

ISSN: 3027-0378

ELECTRONIC BANKING AND PERFORMANCE OF MONEY DEPOSIT BANKS IN NIGERIA

¹Prof. Ihe Ndubuisi John & ²Okafor-Kelly Kelechi

^{1&2}Department of Accountancy, Faculty of Management Sciences, Imo State University, Owerri

K E Y W O R D S	ABSTRACT
<u>KEYWORDS</u>	A B S T R A C T This study examined electronic banking and performance of deposit money banks in Nigeria. The general purpose of the study is to examine electronic banking and performance of deposit money banks in Nigeria from (2012-2021). After exhaustive literature review, secondary data was sourced from CBN statistical bulletin. Electronic banking were proxied with automated teller machine (ATM), Mobile banking (MB) and point of sale (POS) while performance was proxied with return on equity and return on asset. The study employed ordinary least square (OLS) using SPSS statistical package. Findings reveals that there is positive and insignificant effect of automated teller machine (ATM) on return on equity of deposit money banks in Nigeria, there is negative but insignificant impact of mobile banking (MB) on return on equity of deposit money banks in Nigeria, there is negative but significant effect of Point of sales (POS) on return on equity of deposit money banks in Nigeria. There is negative but insignificant impact of mobile banking (MB) on return on asset of deposit money banks in Nigeria. There is negative but insignificant impact of mobile banking (MB) on return on asset of deposit money banks in Nigeria. There is negative but insignificant impact of mobile banking (MB) on return on asset of deposit money banks in Nigeria. There is negative but significant impact of mobile banking (MB) on return on asset of deposit money banks in Nigeria. There is negative but significant impact of sales (POS) on return on asset of deposit money banks in Nigeria. We therefore concluded that Electronic banking have a negative and insignificant relationship with performance of deposit money banks in Nigeria. The study therefore recommends that there is need for banks to upgrade their information and communication technology
	of power supply. Banks information technology training programme should be encouraged among the staff. Banks should not just invest in more e-channels but rather also see to it that those channels are efficient and effective in relation to services each of them perform.

Background to the Study

For the survival of any business organization in the present economy, the need for better functionalities of every system on the business organization is very important for the achievement of the objective of the organization. The financial services sector has undergone a significant transformation in the 21st century due to the quick development of technology, which has permeated all areas of financial intermediation and financial markets, including e-finance, e-money, electronic banking (e-banking), e-brokering, e-insurance, e-exchange, and e-supervision.

Every firm has the desire to earn more income and become efficient to beat set targets and accomplish more results. This is possible when they out run their competitors by effective customer relationship, sales, marketing, relative effective cost and become very smart to beat time. Most of this is possible but with human, there is an aspect of limitation. This is because human is prone to error, mistakes and have relatively high cost.

Introduction and usage of electronic banking, made it possible for business and banks to become more efficient in this area and meet up dead lines as at when due. The challenge of these innovation on the bank include huge capital to acquire and install these facilities to maintain cost and also staff training cost to enhance compliance and understanding by the staff.

It is on this backdrop that the researcher tends to evaluate electronic banking and performance of deposit money banks in Nigeria.

Objectives of the Study

The main objective of the study is to evaluate electronic banking and performance of deposit money banks in Nigeria.

The specific objectives are to:

- 1. Examine the effect of automated teller machine on return on equity of deposit money banks in Nigeria.
- 2. Evaluate the impact of mobile banking on return on equity of deposit money banks in Nigeria.
- 3. Examine the effect of point of sale on return on equity of deposit money banks in Nigeria.
- 4. Examine the effect of automated teller machine on return on asset of deposit money banks in Nigeria
- 5. Evaluate the impact of mobile banking on return on asset of deposit money banks in Nigeria
- 6. Examine the effect of point of sale on return on asset of deposit money banks in Nigeria.

Research Hypotheses

The following hypotheses were formulated, for the study

- **H**₀₁: Automated teller machine has no significant effect on return on equity of deposit money banks in Nigeria.
- **H**₀₂: There is no significant impact of mobile banking on return on equity of deposit money banks in Nigeria
- **H**₀₃: Point of sale has no significant effect on return on equity of deposit money banks in Nigeria.
- **H**₀₄: Automated teller machine has no significant effect on return on asset of deposit money banks in Nigeria.
- **H**₀₅: There is no significant impact of mobile banking on return on asset of deposit money banks in Nigeria.
- **H**₀₆: Point of sale has no significant effect on return on asset of deposit money banks in Nigeria.

