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Impact of Non-Performing Loans on the Performance of Selected Commercial Banks in Nigeria

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Abstract
The study examined the impact of Non-performing Loans on the Performance of Selected Commercial Banks in Nigeria covering the period 2000 - 2013 with special emphasis on Access Bank, United Bank for Africa and Union Bank of Nigeria Plc. It specifically determined the effect of non-performing loans, provision for loan loss and loans and advances on the performance of banks measured by Return on Assets and Return on Equity. The study utilized secondary data obtained from annual report and accounts of the selected banks for the period under study. The data were analyzed using ordinary least square method and ratio analysis. The specific finding of the work is that return on asset and return on equity have inverse relationship with non-performing loans and loan loss provision respectively while they are positively related to loans and advances. The conclusion therefore is that the effects of non-performing loans on Commercial Banks' performance is negative and cannot be underestimated, and poses a fundamental danger to the very existence of the Banks as corporate business entities. Based on the above findings, the work recommends that banks should maintain high credit standards while the Apex Bank and other regulatory agencies should maintain high surveillance on banks' credit operations.
Keywords: Loans and advances, Nonperforming loans, Provision for loan loss, Deposit Money Banks, Return on Assets and Return on Equity.

1. Introduction

Commercial banks are the most relevant financial institution in many countries which encourage and mobilize savings and also channel such savings into productive investment. The reason is because of their high network of offices; and secondly because the banks are strong and thus attract savers. Commercial banks (Deposit Money Banks or DMBs) also accept deposits from customers and lend to borrowers for various purposes; this role paramount and outweighs every other one. They serve as intermediaries between borrower and savers. In the process of lending, new money is created by banks through the deposit lending multiplier effect. Based on this, DMBs are able to influence the level of money stock, the allocation of fund, the direction and use of resources in the economy.

Obviously, credit creation is the main income generating activity of banks (Kargi, 2011). However, it exposes the banks to credit risk. The Basel Committee on Banking Supervision (2001) defined credit risk as the possibility of losing the outstanding loan partially or totally, due to credit events (default risk). Credit risk is an internal determinant of bank performance. The higher the exposure of a bank to credit risk, the higher the tendency of the bank to experience financial crisis and vice-versa. According to Ahmad and Ariff (2013), most banks in Nigeria and other economies such as Thailand, Indonesia, Malaysia, Japan and Mexico experienced high Non-Performing Loans(NPLs) and significant increase in credit risk during financial and banking crises, which resulted in the closing down of several banks in Indonesia and Thailand. The negative effect of credit risk and non-performing loans on banks performance and the economy in general has made the issue of NPLs a global one and of great importance in the last decades. According to Hou and Dickinson (2007), many researches on the causes of bank failures found that asset quality is a statistically significant predictor of insolvency, and that failing bank institutions always have high level of Non-performing loans prior to failure. Therefore, in managing the lending portfolio to attain the desired results, the bank should give adequate attention to the above factors.

On this premise therefore, some of the pertinent questions to be addressed by the study are as follows: To what extent does non-performing loans affect the performance of banks in Nigeria?; To what extent does loan loss provision affects the performance of banks in Nigeria?; To what extent does loans and advances impact on performance of banks in Nigeria? Consequently, the direction of this study is to empirically establish the effect of non-performing loans on the performance of commercial banks in Nigeria.

2. Literature Review

2.1 Profile of the Selected Banks

2.1.1 Union Bank of Nigeria Ltd

Union Bank of Nigeria's rich history can be traced to 1917 when it was first established as Colonial Bank. In 1925 the bank became known as Barclays Bank DCO (Dominion, Colonial and Overseas) resulting from its acquisition by Barclays Bank. Following Nigeria's independence and the enactment of the Companies Act of

1968, the bank was incorporated as Barclays Bank of Nigeria Limited (BBNL, est. 1969).

Between 1971 and 1979, the bank went through a series of changes including its listing on the NSE and share acquisitions/transfers driven by the Nigerian Enterprises Promotion Acts (1972 and 1977); this resulted in its evolution into a new wholly Nigerian-owned entity. To reflect the new ownership structure, and in compliance with the Companies and Allied Matters Act of 1990, it assumed the name Union Bank of Nigeria Plc. (UBN "the Bank" or "Union Bank"). In 1993, in line with its privatisation/commercialisation drive, the Federal Government divested by selling its controlling shares (51.67%) to private investors. Thus, Union Bank became fully owned by Nigerian citizens and organizations all within the private sector. During the Central Bank of Nigeria's (CBN) banking sector consolidation policy, Union Bank of Nigeria Plc acquired the former Universal Trust Bank Plc and Broad Bank Ltd. and absorbed its one-time subsidiary, Union Merchant Bank Ltd.

Following the banking crisis in 2009 and the intervention of the CBN via Asset Management Company of Nigeria (AMCON), the bank was recapitalized in 2012 with an injection of $500 million by Union Global Partners Limited (UGPL), a consortium of local and international investors. UGPL acquired 65% of the bank's shareholding and in the last quarter of 2014, AMCON's remaining 20% stake in the bank was acquired by Atlas Mara. UGPL comprises: Africa Capital Alliance, ADC African Development Corporation, Corsair Capital, FMO (the Netherlands Development Finance Company), Chandler Corporation, Standard Chartered Private Equity. (UBN, 2013).

2.1.2 United Bank for Africa (UBA) Plc

United Bank for Africa (UBA) Plc is a leading financial services group in sub-Saharan Africa with presence in 19 African countries, as well as the United Kingdom, the United States of America and France. The origin of UBA dates back to 1949 when it was first referred to as the British and French Bank Limited (BFB). It took over the assets and liabilities of BFB and was incorporated as a limited liability company on 23 February, 1961 under the Companies Ordinance (Cap 37) 1922. UBA was the first Nigerian bank to make an Initial Public Offering (IPO), following its listing on the NSE in1970. It was also the first Nigerian bank to issue Global Depository Receipts (GDRs).

In 2005, it completed one of the biggest mergers in the history of Nigeria's capital markets following the business combination with Standard Trust Bank (STB) Plc. It is a publicly quoted company listed on the Nigerian Stock Exchange (NSE) and has a well-diversified shareholder base. UBA is a financial institution offering a range of banking, other financial and pension fund custody services (UBA, 2013).

