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Relationship of Internet Banking and Bank Performance (A Case of Deposit Money Banks in Nigeria)

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Abstract: Banking industry has been in a process of significant transformation. The transformation in the banking industry is based on innovation in information technology. Information communication technology is the backbone of global change curve by internet banking in Nigeria. It is against this background that the study examined the relationship of internet banking on performance of banks. (A case study of Deposit Money Banks in Nigeria). Using time series data of 2011 – 2015, the study employed regression technique in the analysis of sourced data. Data were collected from secondary sources through annual reports and statistical bulleting of central bank of Nigeria. Internet banking was measured using the total value of internet and mobile banking while Bank performance was measured using return on total assets and return on equity of deposit money banks in Nigeria. Return on equity was regressed on internet and mobile banking, and return on total assets was also regressed on internet and mobile banking using multiple regression technique. The study revealed that positive relationship exists between mobile banking and return on equity, and between internet banking and return on assets. While on the other hand no significant relationship between internet banking and return on equity, and between mobile banking and return on assets. It is therefore, recommended that banks must offer numerous services through mobile banking Banks and effective transaction through the internet.

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INTRODUCTION

Before the emergence of modern banking system banking operations was normally done and this may have led to a slowdown in the settlement of transactions. This system involves posting transactions from one ledger to another manually, counting of money was done manually which were sometimes not accurate and these may have resulted to errors.

The evolution of internet banking in Nigeria can be traced to 1986 when the banking industry was deregulated. The result of this deregulation brought far reaching transformation through computerization and improved bank service delivery. In the recent years, internet banking has been viewed as a driving force that is changing the landscape of the banking industry to a more competitive industry.

Competition with new products became keen within the system while customer sophistication posed a challenge for them, hence the reengineering of processing techniques of business accounts encourage the automation of financial services among banks (Oluwatolani, Joshua & Phillips, 2011).

The world has witnessed numerous internet banking instruments meant to facilitate trade and simplify transactions before the introduction of internet banking into the Nigerian banking system. For many years, bankers, entrepreneurs and others have advocated for the replacement of physical cash and the introduction of more flexible, efficient and cost effective retail payment solutions (Siyanbola, 2013).

Internet banking has experienced tremendous growth and has transformed traditional practices in banking (Gonzalez, 2008). This study examines the relationship of internet banking on Bank performance. A case study of deposit money banks in Nigeria.

Statement of the problem

Since independence, the financial sector has been on the increase. Today, we have over 20 strong banks and well functional stock market. The financial sector has been liberalized in Nigeria. However, despite the growth record of banks and non- banks financial institutions in Nigeria, and liberalization policy, the Nigerian economic growth is sluggish (Maduka & Onwuka, 2013).

Banks appear very profitable in Nigeria, whether returns on assets are assessed on country by country, income group or by individual banks. The Nigerian economy observed in the present dispensation has been characterized by worsening economic fortunes in terms of increased unemployment, galloping inflation, high incidence of poverty, worsening balance of payment condition, high debt burden and increasing unsustainable fiscal deficit. There are management challenges confronting Nigeria banks since the advent of indigenous banks. Apart from loss

experienced by depositors, employees and other stakeholders, the level of confidence in the financial system has been negatively affected (Bosede, Olusegun & Olubukunola, 2013).
Before the emergence of modern banking system, banking operation was manually done, and that solely account for the inefficiency in handling transactions. Traditional banking system was often characterized by delay and inefficiency in the delivery of financial services which led to introduction of internet banking. The introduction of internet banking system which was supposed to bring about efficiency and effectiveness in service delivery, rather resulted to disappointment to customers. (Siyanbola, 2013).
The major difficulties users face in carrying out electronic payments are network (communication gaps between banks and network hosts) issues, literacy, concerns on risk and unreliable machines (Agbaje & Ayanbadejo, 2013). This study seeks therefore to address the relationship of internet banking on Bank performance of deposit money banks in Nigeria.

