banks revealed a strong and positive relationship with the dependent variation (PAT). This variable (LA) is appropriately signed in that it is expected to have a positive relationship depending on the quality of the loans and advances given to customers. If the quality of the loans and advances is higher, it is expected to have a positive effect, but if the quality of loans is poor, then it is expected to have a negative effect. The quality of loans here refers to the degree of loan repayment. The total asset (TA) shows here a positive relationship with the dependent variable. This is appropriately signed as expected. One of the reasons for this appropriate sign may be the composition of the total asset used in the study. The customer deposit (DL) has a negative relationship with dependent variable and it is signed as expected. The shareholders fund (SF) which is the main independent variable in this study has a negative relationship with the dependent variable and it is inappropriately signed.

The  $R^2$  of 0.999 shows that 99% variation in the dependent variable is explained by the independent variables and this is very significant. The adjusted  $R^2$  of 0.997 which is about 99% shows that the  $R^2$  indicates the true behaviour of the dependent variable according to changes in the



independent variable. The f-statistics of 618.2806 is very significant and it shows that the independent variables greatly explain changes in the dependent variable.

Individually, two of the independent variables show significant relationship with the dependent variable at 1% and 5% level of significance Loans and Advance (LA) significant at 1% level of significance. This means that the t-value tabulated less than the t-value observed. The Total Assets is significant at 0.005 level of significant. The t-value observed is greater than the t-value tabulated. The SF which is the variable of interest in the study is one of the most significant independent variable.

# SUMMARY, CONCLUSION AND RECOMMENDATIONS

In this study we try to investigate the impact of the adoption of the Basle Accord, Capital Adequacy Standards on the performance of Nigerian banks.

Of the two models formulated to measure performance in the selected banks, model 2 which has the profit after tax (PAT) as its dependent variable and loans and advances, bank deposit, total asset and the shareholders fund as its explanatory variables is the most significant model in all the banks. The coefficient of determination of this is 99% (Table 4.2). In both models, the shareholders' fund which is the measure of capital adequacy and the variable of interest was the main impendent variable. Other explanatory variables such as loans and advances, customer deposit and total asset were used as explanatory variables because they also have effect on banks' performance. Reflecting on the result of the analyses in the study, it is obvious that capital adequacy exerts a major influence on bank performance

The implication of this was clearly seen in the t-test analysis where the shareholders fund (a measure of capital adequacy) reflects a significant relationship within the models. However, the coefficient of determination ( $R^2$ ) and the F-test show that there are other variables that affect the performance apart from the owner's capital.

Loans and advances for example can determine the level of growth in banks. If the quality of loan and advances in terms of repayment and performance is high, banks performance will improve, but if the quality is poor, the banks risk will be increased and this will hinder growth. Apart from this, the quality of assets portfolio in a bank has a great influence on bank performance. Investment in poor and too risky asset will definitely retard growth while a well diversified and high quality asset will enhance performance. Findings from the study show that capital adequacy has a major positive impact on banks' performances because it has direct relationship with other key variables that affect performance.



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This study tested the effect of the shareholders funds on key variables such as profit, total assets, total deposit, return on asset, earning per share, loans and advances and the credit risk. The result showed that there is a significant relation between the share capital and these variables, although not all results were significant. A critical look at the data analyzed also shows that the share capital of the selected banks were very small compared to the values of their deposits and total assets. This has led to the problem of over-trading whereby the share capital available in a bank is inadequate for the volume of their business operations. Finally, the impacts of the Nigerian monetary authority on the new capital requirement were found to have been complemented with the adopted Basle capital accord framework.

Based on the analyses and findings in this study, it is suggested that the regulatory bodies i.e. CBN and NDIC, should not rely solely on the N25 billion capitalization of banks as a determinant of good banks' performance but should also concentrate on efficient and effective bank management supervision. In addition, they should put effective machinery in motion on banks examination and control of banks in the nation. Also in as much as banks are being compelled to meet up and maintain the stipulated capital standard and requirements, bank should also be given freedom to function efficiently as business organizations. Apart from this, the central bank of Nigeria (CBN) should undergo a reengineering process aimed at repositioning the banks to be responsive to the demands of economic development.

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