2.1.3 Access Bank Plc

Access Bank Plc is a full service commercial and retail bank with headquarters in Nigeria and operations across sub-Saharan Africa and the United Kingdom. It was incorporated in February 1989 as a privately owned financial institution and commenced banking operations in May 1989. It was listed on the Nigerian Stock Exchange in 1998. The Bank engages in commercial banking, business banking. personal banking and corporate & investment banking. Some of the products Access bank offers include current and savings accounts, loans and advances, etc.(Access Bank, 2013)

2.2 Conceptual Framework

In its general term a loan is a written or oral agreement for a temporary transfer of a property (usually cash) from its owner (the lender) to a borrower who promises to return it according to the terms of the agreement, usually with interest for its use. However, in the ambience of banking upon which our research is based a loan is regarded as money which is borrowed from a lending institution or a government agency and repaid at a future date. According to Onyiriuba (2009) a loan is money that a bank lets a borrower to have the use of as a credit facility on condition that they pay it back with interest to the bank at an agreed future date.

According to Onyeagocha (2001), the term credit is used specifically to refer to the faith placed by a creditor (lender) in a debtor (borrower) by extending a loan usually in the form of money, goods or securities to debtors. Essentially, when a loan is made, the lender is said to have extended credit to the borrower and he automatically accepts the credit of the borrower. Credit can therefore be defined as a transaction between two parties in which the creditor or lender supplies money, goods and services or securities in return for promised future payments by the debtor or borrower.

Loans are generally repaid according to pre-agreed terms of agreement as detailed in the repayment schedule which states the amount of principal and interest that is due during the tenor of the loan. If the loan is repayable on the demand of the lender, it is called a demand loan. If the loan is repayable in equal monthly installments (EMI), it is referred to as an installment loan. If repayable in lump sum at the loan's maturity (expiration) date, it is a time loan. Banks further classify their loans according to the assets financed such as consumer loan for consumer items. Others are commercial, industrial, construction, personal or mortgage. Further loan classification could be secured or unsecured depending on whether they were properly backed by collateral.

Non-Performing loans arises from the extension of credit facilities to customers (Inekwe, 2010). This

exposes banks constantly to credit risk due to the possibility that the borrower will default. Usually banks try to avoid or minimize credit risk in their portfolio. There are various ways of evaluating the credit worthiness of a borrower, one of which is the 5Cs of credit, i.e Character, Capacity, Condition and Collateral. To Onyia and Oleka (2010), they are also known as the Canons of good lending. In the same vein, Mather as cited in Aremu, Suberu and Oke (2010) described three basic principles of evaluating credit as Safety, Suitability and Profitability. First, they maintained that the safety of any advance or loan is of utmost importance. Under this principle, the character, amount generated from cash flow and acceptable securities were equally emphasized. Secondly, they contended that the purpose of the loan must be legal and not conflicting with the economic and monetary policies of the government, Central Bank of Nigeria (CBN) guidelines and Banks and Other Financial Institutions Act (BOFIA). Finally, that profitability is a guiding force to any operation of the bank. They argue that as profit oriented institutions, banks usually expect their facilities to yield certain level of profit. That was why Panday (as cited in Ayodele, 2010), believed that bad debts are familiar words to bankers; and people wonder occasionally why bad debts occur despite all the rules and regulations guiding banks. Yet the best way to avoid bad debt is to make zero lending, but banks cannot afford zero lending since greater proportion of their earnings come from interest earned on loan and advances.

Despite the above methods of evaluating credit in the banking industry in Nigeria a lot of its advance and loans end up as NPLs. However, Hou and Dickinson (2007) definition do summarize the elements of NPLs as defined in many jurisdictions including Nigeria. He defined NPLs as a loan that is not earning income and: Full payment of principal and interest is no longer anticipated, Principal or interest is 90 days or more delinquent, or The maturity date has passed and payment in full has not been made.

2.3 Theoretical Framework

Bank loans are regarded as risk assets. They are regarded as such because the monies advanced as loans by the banks belong to depositors and the risk arises in the sense that in case of massive defaults, depositors' monies may not be available on demand. Banking and indeed lending may therefore suitably be regarded as high-risk business. The subject matter of risk and uncertainty assume considerable importance in determining business success or failures. According to Pandy (2006) risk arises because we cannot anticipate the occurrence of possible future events with certainty and consequently cannot make any correct prediction about the cash flow sequence. There is risk associated with life itself as well as in business. Despite the important role played by credit in the economy, it is associated with a catalogue of risks. According to Obalemo (2004), credit risk is an assumed risk that a borrower won't pay back the lender as agreed. The various types of credit risks include management risk, geographical risk, business risk, financial risk and industrial risk. The probable occurrence of partial or total default requires a thorough risk assessment prior to granting loans. Field (2011) the human condition is that of living with risk. The success or failure of banks therefore lies with management of skills and their ability to package loans and deliver such value as would mitigate risks of default.

The Central Bank of Nigeria through its Prudential Guideline (2010) mandated all licensed banks in Nigeria to review their credit portfolio continuously (at least once in a quarter) with a view to recognizing any deterioration in credit quality. According to the Guideline, Credit facilities (which include loans, advances, overdrafts, Commercial Papers, Bankers Acceptances, bills discounted, leases, guarantees, and other loss contingencies connected with a bank's credit risks) should be classified as either "performing" or "non-performing" as defined below: Performing: According to the Guideline, a credit facility is deemed to be performing if payments of both principal and interest are up-to-date in accordance with the agreed terms; Non Performing: a credit facility should be deemed as non-performing when any of the following conditions exists: (i) Interest or principal is due and unpaid for 90 days or more; (ii) Interest payments have been capitalized, rescheduled for over 90 days or rolled over into a new loan.

According to Robert Bench (1991) the scope of lending (credit) policies should include: who receive the credit; who grants it (and how); the pricing of the credit; the amount of credit and organizational structure for its distribution. Other issues like what kind of credit and under what circumstances they are granted, also come into this preview of credit policymaking. The above definition by Bench seeks to specify the scope of credit policy. However, the definition could be stretched further by pointing out the fact that credit policy influences and affects the administration and management of credits.

Etloite (1989), argued that however competent a manager is in his lending practices, bad debt will arise or the repayment of a loan and advance will become doubtful from time to time will eventually affect profitability. He pointed out that bad debts pass through doubtful stage prior to a real loss of money occurring and that there are lots of reasons for lending becoming unsatisfactory. These reasons according to him include; (i). Customers not being able to manage their business efficiently, (ii). A principal member of the company dying (iii). A falling demand for goods or services (iv). Excessive drawing by the proprietors of the business or (v). Failure to live within their means and even adverse whether condition working against a particular business.