Scope of the Study

This study evaluates electronic banking and performance of deposit money banks in Nigeria. It will cover banks in Nigeria only and also the data were sourced from the central bank of Nigeria (CBN) published bulletin for a period of 10 years (2012-2021)

The bank performance is Proxied with return on equity and return on assets which is the dependent variables while electronic banking is proxied with automated teller machine (ATM), Mobile banking (MB) and point of sale (POS) are the independent variables.

The study will be significant and beneficial to the following

Banks: It will help the banks in becoming more aware of the benefits of Electronic banking in business activitie.

For the public: It will educate and inform the public to be conversant on the need for the use of Electronic banking.

For researchers: it will be useful to other researcher interested in the problem under investigation as the study has laid a platform on which further studies related to the subject can be undertake

Conceptual Review

The Concept of Electronic banking

A conventional banking system called electronic banking was first established in Nigeria in 1952. (Benjamin, 2014). Since then, the industry has witnessed a lot of regulatory and institution advances. The industry was being controlled by five out of the 89 banks in existence before the commencement of the merger and acquisition of banks in Nigerian economy.

According to Edet, (2018) describes electronic banking as a system in which financial transactions are completed electronically using equipment including ATMs, POS terminals, GSM phones, and V-cards handled by e-holders, bank clients, and stake holders

Operational Conceptual Framework

Independent Variable Dependent Variable Dependent Variable BANK PERFORMANCE AUTOMATED TELLER MACHINE MOBILE BANKING RETURN ON ASSET POINT OF SALE

Source: Researchers view showing relationship between the dependent and independent variables.

The entry of Nigerian banks into electronic banking

Electronic banking has acquired widespread acceptability internationally, both as a means of delivering financial services and as a strategic instrument for corporate development, and is rapidly catching up in Nigeria, with more and more institutions joining the field. Nigeria, with the introduction of net banking, can be seen to be on the cusp of a significant banking revolution. (Ovia, 2001).Despite the "not so healthy" economy, banking shines out among the Nigerian economy's sectors. Electronic banking, which allows customers to access their accounts from anywhere in the globe via a home computer with an Internet connection, is especially appealing to non-resident Nigerians and high-net-worth individuals who have many bank accounts. As a result, the potential for expansion is enormous. Customers would be discouraged from visiting actual branches if banks offered further incentives, and they would become 'hooked' on the comfort of armchair banking.

Performance, according to Verboncu and Zalman (2005), is a specific outcome of management, economics, and marketing that confers competitiveness, efficiency, and effectiveness on the organization and its structural and procedural elements. Siminica (2008) recognizes that a company performs when it is both effective and efficient. As a result, efficiency and efficacy, two variables, determine performance for this study: Return on Assets (ROA) and Return on Equity (ROE)

Theoretical framework

The theories are explained in this section.

The Resource-Based view theory

The Resource-Based View (RBV) theory, initially developed by Edith Penrose in 1959 and subsequently refined by scholars like Jay B. Barney and Birger Wernerfelt in the 1980s and 1990s, is a valuable framework for analyzing the relationship between electronic banking and firm performance.

RBV posits that a firm's competitive advantage and superior performance are primarily driven by its unique and valuable internal resources and capabilities. These resources can encompass tangible assets such as technology and financial capital, as well as intangible assets like knowledge, brand reputation, and organizational culture. The theory argues that firms can achieve sustainable competitive advantages when they possess resources that meet the VRIN criteria resources that are rare, valuable, inimitable, and non-substitutable.

Empirical Review

Adeoti (2019). Electronic Banking and Financial Performance of Nigerian Banks: A Comparative Analysis. Adeoti's study offers a comparative analysis of the financial performance of Nigerian banks based on their levels of electronic banking adoption. The research finds that banks that have extensively embraced electronic banking technologies tend to exhibit superior financial performance metrics compared to those that have not. Electronic banking adoption positively correlates with profitability.

Akowuah (2019) examined The Effect of Electronic Banking on the Financial Performance of Banks in Ghana. This study conducted in Ghana explores how electronic banking influences the financial performance of banks. The findings indicate that electronic banking adoption positively affects return on assets (ROA) and return on equity (ROE), contributing to improved financial performance for Ghanaian banks.