Objective of the study
The main objective of the study is to examine the relationship of internet banking on Bank performance with reference to deposit money banks in Nigeria. Specifically, the study objectives are:

i. To determine whether internet banking has any impact on return on equity of deposit money banks in Nigeria.
ii. To ascertain whether mobile banking has any impact on return on equity of deposit money banks in Nigeria.
iii. To determine whether internet banking has impact on return on asset of deposit money banks in Nigeria.
iv. To examine whether mobile banking has any impact on return on asset of deposit money banks in Nigeria.

Research Questions
The study was based on the following research questions:

i. To what extent does internet banking have any impact on return on equity of deposit money banks in Nigeria?
ii. To what extent does mobile banking have any impact on return on equity of deposit money banks in Nigeria?
iii. To what extent does internet banking have any impact on return on asset of deposit money banks in Nigeria?
iv. To what extend does mobile banking has any impact on return on asset of deposit money banks in Nigeria?

Research Hypotheses
For the purpose of analyzing the data, the following hypotheses were tested:
$H0_1$: There is no significant relationship between internet banking and return on equity of deposit money banks in Nigeria.
$H0_2$: There is no significant relationship between mobile banking and return on equity of deposit money banks in Nigeria.
$H0_3$: There is no significant relationship between internet banking and return on asset of deposit money banks in Nigeria.
$H0_4$: There is no significant relationship between mobile banking and return on asset of deposit money banks in Nigeria.

Significance of the study
The study addresses the relationship of internet banking on the performance of deposit money banks in Nigeria. It is expected that the findings of the study will assist shareholders in the banking industry ascertain whether internet banking has improved the performance of deposit money banks in Nigeria or not. If the finding of this study reveal that internet banking has not enhanced the performance of deposit money banks in Nigeria, the study will recommend new strategy that bank should adopt in using internet banking to impact positively on its performance.
The study will also come up with recommendations that will help shareholders in the banking industry with new techniques to cope with internet banking challenges and meeting customers' needs which are essential for facilitating performance of deposit money banks in Nigeria. A number of studies (Auta, 2010; Dogarawa, 2005; Siyanbola,2013) have shown that internet banking awareness is still very low, thereby hindering accelerated performance of deposit money banks in Nigeria. This study will also help the general public by creating awareness on the benefits of internet banking which hopefully will drastically reduce cash handling, thereby reducing the cost of printing of cash, processing cost, storage cost, insurance cost and the cost of moving cash.
In addition, the study will serve as a useful reference material for students, academicians, institutions, corporate bodies and corporate managers who are interested in the subject of internet banking. Finally, the findings of the study will contribute to the existing body of knowledge on internet banking and offer opportunity for further study.

Literature Review
Different authors have defined Internet Banking in different ways based on their understanding of its application. Internet banking is the term used for new banking system and it is also called online banking (Auta, 2010).

Internet banking uses the internet as the delivery channel by which to conduct banking activities, for example, transferring funds, paying bills, viewing current and savings account balances, paying mortgages and purchasing financial instruments and certificates of deposits (Mohammed, Siba &Sreekmar, 2009 cited in Auta, 2010).

Internet banking is the delivery of banking services and products through the use of electronic means irrespective of place, time and distance. Such products and services can include deposit taking, lending, account management, the provision of financial advice, electronic bill payment, and the provision of other electronic products and services such as electronic money (Dogarawa, 2005). Internet banking is also known as the automated delivery of new and traditional banking and services directly to customers through electronic, interactive communication channels (Daniel, 1999; Sathye, 1999). As has been pointed out by (Akinyele & Olorunleke, 2010), internet banking means the provision of information about the bank and its product via a page on the internet.

Izogo, Nnaemeka, Ezema and Onuoha (2012) citing Idowu (2011) assert that internet banking is a means where by banking business is transacted using automated processes and electronic devices such as personal computers, telephones, fax machines, internet, card payments and other electronic channels.