2.4 Review of Related Empirical Literature

Credit risk is a serious threat to the performance of banks; therefore various researchers have examined the impact of credit risk on banks in varying dimensions. Credit risk management greatly influences or prevents the failure of a bank. This is because the failure of a bank is influenced to a large extent by the quality of credit decisions and thus the quality of the risk assets. Credit risk management provides a leading indicator of the quality of banks credit portfolio (McNaugton 1994). Felix and Claudine (2008) investigated the relationship between bank performance and credit risk management. It could be inferred from their findings that return on equity (ROE) and return on assets (ROA) both measuring profitability were inversely related to the ratio of non-performing loan to total loan of financial institutions thereby leading to a decline in profitability.

Kithinji (2010) assessed the effect of credit risk management on the profitability of Deposit Money Banks in Kenya. Data on the amount of credit, level of non-performing loans and profits were collected for the period 2004 to 2008. The findings revealed that the bulk of the profits of Deposit Money Banks are not influenced by the amount of credit and non-performing loans, therefore suggesting that other variables other than credit and non-performing loans impact on profits.

Kargi (2011) evaluated the impact of credit risk on the profitability of Nigerian banks. Financial ratios as measures of bank performance and credit risk were collected from the annual reports and accounts of sampled banks from 2004-2008 and analyzed using descriptive, correlation and regression techniques. The findings revealed that credit risk management has a significant impact on the profitability of Nigerian banks. It concluded that banks' profitability is inversely influenced by the levels of loans and advances, non -performing loans and deposits thereby exposing them to great risk of illiquidity and distress.

Epure and Lafuente (2012) examined bank performance in the presence of risk for Costa-Rican banking industry during 1998-2007. The results showed that performance improvements follow regulatory changes and that risk explains differences in banks and non-performing loans negatively affect efficiency and return on assets while the capital adequacy ratio has a positive impact on the net interest margin.

Ahmad and Ariff (2013) examined the key determinants of credit risk of Deposit Money Banks on emerging economy banking systems compared with the developed economies. The study found that regulation is important for banking systems that offer multi-products and services; management quality is critical in the cases of loan-dominant banks in emerging economies. An increase in loan loss provision is also considered to be a significant determinant of potential credit risk. The study further highlighted that credit risk in emerging economy banks is higher than that in developed economies.

Ahmed, Takeda and Shawn (2013) in their study found that loan loss provision has a significant positive influence on non-performing loans. Therefore, an increase in loan loss provision indicates an increase in credit risk and deterioration in the quality of loans consequently affecting bank performance adversely.

The risks in lending stem from the various factors that can lead to non-payment of the loan obligation when it falls due. Losses sometimes result from "acts of god" such as storm, drought, fires, earthquakes and floods. Changes in consumer demand or in technology of an industry may alter drastically the fortunes of a business firm and place a once profitable borrower to a loss position. A prolonged strike, competitive price cutting, or loss of key management personnel, can seriously impair a borrowers' ability to make loan repayments. The swings of the business cycle affect the profits of many who borrow from banks and influence the optimism and pessimism of business people as well as consumers.

3. Research Methodology

3.1 Data Sources and Model Specification

The macroeconomic nature of the study prompted the use of secondary data. The essence of using secondary data is because of the nature of the study data, which essentially involve the use of published work and in order to meet the information requirement, as well as for accuracy and precision of data. The data used in this study were sourced from the Annual Report and Accounts of the three selected banks in Nigeria namely: Union Bank of Nigeria(UBN) Plc, United Bank for Africa (UBA) Plc and Access Bank Plc . The data used are aggregates for each variable obtained for the period 2000 – 2013 (14 years). The period was chosen to cover to a reasonable extent the period of various reforms in the banking sector and because of the availability of data.

3.2 Development of the Model

The model adopted for this study is underpinned to the model of Kargi (2011) in his study "Credit Risk and the Performance of Nigerian Banks" which measured profitability with Return on Asset (ROA) as a function of the ratio of Non-performing loan to loan and Advances (NPL/LA) and ratio of Total loan and Advances to Total deposit (LA/TD) used as indicators of credit risk. However, the study modified the model used by Kargi (2011). In this recent work, in addition to ratio of Non-performing Loan to Loan and Advances (NPL/LA), the ratio of loan loss provision to loan and advances (LLP/LA) shall be used as one of the indicators of non-performing loan as well as ratio of Loan and Advances to total Assets (LA/TA). Also, Return on Equity (ROE) and Return on

Assets (ROA) shall be used as proxy for bank performance.
The model for this study functionally becomes:
ROA = f(NPL/LA,LLP/LA, LA/TA)----------(1)
ROE = f(NPL/LA, LLP/LA, LA/TA) ----------(2)
Where;
ROA: Return on Assets (ratio of Profit after Tax to Total Assets (PAT/TA)*100)
ROE: Return on Equity (ratio of Profit after Tax to Equity)
NPL: Ratio of Non-Performing Loan to Loans and Advances: (NPL/LA)*100
LA: Ratio of Loans and Advances to Total Assets.
LLP: ratio of Loan Loss Provision to Loans and Advances: (LLP/LA)*100
The econometric equation for the model is specified as:
$ROA = \beta_0 + \beta_1(NPL) + \beta_2(LLP) + \beta_3(LA) + \mu_t$ ----------(3)
$ROE = \beta_0 + \beta_1(NPL) + \beta_2(LLP) + \beta_3(LA) + \mu_t$ ----------(4)
Where;
β_1, β_2 and β_3 are the partial slope coefficients or parameters of the independent variables, NPL, LLP and LA respectively, β_0 is the intercept term or constant variable in each of the models, and μ_t is the disturbance term (error term).

The 'a priori expectation' in the model is that the independent variables, NPL and LLP are expected to have an inverse relationship with bank performance while LA is expected to have positive relationship. The mathematical expression is represented as; β_1, β_2, < 0; $\beta_2 > 0$. Note that in the models: NPL = (NPL/LA)*100; and LLP = (LLP/LA)*100. LA = (LA/TA)*100.