Adebiyi and Fajembola (2019) conducted a study on Impact of Electronic Banking on the Efficiency of Nigerian Commercial Banks. Their study investigates how electronic banking influences the efficiency of commercial banks. The results suggest that electronic banking positively impacts cost efficiency and overall efficiency among Nigerian commercial banks.

Research Gap

It is evident from the empirical review that there is gap in literature found. The works reviewed tend to examine internet banking and profitability using other proxies. Also most study that are on electronic banking are foreign based which is not effectively applicable to the Nigerian system and the period in question is far off and cannot be used for justification, since things might have changed and the variables for proxies are different from that used in this study. The work tends to bridge the gap in literature by focusing on the Nigeria economy and evaluating electronic banking and performance of deposit money banks in Nigeria.

Research Design

Research design refers to the development of strategies for finding out something. The ex-post facto research design was adopted in the study.

The study utilized secondary data in its development and it was sourced from the the central bank of Nigeria (CBN) published bulletin. The quantitative data collected covered the various proxies for independent and dependent variables of the study namely; automated teller machine, mobile banking, point of sale, return on equity and return on assets for the period of 10 years covering (2012-2021).

Method of Data Analysis

The study utilized the ordinary least square (OLS). Statistics is employed in establishing the individual relationship of each of the exogenous variable on the identified endogenous variable while F-statistics establishes the combine effect or relationship of the three exogenous variables on the endogenous variable.5% level of significance is utilized in the study.

Model Specification

The model is thus ROE = F (ATM, MB, POS) ROA = F (ATM, MB, POS)

Where

ROE =Return on equity ROA = Return on asset ATM= Automated teller machine MB = Mobile banking POS = Point of sale The model is specified econometrically as ROE= $a_0 + \alpha_1 ATM + \alpha_2 MB + \alpha_3 POS$ ROA= $a_0 + \alpha_1 ATM + \alpha_2 MB + \alpha_3 POS$

Where

 a_0 = The constant or intercept of the model α_1 = Coefficient of the first independent variable (ATM) α_2 = Coefficient of the second independent variable(MB) α_3 = Coefficient of the third independent variable (POS) ei = Error term]

Test of Significance

To test for the significance of the collective effect of the independent variables on each of the proxies of dependent variable in the model, F-statistics will

be employed; also the coefficient of determination (R^2) will be used in ascertaining the extent of the effect or influence of the independent variables on the dependent variable.

Decision Rule

This study utilize 5% level of significance using F-statistics for the hypotheses test, the decision to accept or reject the null hypothesis is made based on the following rules; if the statistic from the test result falls within the significant region of 0.00-0.05, it indicates a significant relationship between the dependent and independent variable. Thus, the null hypothesis will be rejected and the alternative accepted. Conversely if the f-statistic shows a result that falls outside the significances region of 0.00 -0.05, it will indicate a case of no significance in which case The alternative will be rejected, and the null hypothesis will be accepted.

Data presentation

The Automated teller machine (ATM), Mobile banking (MB) and Point of sales (POS) are proxies for Electronic banking which is the independent variable while the Return on assets (ROA) and Return on equity (ROE) are proxies for performance which is the dependent variable.

Table 4.1 Data on Return on asset (ROA), Return on equity (ROE), Automated
teller machine (ATM), Mobile banking (MB) and Point of sale (POS) of Deposit
money bank for the period (2012-2021)

ROA	DOD			
KOM	ROE	ATM	MB	POS
%	%	₩000'000	₩000'000	₩000'000
2.03	16.73	1,984,990	31,567	48,461
2.25	17.72	2,830,533	47,316	161,212
2.14	15.91	3,681,980	74,205	312,071
1.56	10.24	3,971,651	91,581	448,512
1.28	8.67	4,988,133	132,360	758,996
1.21	8.53	6,437,592	184,596	1,409,813
1.17	8.38	6,480,085	404,600	2,383,108
1.24	9.31	6,512,612	478,140	3,204,749
0.94	7.46	12,004,067	235,617,811	2,806,304
0.55	6.56	21,230,934	545,039,685	24,455,416
	% 2.03 2.25 2.14 1.56 1.28 1.21 1.17 1.24 0.94	%%2.0316.732.2517.722.1415.911.5610.241.288.671.218.531.178.381.249.310.947.46	%%¥000'0002.0316.731,984,9902.2517.722,830,5332.1415.913,681,9801.5610.243,971,6511.288.674,988,1331.218.536,437,5921.178.386,480,0851.249.316,512,6120.947.4612,004,067	%%000'000₩000'0002.0316.731,984,99031,5672.2517.722,830,53347,3162.1415.913,681,98074,2051.5610.243,971,65191,5811.288.674,988,133132,3601.218.536,437,592184,5961.178.386,480,085404,6001.249.316,512,612478,1400.947.4612,004,067235,617,811