In Georgesan (2008), internet banking is defined to include the provision of retail and small value banking products and services through electronic channels as well as large value electronic payments and other whole sale banking services delivered electronically. In Aburime (2008) electronic banking includes systems that enable financial institutions, customer, individual and businesses to access accounts, transact business or obtain information on financial products and services through public or private networks including the internet. Customers access internet banking services using an intelligent electronic device such as a personal computer (PC) personal digital assistant (PDA), Automated Teller Machine (ATM), among others.

In Edet (2008), internet banking is defined as a system by which transactions are settled electronically with use of electronic gadget such as ATMs, POS terminals, GSM Phones and v-cards etc. handled by e-holders, bank customers and stakeholders.

Banking over the internet has attracted increasing intention from banks and other financial services industry, from participants, the business press, regulators and law makers, both in Nigeria and other countries.

From the above definition so far, the researcher therefore defines internet banking as the delivery of banking products and services to the customers and general public electronically through the use of internet banking instruments or products like automated Teller Machine (ATM), Mobile, internet (Web), and point of sales (POS) among others.

Automated Teller Machine: This is an electronics device which allows a bank's customers to make cash withdrawals and check their account balances at any time without the need for a human teller. Many ATMs also allow people to deposit cash or cheques, transfer money between their bank accounts or even postage stamps. To withdraw cash, make deposits, or transfer funds between accounts, you generally insert an ATM card and enter your personal identification number (PIN). Some ATMs impose a surcharge, or usage fee, on consumer who are not member of their institution or on transactions at remote locations. ATMs must disclose the existence of a surcharge on the terminal screen or on a sign next to the screen. Check the rules of your institution to find out when or whether a surcharge is imposed. If one incurred a loss or stolen ATM card, he/she should notify the issuer by certified letter, return receipt requested, so you can prove that the institution received your letter. Keep a copy of the letter you send for your records. If you fail to notify the institution of the error within 60 days, you may have little recourse. Under Federal Law, the institution has no obligation to conduct an investigation if you have missed the 60-days deadline. After notification about an error on your statement, the institution has 10 business days to investigate. The financial institution must tell you the results of its investigation within three business days after completing it and must correct the error within one business day after determining that the error has occurred. If the institution needs more time, it may take up to 45 days to complete the investigation but only if the money in dispute is returned to your account and you are notified promptly of the credit. At the end of the investigation, if no error has been found, the institution may take the money back if it sends you a written explanation.

***Mobile* Banking**

Mobile banking involves the use of mobile phone for settlement of financial transactions. It supports person to person transfers with immediate availability of funds for the beneficiary. Mobile payment uses the card infrastructure for movement of payment instruction as well as secure Short Message Service (SMS) messaging for confirmation of receipt to the beneficiary. Mobile banking is meant for low value transactions where speed of completing the transaction is a key. The services are covered under this product include account enquiry, funds transfer, recharge phones, changing of passwords and bill payment which are offered by few institution (Sathye, 1999).

Telephone Banking

This is the most familiar of the tele-banking devices and it allows customers to transact banking business over the phone. It can be used as an alternative to the traditional branch banking or in conjunction with it (Stan, 1997 cited in Agboola, 2001). The customer can access their accounts using telephone lines as a link to the financial institutions computer Centre. Services rendered here include account balance, transfer, change of pin etc. This product has also experienced low patronage due to inadequate awareness and education of the customer on how to maximally use their phone to transact simple banking operations (Siyanbola, 2013).

Internet Banking

Internet banking involves conducting banking transactions such as account printing of statement of account; funds transfer payments for goods and services, etc. on the internet (World Wide Web) using electronic tools such as the computer without visiting the banking hall. E-commerce is greatly facilitated by internet banking and is mostly used to effect payment. Internet banking also uses the electronic card infrastructure for executing payment instructions and for final settlement of goods and services over the internet between the merchant and the customer, currently the most common internet payments are for customer bills and purchase of air tickets through the websites of the merchants (Littler, 2006).