4. Data Presentation and Analysis

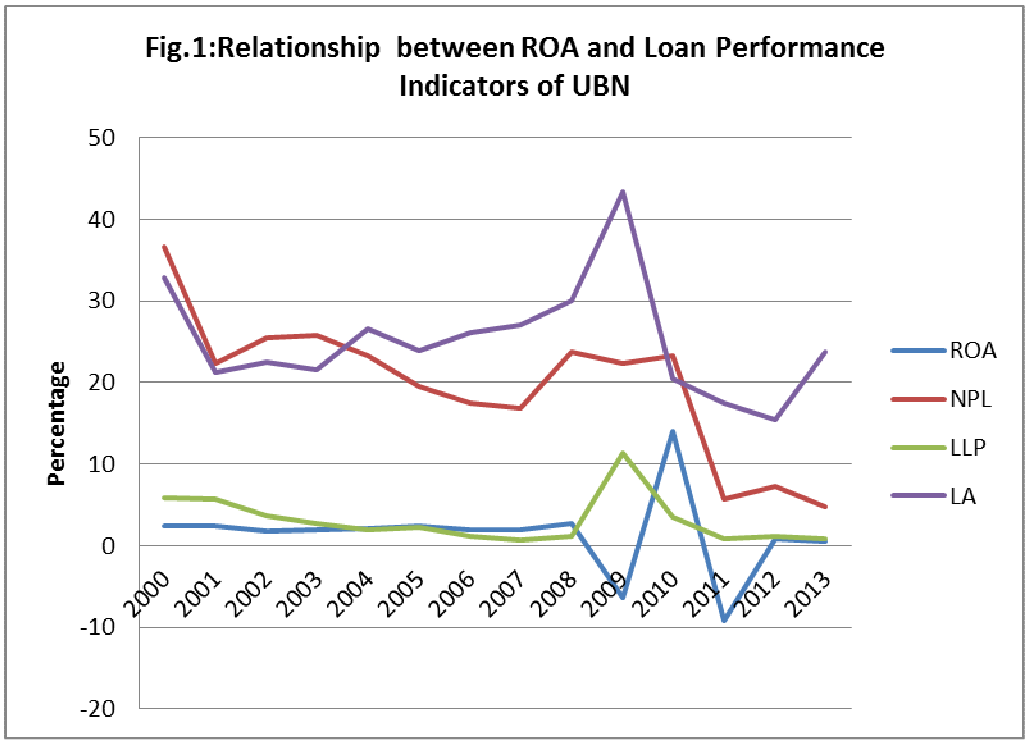
In attempt to answer the questions of the study and the consequent hypothesis so developed, the writer shall use the Multiple Regression Statistical techniques. Also, 5% (0.05) level of significance or 95% confidence level was chosen for the purpose of this study. In addition, the descriptive analysis will be carried out using ratio analysis.

4.1 Ratio Analysis

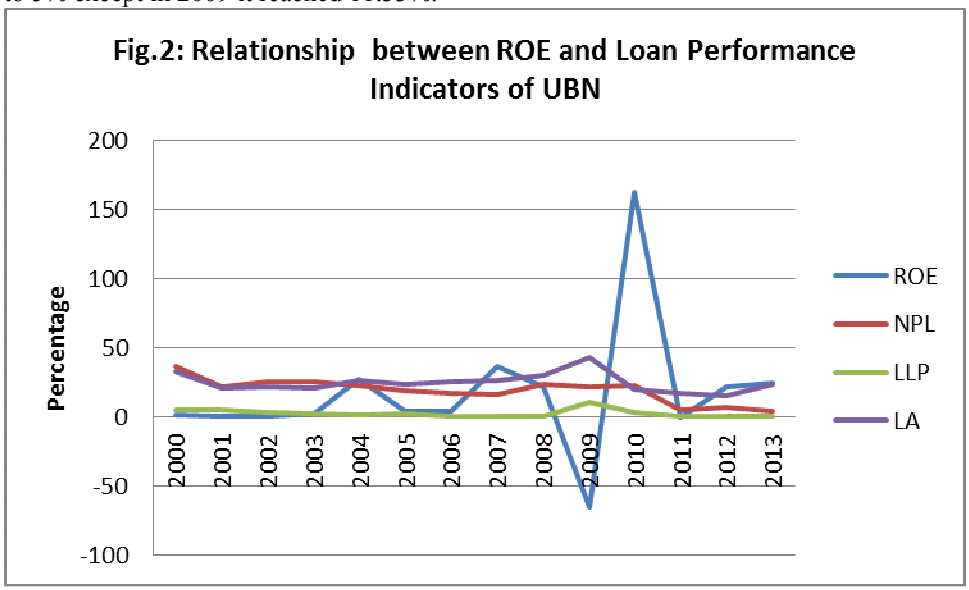
Table 1:UBN Financial Performance and Loan and Advances indicators 2000 – 2013.

	UBN				
Year	ROA %	ROE %	NPL %	LLP %	LA %
2000	2.48	1.75	36.70	5.79	32.80
2001	2.34	0.46	22.37	5.64	21.33
2002	1.72	0.65	25.51	3.66	22.52
2003	2.00	2.76	25.74	2.67	21.53
2004	2.11	27.23	23.28	1.93	26.55
2005	2.35	4.81	19.49	2.27	23.94
2006	1.94	4.12	17.50	1.13	26.06
2007	1.96	36.83	16.85	0.74	27.08
2008	2.73	22.12	23.84	1.19	30.09
2009	-6.42	-64.72	22.43	11.33	43.39
2010	14.07	163.00	23.37	3.55	20.53
2011	-9.27	-0.28	5.64	0.86	17.45
2012	0.89	22.20	7.24	1.10	15.45
2013	0.58	25.00	4.73	0.78	23.82

Source: Computed from Union Bank Financial Statement for various years.



Return on Assets(ROA) expresses a relationship between the net profit after taxes of the firm and its net assets. Like the other profitability ratios, the higher the ROA, the better. A low level of ROA may be the result of a low level of profit margin or low turnover of total assets. Return on Assets(ROA) of UBN Limited indicates smaller fluctuations. Between 2000 and 2008, the ROA was very closer. But from 2008 to 2013, it was rising and falling, an indication that the bank was not able to utilise her total assets effectively. The ratio of Non-Performing Loans to Loans & Advances (NPL) had a downward trend for the period showing that the riskiness of being default was low. The ratio of Loans and advances to total assets (LA) determines the return in respect of total amount of loans & advances disbursed in relation to total assets. This ratio is higher in 2010 (43.39%) and later declined in the successive years. On the other hand, the Loan loss provision(LLP) was within the range of 0 to 5% except in 2009 it reached 11.33%.