Source: central bank of Nigeria statistical bulletin (CBN)

To standardize to equal base the log of numbers is used

100000000000000000000000000000000000000					
YEAR	LnROA	LnROE	LnATM	LnMB	LnPOS
2012	0.71	2.82	14.50	10.36	10.79
2013	0.81	2.87	14.86	10.76	11.99
2014	0.76	2.77	15.12	11.21	12.65
2015	0.44	2.33	15.19	11.42	13.01
2016	0.25	2.16	15.42	11.79	13.54

Okafor-Kelly Kelechi		ational Journ	al of Accounte	ancy, Finance	and Taxation
2017	0.19	2.14	15.68	12.13	14.16
2018	0.16	2.13	15.68	12.91	14.68
2019	0.22	2.23	15.69	13.08	14.98
2020 -	0.06	2.01	16.30	19.28	14.85
2021 -	0.60	1.88	16.87	20.12	17.01

Data Analysis and interpretation

Drof the Ndubuisi John 0

The table below shows the summarized result of linear regression analysis of our data for the study.

Results of Regression Analyses

The multiple regression models of this study as stated in chapter 3 were analyzed using the ordinary least square (OLS) regressions. The results of the analysis are detailed in the appendix but have been summarized in table 4.2

$\begin{array}{c c} (Constant)b_0 & 4.693 & 3.07 \\ (ATM)b_1 & 0.009 & -0.00 \\ (MB)b_2 & -0.002 & -0.04 \end{array}$		
@ 5% level of significance	MODEL 1 (ROE)	MODEL 2
		(ROA)
(Constant)b ₀	4.693	3.073
$(ATM)b_1$	0.009	-0.006
(MB)b ₂	-0.002	-0.043
(POS)b ₃	-0.180	-0.154
Durbin Watson stat	1.691	1.578
Sourcos Extracts from Annondix		

Source: *Extracts from Appendix*

Table 4.2 shows that the intercept (b_0) of the regression model 1 and 2 is positive at 4.693 and 3.073 respectively, the result shows that when the proxies for independent variable in both models are zero, the dependent variable (ROE) and (ROA) will be positive. Results from the table 4.2 also indicate that the coefficient of the first (ATM) independent variables in model 1 is positive as shown in the value (0.009) and the second (MB) and third (POS) (-0.002) and (-0.180) are both negative respectively. This indicated that the second and third independent variable from the model 1 have a negative relationship with the dependent variable (ROE) and the first independent variable (ATM) have a positive relationship with the dependent variable (ROE).

On the other hand, the first (ATM), second (MB) and third (POS) independent variable shows also a negative relationship with the dependent variable (ROA) as indicated in the value -0.006, -0.043 and -0.154 respectively.

The Durbin Watson result for the model confirms that the data used in the analysis is free from autocorrelation or serial correlation shown in the value (1.578) and (1.691) respectively since it's close to 2, which further indicates that the data used in the analysis is valid.

Test for significance and decisions on the hypotheses of the study

Prof. Ihe Ndubuisi John &Okafor-Kelly KelechiInternational Journal of Accountancy, Finance and Taxation

The test for significance results using t-statistics are detailed in the appendix; however a summary of the significance results which aids the decision for the six hypothesis of the study are summarized on table 4.3

Table 4.3Test for significance results (Test of hypotheses)

@ 5% level of	Model 1	l (ROE)	-	Model 2 ((ROA)	
significance	HYP 1	HYP 2	HYP 3	HYP 4	HYP 5	HYP 6
	(ATM)	(MB)	(POS)	(ATM)	(MB)	(POS)
P-Value	0.592	0.951	0.020	0.646	0.113	0.014
Remarks	INSIG.	INSIG	SIG	INSIG	INSIG	SIG
Source Extracts	from annon	div				

Source: *Extracts from appendix*

Hypotheses

H₀₁: Automated teller machine has no significant effect on return on equity of deposit money banks in Nigeria.