Internet Banking refers to systems that enable bank customers to get access to their accounts and general information on bank products and services through the use of bank's website, without the intervention or inconvenience of sending letter, faxes, original signature and telephone confirmation. (Thulani, Tofara & Agboola (2001) studied the impact of computer automation of banking services in Lagos using 6 banks and concluded that electronic banking has tremendously improved the service of the banks to their customers.

Lustsik (2004 explores the implementation of techniques of activity-based-costing (ABC) in the banking sector on the example of Estonia banks in order to analyze the cost structure for traditional and electronic channel transactions. The methodology and empirical parts of the study were based on Hans bank's analysis and statistical report as well as on Hans banks internal documents that stipulate rooms for cost allocation and limit cost calculation. The findings of the study revealed that banks additional profit at the transactions effected via electronic channels banking services have high profitability for banks, as the absolute unit cost numbers are lower than fees collected from clients.

Siam (2006) examined the effect of electronic banking on bank's profitability in Jordan. The population of the study included all working banks in Jordan which have sites on the internet for the periods of 1999-2004. The result from the data analysis that were gathered from the study instrument (questionnaire) showed that there is a correlation with statistical significance between electronic banking and banks profitability. Showing a negative effect in profitability in the short run and a positive effect in profitability in the long run. Thus, managers and bank employees in the area prefer their banks to expand their electronic operation in servicing customer but not converting all banks to total electronic banks. Hernando and Nieto (2007) attempted to fill this gap by identifying and estimating the impact of the adaptation of a transactional website on financial performances using a sample of 72 Deposit Money banks in Spain over the period 1994-2002. The analysis of the sample is based on several financial performance ratios. These financial ratios measure business activity as a percentage of average total assets and profitability. The results showed that the impact of transactional web adoption on banks performance take to appear. The adoption of the internet as a delivery channel involves a gradual reduction in overhead expenses This effect is statistically significant after one and half year after adoption. The cost reduction translates into an improvement in banks profitability, which becomes significant after one and half year in term of return on asset (ROA) and after three years in term of return on equity (ROE).

Maiyaki and Mokhtar (2010) employing a survey of 407 bank customers in 33 organizations in Kano state of Nigeria studied the effects of availability of electronic banking facilities among other factors. They study reveals that the availability of electronic banking facilities such as ATM, online banking and telephone banking do not have significant influence on customer's bank choice decision.

Carrallio and Siegel (2011) investigated the return on the investment for online banking services: an analysis of financial account aggregation. The return on investment of the account aggregation technology was evaluated using the calculation of earnings before interest and taxes (EBIT) and the net present value (NPV) for a period of five years. The sample covers three basic bank sizes according to the number of its online accounts; small banks are those with 1.0 to 2.8 million online accounts, medium banks those with 2.8 and large banks are those with 8.8 to 16 million online accounts. The study concluded that account aggregation is a compelling technology that should become a commodity in the sector that most important banks will provide and it will represent no more a differentiated competitive advantage.

This study employed quantitative research design as its methodology while using multiple regression for the analysis of the time series data from 2011-2015. The major deviation of this study is that it studies the relationship of internet banking on the performance of banks. It also used data involving all the deposit money banks in Nigeria.

METHODOLOGY

The quantitative research design was adopted for this study. This is similar to research design adopted by Hassan, Mamman and Farouk (2013). The population of the study consists of all the 15 deposit money banks in Nigeria. Secondary source of data was used for this study, and the data were sourced from Central Bank of Nigeria's annual report and statistical bulletin. The study covers the period 2011-2015.

The key variables of Bank performance were measured in relation to deposit money banks in the study are return on equity and return on asset. This will constitute the dependent variables. While the independent variables of internet banking that were measured are internet and mobile banking. The technique of data analysis that was adopted for this study is inferential statistics. Multiple Regressions was used to find out whether relationship exist between internet banking variables and Bank performance variables identified in the study. If relationship exists, what is the nature of the relationship?