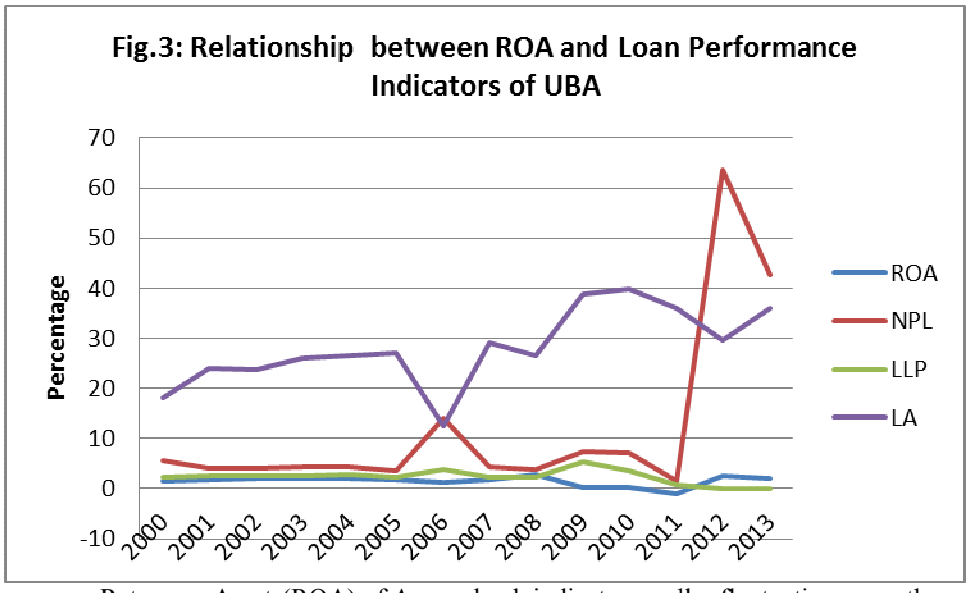


Return on Equity(ROE) measures a firm's ability to reward its shareholders investment, build its equity base through retained earnings and raise additional equity investment. This ratio demonstrates the bank's ability to generate income from its core financial service activity. Return on Equity(ROE) of UBN Limited fluctuated largely in various years. It reached its peak in 2010(163%). It shows that shareholders value are decreasing over the period.

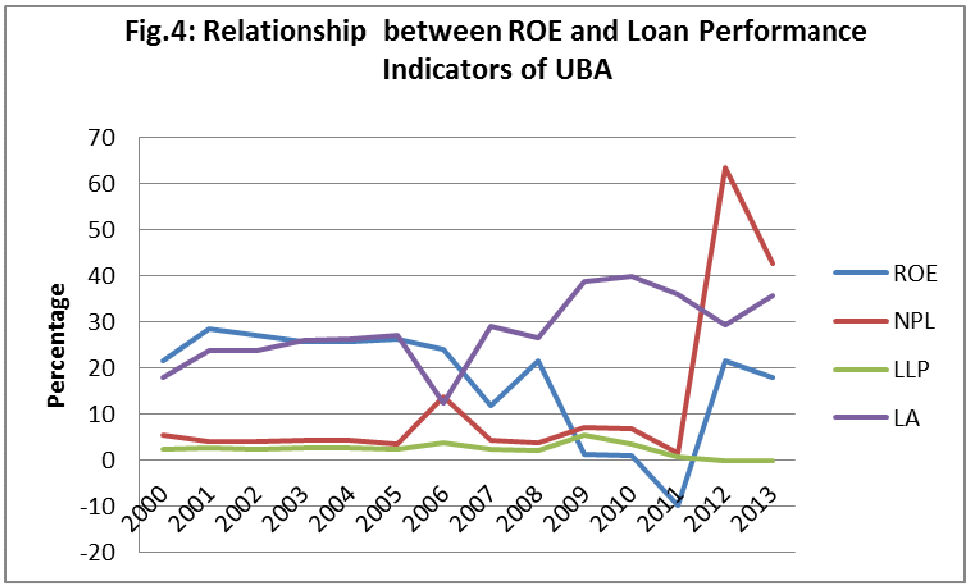
Table 2: UBA Financial Performance and Loan and Advances indicators 2000 – 2013.

YEAR	ROA %	ROE %	NPL %	LLP %	LA %
2000	1.45	21.61	5.51	2.35	18.02
2001	1.8	28.61	4.18	2.67	23.97
2002	2.06	27.17	4	2.48	23.86
2003	2.04	25.93	4.3	2.62	25.98
2004	2.13	25.81	4.33	2.78	26.48
2005	1.87	26.29	3.58	2.33	27.16
2006	1.35	24.08	13.99	3.8	12.59
2007	1.8	12.03	4.4	2.36	29.05
2008	2.69	21.7	3.84	2.31	26.68
2009	0.17	1.27	7.3	5.39	38.78
2010	0.15	1.15	7.04	3.69	39.87
2011	-0.99	-9.63	1.52	0.68	36.03
2012	2.45	21.5	63.59	0.03	29.52
2013	2.1	17.91	42.74	0.01	35.94

Source: Computed from UBA Financial Statement for various years.



Return on Assets(ROA) of Access bank indicates smaller fluctuations over the years. Between 2000 and 2011, the ROA was very closer. By 2012, it reached its peak, before declining. Over all, the graph shows that the bank was not able to use her total assets in an effective manner. The ratio of Non-Performing Loans to Loans & Advances (NPL) was rising and falling for the period showing that the riskiness of being default was high in 2006, 2012 and 2013 respectively. The ratio of Loans and advances to total assets (LA) determines the return in respect of total amount of loans & advances disbursed in relation to total assets. This ratio had steady growth than that of UBN within the period. On the other hand, the Loan loss provision(LLP) was within the acceptance region of 0 to 5% which is better than that of UBN.

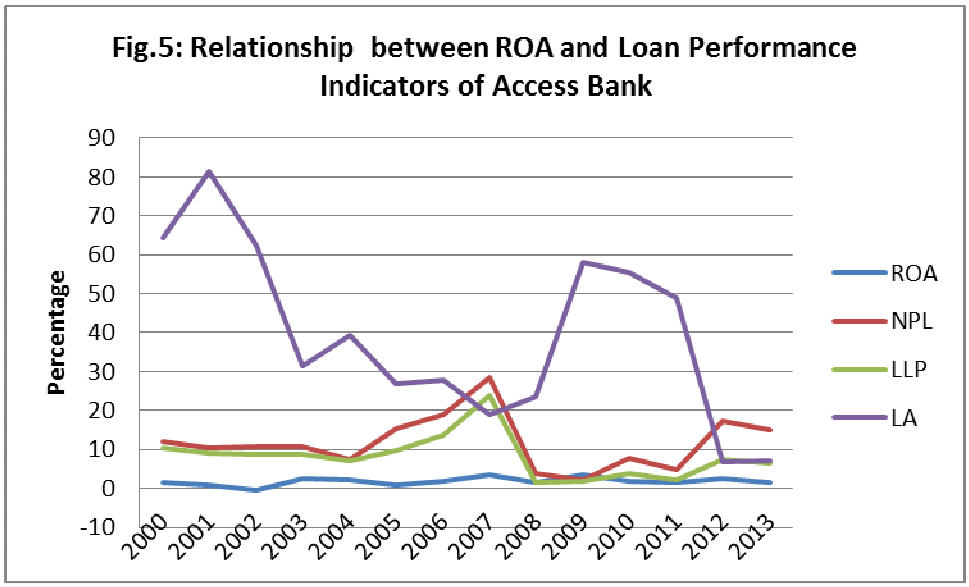


Return on Equity(ROE) determines the net income earned by exploiting each Naira of total common equity. The ROE of UBA Ltd fluctuated largely in various years. It reached its peak in 2010(163%). It shows that shareholders value are decreasing over the period.