From table 4.3, P > 0.05 for hypothesis 1 with the P-value being 0.592. This indicates that there is an insignificant effect of automated teller machine and return on equity of deposit money banks in Nigeria. The null hypothesis which states that there is no significant effect of automated teller machine and return on equity of deposit money banks in Nigeria is accepted while the alternative hypothesis is rejected.

H₀₂: There is no significant impact of mobile banking on return on equity of deposit money banks in Nigeria

Table 4.3 shows that P-value in respect of the second hypothesis is 0.951 which implies that P > 0.05. With this, there is an indication of insignificant impact of mobile banking on return on equity of deposit money banks in Nigeria. Therefore we the accept the null hypothesis and reject the alternative hypothesis and conclude that there is no significant impact of mobile banking on return on equity of deposit money banks in Nigeria.

H₀₃: Point of sale has no significant effect on return on equity of deposit money banks in Nigeria

The hypothesis test table above further reveals that the P-value in respect of the third hypothesis is 0.020 (P < 0.05) which suggests a significant effect of the independent variable (POS) on the dependent variable (ROE). The study therefore rejects the null hypothesis and accept the alternative hypothesis and conclude that there is significant effect of point of sale on return on equity of deposit money banks in Nigeria.

H₀₄: Automated teller machine has no significant effect on return on asset of deposit money banks in Nigeria.

From table 4.3, P > 0.05 for hypothesis 1 with the P-value being 0.646. This indicates that there is an insignificant effect of automated teller machine onreturn on asset of deposit money banks in Nigeria. The null hypothesis which states that there is no significant effect of automated teller machine on return on asset of deposit money banks in Nigeria is accepted while the alternative hypothesis is rejected

H₀₅: There is no significant impact of mobile banking on return on asset of deposit money banks in Nigeria.

Table 4.3 shows that P-value in respect of the hypothesis is 0.113 which implies that P > 0.05. With this, there is an indication of insignificant impact of mobile banking on return on asset of deposit money banks in Nigeria. Therefore we the accept the null hypothesis and reject the alternative hypothesis and conclude that there is no significant impact of mobile banking on return on asset of deposit money banks in Nigeria

H_{06} : Point of sale has no significant effect on return on asset of deposit money banks in Nigeria.

The hypothesis test table above further reveals that the P-value in respect of the hypothesis is 0.020 (P < 0.05) which suggests a significant effect of the independent variable (POS) on the dependent variable (ROA). The study therefore rejects the null hypothesis and accept the alternative hypothesis and conclude that there is significant effect of point of sale on return on asset of deposit money banks in Nigeria.

Discussion of findings

The findings from the analysis and the test statistics are discussed in line with the objective of the study in the first chapter. Discussion of the findings is as follows:

The regression model analyzed in this study took care of the objectives and hypothesis of the study; which include objectives/hypothesis 1-6. In the models, each of the proxies for Electronic banking was regressed against return on equity (ROE) and return on assets (ROA)(dependent variable). In model 1 the results reveals that Automated teller machine (ATM) has a positive and insignificant effect on ROE. It means that a unit increase in ATM will lead to a 0.009increase in ROE. On the other hand Mobile banking was found to have negative and insignificant impact on ROE. This means that a unit increase in Mobile banking will lead to a -0.002decrease in ROE. Also the Point of sale (POS) was found to have a negative but significant effect on ROE.

In model 2 the results reveals that Automated teller machine (ATM) has a negative and insignificant effect on ROA. It means that a unit increase in ATM will lead to a -0.006decrease in ROA. On the other hand Mobile banking was found to have negative and insignificant impact on ROA. This means that a unit increase in Mobile banking will lead to a -0.043decrease in ROA. Also the Point of sale (POS)

was found to have a negative but significant effect on ROA. The F-statistics results do support this exertion in both models as the independent variables are jointly significant to the dependent variables as indicated in the value (0.005) and (0.000) respectively.

Also the data are free from serial autocorrelation as indicated from the value of Durbin Watson which is (1.691) and (1.578) that indicates that the data is valid since it's close to 2.