The return on equity (RE) was regressed on internet banking (IB) and mobile banking (MB) using the researcher's model. The model is stated below:

$$RE = b_0 + b_1IB + b_2MB + e \tag{1}$$

Where

RE=return on equity

RA=return on asset

b_0 = Intercept

b_1, b_2 = Parameters of regression model

IB = Value of internet banking

MB = Value of mobile banking

e = Error Term

The return on asset (RA) was regressed on internet and mobile banking using the researcher's model as stated below:

$$RA = b_0 + b_1IB + b_2MB + e \tag{2}$$

The estimation of the coefficients of the models and interpretation were done using SPSS version 23 in order to test the robustness of the models.

RESULTS AND DISCUSSIONS

This section presents the results and discussion of the hypotheses tested.

Test of Hypotheses

Secondary data was used in testing the study hypotheses. Information relating to internet banking, mobile banking, return on equity and return on asset of deposit money banks in Nigeria for the period 2011-2015 were gathered from the banks' annual reports and CBN statistical bulletin.

Test of Hypotheses One and Two

Test of the hypotheses one and two were done using multiple regression model generated from the secondary data sample for the study. The model is re-stated as follows:

$RE = b_0 + b_1IB + b_2MB + e$

The hypotheses are re-stated below:

$H0_1$: There is no significant relationship between internet banking and return on equity of deposit money banks in Nigeria.

$H0_2$: There is no significant relationship between mobile banking and return on equity of deposit banks in Nigeria.

Appendix 2 revealed that the adjusted R^2 is 0.29, signifying that 29% of variation in return on equity is explained or accounted for by internet and mobile banking. Thus, the goodness of fit embedded in the adjusted coefficient of determination shows that the estimated model has high predictive power. Appendix 2 also revealed that the F-statistics is statistically significant, as confirmed by the P-value of 0.647, this is a testimony of joint significant of estimated coefficient of internet and mobile banking.

The P-value is 0.65, which is reasonably high, as such; we can now reject the null hypothesis of normality assumption. Appendix 2 also revealed that the Durbin-Watson statistics of 2.417 confirm non-auto correlation of random variables. The DW statistics can vary between 0 and 4 with a value of 2 meaning that the residuals are uncorrelated (Field, 2009).

Hypothesis One: A linear negative relationship exists between internet banking and return on equity of deposit money banks in Nigeria as it is confirmed by the regression coefficient of -1.029 in Appendix 2. The t-statistic (-0.87) is not significant as shown by the P-value of 0.47 in Appendix 2. This means that internet banking is not a strong predictor of return on equity of deposit money banks in Nigeria. The study therefore, fails to reject the null hypothesis and concludes that there is no significant relationship between internet banking and return on equity of deposit money banks in Nigeria. The implication of this result may be attributed to high incidence of internet fraud and the problem of internet connectivity which has eroded customers' trust and confidence in conducting transactions on internet banking platform.

Hypothesis Two: Appendix 2 shows that a linear positive relationship exists between mobile banking and return on equity of deposit money banks in Nigeria as it is confirmed by the regression coefficient of 7.348. Appendix 2 also shows that the t-value (0.502) is highly statistically significant, as indicated by the P-value of 0.665. This shows the importance of mobile banking in predicting return on equity of deposit money banks in Nigeria. The low standard error of 0.612 as can be seen in Appendix 2 in relation to 3.674 (half value of the coefficient) confirms that the coefficients are not equal to zero. The study therefore, rejects the null hypothesis and concludes that there is positive relationship between mobile banking and return on equity of deposit money banks in Nigeria. The regression co-efficient is thus fitted as:

$$RE= 0.238- 1.029IB + 7.348MB \qquad (3)$$

Test of Hypotheses Three and Four

Hypotheses three and four were tested using multiple regression model generated from the secondary data utilized in the study.

The model is restated as follow:

$$RA= b_0 =b_1IB + b_2MB +e$$

The hypotheses are re-stated below:

$H0_3$: There is no significant relationship between internet baking and total asset of deposit money banks in Nigeria.

$H0_4$: There is no significant relationship between mobile banking and total asset of deposit money banks in Nigeria.