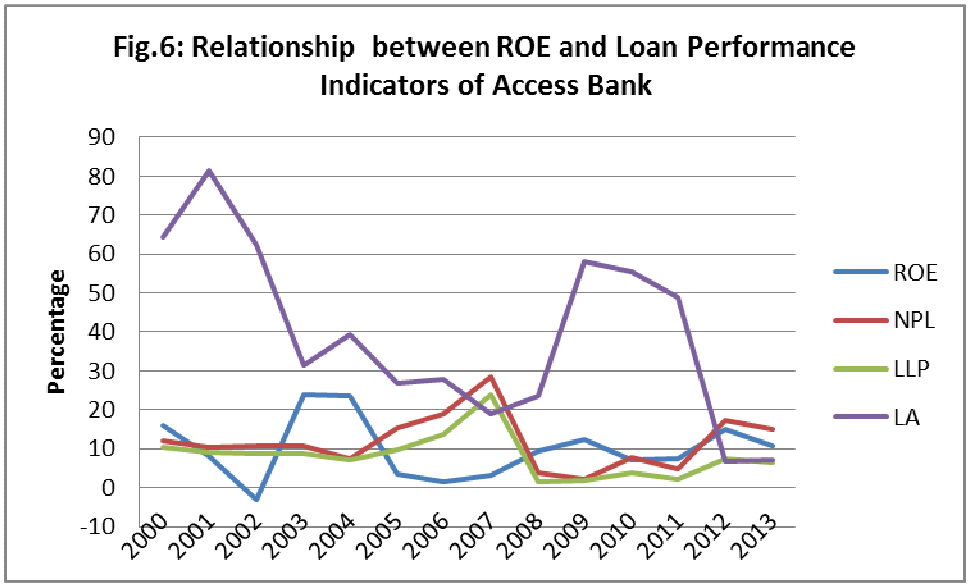
Table 3: Access Bank Financial Performance and Loan and Advances indicators 2000 – 2013.

Access Bank					
Year	ROA %	ROE %	NPL %	LLP %	LA %
2000	1.54	16.00	12.07	10.47	64.41
2001	0.97	8.00	10.37	9.18	81.56
2002	-0.49	-3.00	10.62	8.80	62.47
2003	2.46	24.00	10.86	8.82	31.59
2004	2.03	23.59	7.41	7.13	39.38
2005	0.75	3.56	15.34	9.80	26.81
2006	1.92	1.49	18.95	13.65	27.68
2007	3.37	3.28	28.49	23.81	18.84
2008	1.56	9.34	3.92	1.42	23.70
2009	3.39	12.38	2.24	1.87	58.04
2010	1.78	7.09	7.75	3.78	55.46
2011	1.44	7.35	4.84	2.20	48.96
2012	2.36	15.07	17.23	7.42	6.85
2013	1.54	10.69	15.04	6.57	7.06

Source: Computed from Access Bank Financial Statement for various years.



Return on Assets(ROA) of Access bank indicates smaller fluctuations over the years. ROA has decreased gradually. The graph shows a downward trend of ROA. It shows that the bank was not able to use her total assets in an effective manner. The ratio of Non-Performing Loans to Loans & Advances (NPL) was rising and falling for the period showing that the riskiness of being default was high in 2006, 2012 and 2013 respectively. The ratio of Loans and advances to total assets (LA) determines the return in respect of total amount of loans & advances disbursed in relation to total assets. This ratio had steady growth than that of UBN within the period. On the other hand, the Loan loss provision(LLP) was within the range of 0 to 5% which is better than that of UBN.



Return on Equity(ROE) determines the net income earned by exploited each Naira of total common equity. The ROE of Access Bank fluctuated largely in various years. It reached its peak in 2003 and 2004(24% & 23%). It shows that shareholders value are decreasing over the period. The ratio of Non-Performing Loans to Loans & Advances (NPL) was high between 2005 and 2007 and declined afterwards.

4.2 Empirical Analysis and Discussion of Results

4.1 Unit Root Test

Table 4: Summary of Result of Stationarity Test (Union Bank, Access Bank and UBA)

Variables	ADF value for (UBN, AB & UBA)	Critical value	Order of Integration
ROA	-8.237420 -6.280352 -3.349784	1% = -4.247073 5% = -3.212696 10% = -2.747676	Stationary at First difference *I(1)*
ROE	-6.489019 -5.373859 -4.974186	1% = -4.247073 5% = -3.212696 10% = -2.747676	Stationary at First difference *I(1)*
NPL	-4.568772 -4.097311 -5.016605	1% = -4.200056 5% = -3.175352 10% = -2.728985	Stationary at first difference I(1)
LLP	-4.103420 -4.373748 -3.456205	1% = -4.200056 5% = -3.175352 10% = -2.728985	Stationary at first difference I(1)
LA	-5.692259 -3.437818 -5.209529	1% = -4.582648 5% = -3.320969 10% = -2.801384	Stationary at first difference *I(1)*

Source: Extracts from Result of Stationarity Test

The result of unit root test, in relation to Union Bank, Access Bank and UBA is summarized in table 4, shows that ROA, ROE, NPL, LLP and LA are stationary at first difference and therefore, are integrated of order one i.e. I(1).

Table5**:** OLS Result (UBN: Model 1)

Dependent Variable: ROA
Method: Least Squares
Sample: 2000 2013
Included observations: 14

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-4.564667	3.774615	-1.209307	0.2544
NPL	-0.062936	0.011021	-5.710552	0.0000
LA	1.872906	5.508959	0.339975	0.7417
LLP	-0.852259	0.198820	-4.286579	0.0016

R-squared	0.349042	Mean dependent var	1.452967
Adjusted R-squared	0.218851	S.D. dependent var	5.340100
S.E. of regression	4.719722	Akaike info criterion	6.140551
Sum squared resid	222.7578	Schwarz criterion	6.270924
Log likelihood	-36.91358	F-statistic	5.680978
Durbin-Watson stat	2.965382	Prob(F-statistic)	0.032731

Substituted Coefficients:

==========

ROA = -4.564667 - 0.062936*NPL+ 1.872906*LA - 0.852259*LLP

The result obtained from the regression of model 1is presented in table 5. The relationship as shown is: ROA = -4.564667 - 0.062936*NPL + 1.872906*LA - 0.852259*LLP.