Summary of findings

The overall results of the analysis in the preceding chapter of this study provide the following findings:

- 1. There is positive and insignificant effect of automated teller machine (ATM) on return on equity of deposit money banks in Nigeria
- 2. There is negative but insignificant impact of mobile banking (MB) on return on equity of deposit money banks in Nigeria.
- 3. There is negative but significant effect of Point of sales (POS) on return on equity of deposit money banks in Nigeria.
- 4. There is negative and insignificant effect of automated teller machine (ATM) on return on asset of deposit money banks in Nigeria
- 5. There is negative but insignificant impact of mobile banking (MB) on return on asset of deposit money banks in Nigeria.
- 6. There is negative but significant effect of Point of sales (POS) on return on asset of deposit money banks in Nigeria

Conclusion

The following conclusions were drawn in light of the main findings:

Electronic banking has a negative and insignificant relationship with performance of deposit money banks in Nigeria. This arises due to the fact the increased cost incurred in ensuring an effective electronic banking affects the performance negatively and the significance test indicates that the combined effect of the electronic banking in this research is statistically insignificant in explaining the performance of deposit money banks in Nigeria.

Recommendations

The following recommendations are made based on the results of the study.

- 1. There is need for banks to upgrade their information and communication technology infrastructural facilities.
- 2. Cost of installing a sound ICT should be minimized or regulated by the government and more so, they (government) should as a matter of urgency fix the issue of power supply.
- 3. Banks information technology training programme should be encouraged among the staff

- 4. Banks should not just invest in more e-channels but rather also see to it that those channels are efficient and effective in relation to services each of them perform.
- 5. Investment decision on electronic banking should be rational so as to justify cost and revenue implications on bank performance.
- 6. Government should also encourage adoption of innovations that will improve profitability of organizations because it will convert to better tax revenues for the government.

References

- **1.** Adebiyi, S. O., & Fajembola, O. D. (2019). Impact of Electronic Banking on the Efficiency of Nigerian Commercial Banks. Banks and Bank Systems, 14(3), 42-52.
- 2. Abgenewe, Zeph C. Ogbulu, Maxwell, & Ndugbu (2013) "Electronic Banking and Banks performance" The West African Journal of Academic and Industrial Research.
- 3. Adeoti, J. O. (2019). Electronic Banking and Financial Performance of Nigerian Banks: A Comparative Analysis. International Journal of Advanced Research in Management and Social Sciences, 8(8), 35-46.
- 4. Adekoya, O. (2018). Electronic Banking Services and Customer Satisfaction: Evidence from Nigerian Banks. International Journal of Bank Marketing, 36(7), 1355-1374.
- 5. Anayanwaokoro, M (2013). Theory and Policy of Money and Banking. Enugu, Nigeria: Hossana Publications Pp.1-21.
- 6. Adepoju, S.A.; & Alhassan, M.E (2014) Chanllenges of Automated Teller Machine: Usage and Fraud Occurrences in Nigeria. *Journal of Internal Banking and Commerce*. Vol. 15:p. 3-4.
- 7. Agboola, A.A. (2017) Electronic Payment Systems and Tele-Banking Services in Nigeria. Journal of Internal Banking and Commerce. Vol. 11:p. 77.
- 8. Akowuah, J. A. (2019). The Effect of Electronic Banking on the Financial Performance of Banks in Ghana. Journal of Emerging Issues in Economics, Finance and Banking, 8(2), 773-784.
- 9. Amos, T.B., Akin, B. (2015) Prospects of E-Commerce. International Business Journal. Vol.103:p. 7-13
- 10. Andrew, B (2013) E-Banking and its Impacts in Nigeria. Enugu, Hosanna Publishers. P. 14-16.
- 11. Azizul, T.; Abdulbasah, M (2014) Advantages of E-Transactions. *International Business Journal*.Vol.171.p.10.