Appendix 3 shows that 47% of the variation in return on asset of deposit money banks in Nigeria can be attributed to internet and mobile banking. The highly significant F-statistics with P-value of 0.467 confirms that the co-efficient are jointly significant and not equal to zero. The DW statistics of 2.571 confirm non-auto correlation of random variables. According to Swain (2008) if the residuals are not correlated, the DW statistics will be close to 2.

Hypothesis Three: Appendix 3 shows that there is positive linear relationship between internet banking and return on asset of deposit money banks in Nigeria as it is confirmed by the positive regression coefficient of 6.520. The t-statistics is statistically significant at 0.476, which confirms the importance of internet banking in predicting return on asset of deposit money banks in Nigeria. The low standard error of estimate (0.497) in relation to half value of the coefficient (3.260) confirms that the coefficients are not equal to zero. Therefore, the study rejects the null hypothesis and concludes that there is positive relationship between internet banking and return on asset of deposit money banks in Nigeria.

Hypothesis Four: There is negative relationship between mobile banking and return on asset of deposit money banks in Nigeria. This is confirmed by the regression coefficient of -1.828 in Appendix 3. The t-value of -1.076 is not statistically significant as suggested by P-value of 0.384 in Appendix 3. The implication is that mobile banking is a weak predictor of return on asset of deposit money banks in Nigeria. The study therefore, fail to reject the null hypothesis and concludes that there is no significant relationship between mobile banking and return on asset of deposit money banks in Nigeria. Banks need to create more awareness and also modify their mobile banking application to accept all models of mobile phones. Perhaps, when this is done, it will increase the number of mobile banking customer base and subsequently, value of mobile banking transactions. The regression co-efficient is thus fitted as:

$$RA = 0.025+6.520IB\_1.828MB \qquad (4)$$

Summary

This study examined the relationship of internet banking on the performance of deposit money banks in Nigeria. Specifically, the study investigated internet banking; mobile banking; return on equity and return on asset of entire deposit money banks in Nigeria for the period 2011-2015. Return on equity was regressed on internet and mobile banking while return on asset was regressed on internet and mobile banking using multiple regression models. The introductory aspects of the study dwell more on the background to the study emphasizing the evolution of internet banking, research problems; research objectives; research question and research significance. Many literatures and academic journal on internet banking and bank performance were reviewed in the course of the study. Also, included in the areas that were reviewed were concept of internet banking, types of internet banking and determinants of banking performance. The review of literature revealed that e-banking has the potentials to improve profitability and financial performance of banks due to low cost advantages associated with the delivery of internet banking services. The review also revealed that internet banking has enhanced bank customer relationship resulting in customer satisfaction. The study also revealed that there is significant relationship between mobile banking and return on equity, internet banking and return on asset of deposit money banks in Nigeria. However, the study also revealed that there is no significant relationship between internet banking and return on equity, mobile banning and return on asset of deposit money banks in Nigeria.

CONCLUSION

Based on the major findings, the following conclusion were drawn: internet banking has moderately improved the financial performance of deposit money banks in Nigeria. Although, positive relationship exists between mobile banking and return on equity, internet banking and return on asset, internet and mobile banking are yet to make any significant improvement on return on equity and return on asset of deposit money banks in Nigeria respectively. Internet banking has completely changed the way banking is conducted in Nigeria; it has brought numerous, convenience, flexible and efficient service to customers at relatively lower cost. Customers can now check their balance; transfer funds; pay utility bills; view mini statement; order cheque, stop cheque, airtime top up etc. from the comfort of their bedroom. Internet banking has improved bank-customer relationship. Internet and mobile phone has become common media of information used by banks in getting across to their customers. Monthly account statements are sent to customers via e-mail and mobile phones by banks free of charge. Internet banking has become a necessary selling point for deposit money banks in Nigeria. Banks that want to survive, grow and remain relevant must offer efficient services through e-banking.

RECOMMENDATIONS

Based on the conclusions of the study, the following recommendation were made for consideration by deposit money banks and regulatory bodies:

1. Banks that are yet to fully adopt internet banking should as matter of urgency do so if they must grow, remain relevant, competitive and profitable.