The result shows that the variables NPL and LLP have inverse relationship with ROA, showing that NPL and LLP have negative effect on bank performance. This relationship is statistically significant at 95% confidence level and meets the a priori expectation. The result also shows that a unit increase in NPL and LLP will lead to 0.06 and 0.85 reduction in bank performance respectively *ceteris paribus*.

However, the relationship between LA and ROA is opposite that of other variables. The result shows that a positive relationship exists between them meaning that an increase in loans and advances will lead to an increase in bank performance. Not minding that this relationship is not statistically significant, it follows the a

priori expectation. More elaborately, the relationship shows that a unit increase in Loans and Advances granted by Banks will cause the bank return on assets to increase by 1.87units, *ceteris paribus*.

Table 6**:** OLS Result (UBN: Model 2)
Dependent Variable: ROE
Method: Least Squares
Sample: 2000 2013
Included observations: 14

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-270.8445	476.8792	-0.567952	0.5840
NPL	-1.251063	0.273829	-4.568772	0.0013
LLP	-1.304408	0.317883	-4.103420	0.0027
LA	33.96053	56.73468	0.598585	0.5642

R-squared	0.698731	Mean dependent var	-0.020176
Adjusted R-squared	0.665257	S.D. dependent var	0.311448
S.E. of regression	0.105675	Akaike info criterion	-1.387718
Sum squared resid	0.033502	Schwarz criterion	-1.338067
Log likelihood	10.55087	Hannan-Quinn criter.	-1.722594
F-statistic	14.45058	Durbin-Watson stat	2.975718
Prob(F-statistic)	0.026588		

Substituted Coefficients:
==========
ROE = -270.844506886 -1.251063*NPL -1.304408*LLP + 33.960525178*LA
After regressing the variables in model 2, their relationships are stated below:
ROE = -270.844506886 -1.251063*NPL -1.304408*LLP + 33.960525178*LA.

Just like the regression result in model 1, non-performing loan and loan loss provision have inverse relationship with return on equity. A 1unit increase in NPL and LLP respectively will cause ROE to reduce by 1.25units and 1.30units. These relationships are statistically significant. However, loan and advances has positive relationship with return on equity. This means that a unit increase in LA will cause ROE to increase by 33.96units. Nevertheless, this relationship is not significant statistically. The result also shows that at zero performance of the explanatory variables, the explained variable will reduce given the negative coefficient of the constant term. This is also applicable to model 1.

Table 7**:** OLS Result (UBA: Model 1)
Dependent Variable: ROA
Method: Least Squares
Date: 05/10/16 Time: 11:30
Sample: 2000 2013
Included observations: 14

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	3.462796	1.172501	2.953341	0.0145
NPL	-0.018467	0.004261	-4.330437	0.0002
LLP	-0.079090	0.016693	-4.738782	0.0001
LA	0.070837	0.033826	2.094180	0.0627

R-squared	0.445062	Mean dependent var	1.505000
Adjusted R-squared	0.425242	S.D. dependent var	1.030823
S.E. of regression	368985.0	Akaike info criterion	2.920659
Sum squared resid	3.81E+12	Schwarz criterion	3.103247
Log likelihood	-426.0886	Hannan-Quinn criter.	2.903757
F-statistic	22.45606	Durbin-Watson stat	1.727705
Prob(F-statistic)	0.000057		

Substituted Coefficients:
==========
ROA = 3.46279559711 - 0.0184667915875*NPL - 0.0790895873117*LLP + 0.0708372074424*LA

For UBA, the relationship of the variables in model 1 is as follows:
ROA = 3.46- 0.02*NPL - 0.08*LLP + 0.07*LA.
The result shows that the variables NPL and LLP have inverse relationship with ROA, showing that NPL and LLP have negative effect on bank performance. These relationships are statistically significant at 95% confidence level and meet the a priori expectation. The result also shows that a unit increase in NPL and LLP will lead to 0.02unit and 0.08unit reduction in bank performance respectively *ceteris paribus*.

However, the relationship between LA and ROA is opposite that of other variables. The result shows that a positive relationship exists between them meaning that an increase in loans and advances will lead to an increase in bank performance. Not minding that this relationship is not statistically significant, it follows the a priori expectation. More elaborately, the relationship shows that a unit increase in Loans and Advances granted by banks will cause the bank return on assets to increase by 0.07units, *ceteris paribus*.

Table 8**:** OLS Result (UBA: Model 2)
Dependent Variable: ROE
Method: Least Squares
Date: 05/10/16 Time: 11:32
Sample: 2000 2013
Included observations: 14

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	48.89752	11.27657	4.336206	0.0015
NPL	-0.133227	0.022759	-5.853800	0.0000
LLP	-0.140709	0.030506	-4.612521	0.0001
LA	-1.160391	0.325320	-3.566918	0.0051

R-squared	0.564713	Mean dependent var	17.53071
Adjusted R-squared	0.434127	S.D. dependent var	11.84841
S.E. of regression	8.912909	Akaike info criterion	7.447835
Sum squared resid	794.3995	Schwarz criterion	7.630423
Log likelihood	-48.13484	Hannan-Quinn criter.	7.430933
F-statistic	4.324454	Durbin-Watson stat	1.601848
Prob(F-statistic)	0.033733		

Substituted Coefficients:
==========
ROE = 48.8975233042 - 0.133227251318*NPL - 0.140709020505*LLP - 1.16039103271*LA
Considering model 2 for UBA, the relationship is stated as follows:
ROE = 48.90 - 0.13*NPL - 0.14*LLP - 1.16*LA

Just like the regression result in model 1, non-performing loan and loan loss provision have inverse relationship with return on equity. A unit increase in NPL and LLP respectively will cause ROE to reduce by 0.13unit and 0.14unit. These relationships are statistically significant. However, loan and advances also has an inverse relationship with return on equity. This means that a unit increase in LA will cause ROE to decrease by 1.16units. Also, this relationship is significant statistically. The result also shows that at zero performance of the explanatory variables, the explained variable will increase given the positive coefficient of the constant term.