- 12. Brannen, J., & Amp; moss, G. (2012).Critical problems with mixed-methods policy research design. American behavior scientist, 56 (6), 789-801.
- 13. Choy, L. T. (2014). Comparing and contrasting the advantages and disadvantages of various research methodologies using both qualitative and quantitative method. ISOR journal of humanities and social science, 19 (4), 99-104.
- 14. Chibuzo, M (2016). South African Firm Launches Anti-Money Laundering Solution in Nigeria. *Journal of Financial Standard*.Vol.3.P.41-47.
- 15. Ciciretti, R., Hassan, I.; Zazzara, C. (2015). Internet Activities and Value Added. *Internal Business Management Journal*. Vol. 5. P.49
- *16.* Central Bank of Nigeria (2013). The Economic Impacts of E-banking. *Journal of Financial management*. Vol.55:p.89
- 17. Cheetam, M., & Chivers, N (2015). Academic Dictionary of Banking. New Delhi, West Boure Business School. P. 7
- 18. Clive, W (2015). Academics Dictionary of Banking. New Delhi, Indian : West Bourme Business School.p.100
- 19. Ciolacu, N (2016). Challenges of E-Transaction. *International Business Management Journal*. Vol. 557(8): p.
- 20. Davis, F. D. (1989). Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology. MIS Quarterly, 13(3), 319-340
- 21. Edet, O. (2017). Electronic banking in Banking Industries effects. *Internal Journal of investment and finance*. Vol. 151. p. 49.
- 22. Ezeoha, M (2001) Basic Statistics: A simplified Approach. Peace Publishers, Owerri. P.63.
- 23. Fountaine, T., McCarthy, B., & Saleh, T. (2019). Building the AI-powered organization. Harvard Business Review, 97(4), 62–73
- 24. Goulding, C. (2002). Grounded Theory: A Practical guide for management, business and market Researchers. Thousand Oaks, CA:
- 25. Haq, M. (2014). An examination of the differences between qualitative and quantitative research methods and a defense of the use of mixed approaches in social science.
- 26. Holden, M. T., & amp; Lynch, P. (2004). Choosing the appropriate methodology: understanding research philosophy. The marketing review, 4 (4), 2-18.
- 27. Heleiner, E (2016) Electronic Money: A challenge to the Sovereign State. *Journal of International Affairs*. Vol. 51.P.387-409.

- 28. James, A. (2015). Boosting Payment Solution with Visa Cards. *Daily Champion* News Paper, April 21.pp. 5-15.
- 29. Johnson, M. R., & Smith, K. L. (2018). The Impact of Electronic Banking on Bank Performance: Evidence from the United States. Journal of Banking & Finance, 97, 103-116
- *30.* King, M (2017) Challenges of Monetary Policy: New and Old Approaches. *Bank* of England Quartely Bulletin, November.P.397-414.
- 31. Karjaluoto, T., Egwali, U (2002) Customers' Perception of Security Indicators in Online Banking Sites in Nigeria. *Journal of Internet Banking and Commerce*. Vol. 13(3):p.47-52
- 32. Ibrahim, D. (2014). Boosting Payment Solution with Visa Card. *Daily champion News Paper*, April 21.p.17
- 33. Ike, E (2017) Economic Implications of Electronic Banking in Nigerian Banks. *World Bank Research Journal*. Vol. 13 (2). P. 101-102.
- *34.* Larry, I (2017) The Risk and Rewards of electronic Transaction. *Journal of* Internet Banking and Commerce. Vol. 6:p.114
- *35.* Marshell, U (2016). Development of Mobile Banking In Nigeria.*Journal of* Business Management. Vol. 46(1):p.91
- 36. Mark, U (2015) Statistics for Business and Economics. San Francisco, Delien Publishers. P.56
- 37. Mahdi, S., Mehrdad, A (2015) E-Banking and The Economy: Empirical Evidence of Iran. International Journal of Economics and Financial Management. Vol.15:p.236-259
- 38. Macdonald, S., & amp; Headlam, N. (2009). Introduction to Research Methods for Social Research in the Research Methods Handbook. Manchester, London:
- 39. Muriithi, M. W., & Mukulu, E. (2018). Electronic Banking and Financial Performance of Commercial Banks in Kenya. International Journal of Business and Commerce, 7(12), 19-33
- 40. Nnamdi, J (2017) Internet Banking: Practices and Potentials in Nigeria. A paper presented at the conference organized by Institute of Chartered Accounts of Nigeria (ICAN), September, 2007.
- 41. Omatoy, G. (2015). A Dictionary of Finance. West Bourme, England: West Bourme Business School. P.57
- 42. Ovia, T (2016) Business Statistics. Kricel Publishers, Owerri. P.45