2. Positive relationship exists between mobile banking and return on equity of deposit money banks in Nigeria. Therefore, banks that want to improve their return on equity must offer numerous products/services through mobile phones in an effective, efficient and cost effective manner. They must also make mobile banking application of all mobile phones enabled so that those customers who cannot afford Java enabled mobile phones can also use the product.

3. Positive relationship also exists between internet banking and return on asset of deposit money banks in Nigeria. Therefore, banks that want to increase their asset holdings must offer numerous, efficient and cost effective secured transactions through the internet. They must also ensure internet network availability at all times.

4. Aggressive internet banking awareness through all media of communication should be embarked upon by banks. The awareness should focus on the numerous e-banking products available and their benefits. The awareness campaign should also be extended to non-customers, since there are some internet banking products that do not require a customer to operate an account.

5. Banks should liaise frequently with their network providers to ensure that there is 24\7 network availability if internet banking operation must be improved.

6. The Central Bank of Nigeria should ensure that all banks comply with CBN guidelines on internet banking. This will ensure that the problems of network unavailability, non-prompt resolution of dispense error issues and other operational challenges are overcome.

7. Banks should improve the security of e-banking transactions by securing their platforms and they should also educate their customers on how to avert internet banking fraud.

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APPENDIX I

DATA ON RELATIONSHIP OF INTERNET BANKING AND BANK PERFORMANCE				
YEAR	ROA	ROE	INT	MOB
2011	0.0283	0.1815	58000	20500
2012	0.0250	0.1875	31500	31500
2013	0.0251	0.2220	47300	142800
2014	0.0265	0.1998	74300	339200
2015	0.0201	0.1608	91600	442400

Source: Nigerian Deposit Money Banks annual accounts (2011 – 2015)

APPENDIX II

Descriptive Statistics

	Mean	Std. Deviation	N
ROE	.190324	.0226203	5
INT	60540.000	23340.5870	5
MOB	195280.000	188352.9586	5

Correlations

		ROE	INT	MOB
Pearson Correlation	ROE	1.000	-.521	-.327
	INT	-.521	1.000	.884
	MOB	-.327	.884	1.000
Sig. (1-tailed)	ROE	.	.184	.296
	INT	.184	.	.023
	MOB	.296	.023	.
N	ROE	5	5	5
	INT	5	5	5
	MOB	5	5	5

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.238	.049		4.817	.040
	INT	-1.029E-6	.000	-1.062	-.871	.475
	MOB	7.348E-8	.000	.612	.502	.665

a. Dependent Variable: ROE

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics			Durbin-Watson
					R Square Change	F Change	Sig. F Change	
1	.594[a]	.353	-.295	.0257366	.353	.545	.647	2.417

a. Predictors: (Constant), MOB, INT

b. Dependent Variable: ROE

Source: SPSS version 23

APPENDIX III

Descriptive Statistics

	Mean	Std. Deviation	N
ROA	.024986	.0030602	5
INT	60540.000	23340.5870	5
MOB	195280.000	188352.9586	5

Correlations

		ROA	INT	MOB
Pearson Correlation	ROA	1.000	-.498	-.685
	INT	-.498	1.000	.884
	MOB	-.685	.884	1.000
Sig. (1-tailed)	ROA	.	.197	.101
	INT	.197	.	.023
	MOB	.101	.023	.
N	ROA	5	5	5
	INT	5	5	5
	MOB	5	5	5

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.025	.006		4.286	.050
	INT	6.520E-8	.000	.497	.476	.681
	MOB	-1.828E-8	.000	-1.125	-1.076	.394

a. Dependent Variable: ROA

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics			Durbin-Watson
					R Square Change	F Change	Sig. F Change	
1	.724[a]	.524	.047	.0029872	.524	1.099	.476	2.571

a. Predictors: (Constant), MOB, INT

b. Dependent Variable: ROA

Source: SPSS version 23