Table 9**:** OLS Result (Access Bank: Model 1)
Access Bank
Dependent Variable: ROA
Method: Least Squares
Sample: 2000 2013
Included observations: 14

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	3.280232	1.311646	2.500852	0.0314
NPL	-0.163163	0.050062	-3.259213	0.0030
LLP	-0.189321	0.035611	-5.316328	0.0000
LA	0.029154	0.018984	1.535773	0.1556

R-squared	0.483486	Mean dependent var	1.758571
Adjusted R-squared	0.465039	S.D. dependent var	1.005514
S.E. of regression	7216.258	Akaike info criterion	3.094934
Sum squared resid	1.46E+09	Schwarz criterion	3.277522
Log likelihood	-308.0560	Hannan-Quinn criter.	3.078032
F-statistic	26.20954	Durbin-Watson stat	2.176750
Prob(F-statistic)	0.000020		

Substituted Coefficients:
==========
ROA = 3.28023224248 - 0.163163195558*NPL- 0.189320776549*LLP + 0.029154422954*LA
For Access bank, the relationship of the variables in model 1 is as follows:
ROA = 3.28 - 0.16*NPL - 0.19*LLP + 0.03*LA.

The result shows that the variables NPL and LLP have inverse relationship with ROA, showing that NPL and LLP have negative effect on bank performance. These relationships are statistically significant at 95% confidence level and meets the a priori expectation. The result also shows that a unit increase in NPL and LLP will lead to 0.16unit and 0.19unit reduction in bank performance respectively *ceteris paribus*.

However, the relationship between LA and ROA is opposite that of other variables. The result shows that a positive relationship exists between them meaning that an increase in loans and advances will lead to an increase in bank performance. Not minding that this relationship is not statistically significant, it follows the a priori expectation. More elaborately, the relationship shows that a unit increase in Loans and Advances granted by banks will cause the bank return on assets to increase by 0.03units, *ceteris paribus*.

Table 10**:** OLS Result (Access Bank: Model 2)
Dependent Variable: ROE
Method: Least Squares
Date: 05/10/16 Time: 11:06
Sample: 2000 2013
Included observations: 14

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	27.00567	10.07249	2.681132	0.0230
NPL	-1.621829	0.654701	-2.477205	0.0204
LLP	-1.257884	0.180801	-6.957287	0.0000
LA	0.209806	0.145780	1.439196	0.1807

R-squared	0.787640	Mean dependent var	9.917143
Adjusted R-squared	0.770651	S.D. dependent var	7.827052
S.E. of regression	5402.934	Akaike info criterion	7.171984
Sum squared resid	7.30E+08	Schwarz criterion	7.354572
Log likelihood	-278.7952	Hannan-Quinn criter.	7.155083
F-statistic	46.36228	Durbin-Watson stat	1.886978
Prob(F-statistic)	0.000000		

Substituted Coefficients:
==========

ROE = 27.0056731681 - 1.62182946938*NPL - 1.25788410142*LLP + 0.209805837466*LA
After regressing the variables in model 2, their relationships were seen to be:
ROE = 27.01 - 1.62*NPL - 1.26*LLP + 0.21*LA

Just like the regression result in model 1, non-performing loan and loan loss provision have inverse relationship with return on equity. A 1unit increase in NPL and LLP respectively will cause ROE to reduce by 1.62units and 1.26units. These relationships are statistically significant. However, loan and advances has positive relationship with return on equity. This means that a unit increase in LA will cause ROE to increase by 0.21unit. Nevertheless, this relationship is not significant statistically. The result also shows that at zero performance of the explanatory variables, the explained variable will increase given the positive coefficient of the constant term. This is also applicable to model 1.

Table 11**:** SUMMARYOF OLS Result (UBN, ACCESS and UBA: Model 1)

Model 1							
	UBN		Access		UBA		
Variable	Coefficient	t-Statistic	Coefficient	t-Statistic	Coefficient	t-Statistic	Conclusion
NPL	-0.06294	-5.71055	-0.16316	-3.25921	-0.01847	-4.33044	Significant
LLP	-0.85226	-4.28658	-0.18932	-5.31633	-0.07909	-4.73878	Significant
LA	1.872906	0.339975	0.029154	1.535773	0.070837	2.09418	Not Significant

Source: Extract from Tables 5, 7 and 9

From the table 11 above, it is observed that NPL and LLP have inverse relationship with bank performance measured by return on assets. An increase in NPL and LLP will cause a decrease in bank performance. However, given the direct relationship existing between LA and bank performance, 1unit increase in LA will cause an increase in bank performance. Though this relationship between LA and ROA is not statistically significant.

Table 12**:** SUMMARY OF OLS Result (UBN, ACCESS and UBA: Model 2)

Model 2							
	UBN		Access		UBA		
Variable	Coefficient	t-Statistic	Coefficient	t-Statistic	Coefficient	t-Statistic	Conclusion
NPL	-1.25106	-4.56877	-1.62183	-2.47721	-0.13323	-5.8538	Significant
LLP	-1.30441	-4.10342	-1.25788	-6.95729	-0.14071	-4.61252	Significant
LA	33.96053	0.598585	0.209806	1.439196	-1.16039	-3.56692	Not Significant

Source: Extract from Tables 6, 8 and 10

From the table 12 above, NPL and LLP have inverse relationship with bank performance measured by return on equity. An increase in NPL and LLP will cause a decrease in return on equity. However, LA has direct relationship with ROE, meaning that 1unit increase in LA will cause an increase in bank performance measured by ROE. Though this relationship between LA and ROE is not statistically significant.

5. Conclusion and Recommendations

The study has shown that the explanatory variables have significant impact on return on assets (ROA) and return on equity (ROE). The relationship between the dependent variables and the explanatory variables is indicated by the coefficient of each of the explanatory variables. A unit increase in the ratio of non-performing loans to loans & advances and loan loss provision to loans & advances respectively will decrease bank performance. However, the ratio of loans & advances to total assets showed a positive relationship though it is not significant. Given the above findings, the researcher concludes that the effects of non-performing loans on Banks cannot be underestimated and poses a fundamental threat to the very existence of the Banks as corporate business entities.

Based on the findings of this research work, the researcher recommends the need to strengthen supervision of banks by the Central Bank of Nigeria(CBN) and the Nigeria Deposit Insurance Corporation(NDIC) to prevent a sharp buildup of NPLs in the future; Banks should maintain high credit standards while the Apex Bank and other regulatory agencies should maintain high surveillance on banks' credit operations; Banks should collect and perfect all collaterals which are used for obtaining loans. The collateral should be more than the value of loan approved, in case of default.

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