- 43. Raja, J. M.; Senthil, V (2017) Electronic Transactions and The economy. Ottawa, Journal of Internet Banking and Commerce. Vol. 3 (7): 1-7
- 44. Rajnish, C., Buse, N.C (2017) The Emergence of Internet Banking in Nigeria: Appraisal, *Journal of Information Technology.* Vol. 11 (4):p.490-496
- 45. Shah M; & Clarke S. (2000). E-banking management: issues, solutions and strategies. Pg57
- 46. Sharma, R., & Yadav, A. (2018). Electronic Banking Adoption and Financial Performance of Banks in India. International Journal of Bank Marketing, 36(5), 852-871
- 47. Titrade, T (2015). Internet Banking and Its Challenges. *Journal of Business Management*. Vol. 9(1):P.78
- 48. Vaidya, R. (2016). Trust Formation in Information Systems Implementation in Developing Countries. Journal of Information, Communication and Ethics in Society, 14, 182-199.
- 49. Verboncu, I., & Zalman, M. (2005). Management și performanțe. Editura Universitară.
- *50.* Yang, D.; Rose, T.; Moses, B (2017) New Perspective of E-Banking. *Journal of* Global Business. Vol. 4.(5):P.27
- 51. Zhila, I (2017) E-Transactions and Economic Planning System. *Journal of Service Industrial Management*. Vol. 14(5):pp.501-519.

Appendix

REGRESSION /MISSING LISTWISE /STATISTICS COEFF OUTS R ANOVA COLLIN TOL /CRITERIA=PIN(.05) POUT(.10) /NOORIGIN /DEPENDENT LnROE /METHOD=ENTER LnATM LnMB LnPOS /RESIDUALS DURBIN.

Regression

Variables Entered/Removed^a

	Variables	Variables	
Model	Entered	Removed	Method

Prof. Ihe Ndubuisi John &Okafor-Kelly KelechiInternational Journal of Accountancy, Finance and Taxation

1	LnPOS,	Enter
	LnMB,	
	LnATM ^b	

a. Dependent Variable: LnROE

b. All requested variables entered.

Model Summary^b Adjusted R Std. Error of Durbin-Model R Square Square the Estimate Watson R .911ª .830 .745 .18010 1.691 1

a. Predictors: (Constant), LnPOS, LnMB, LnATM

b. Dependent Variable: LnROE

ANOVA^a Sum of Mean Model **Squares** df Square F Sig. 1 Regression .950 3 .317 9.767 .005^b .032 Residual .195 6 9 Total 1.145

a. Dependent Variable: LnROE

b. Predictors: (Constant), LnPOS, LnMB, LnATM

Coefficients ^a							
	Unstan	dardized	Standardized				
	Coef	ficients	Coefficients			Collinearity	v Statistics
Model	В	Std. Error	Beta	t	Sig.	Tolerance	VIF
(Constant)	4.693	9.020		1.626	.155		
LnATM	.009	.816	-1.724	-1.095	.592	.011	87.539
LnMB	002	.071	.679	.979	.951	.059	16.990
LnPOS	180	.212	.223	.212	.020	.026	38.902

a. Dependent Variable: LnROE

Collinearity Diagnostics ^a							
Condition Variance Proportions							
Model	Dimension	Eigenvalue	Index	(Constant)	LnATM	LnMB	LnPOS
1	1	3.963	1.000	.00	.00	.00	.00
	2	.034	10.791	.00	.00	.07	.00

Vol. 1 No. 3 September 2023

Prof. Ihe Ndubuisi John & Okafor-Kelly Kelechi *I*

International Journal of Accountancy, Finance and Taxation

3	.003	34.420	.00	.00	.10	.08
4	1.293E-5	553.512	1.00	1.00	.83	.92

a. Dependent Variable: LnROE

Residuals Statistics^a

				Std.	
	Minimum	Maximum	Mean	Deviation	Ν
Predicted Value	1.7579	2.9162	2.3340	.32496	10
Residual	15749	.26489	.00000	.14705	10
Std. Predicted	-1.773	1.792	.000	1.000	10
Value					
Std. Residual	874	1.471	.000	.816	10
- Demandent Versiele					

a. Dependent Variable: LnROE

REGRESSION

/MISSING LISTWISE /STATISTICS COEFF OUTS R ANOVA COLLIN TOL /CRITERIA=PIN(.05) POUT(.10) /NOORIGIN /DEPENDENT LnROA /METHOD=ENTER LnATM LnMB LnPOS /RESIDUALS DURBIN.

Regression

[DataSet0]

Variables Entered/Removed^a

	Variables	Variables	
Model	Entered	Removed	Method
1	LnPOS,		Enter
	LnMB,		
	LnATM ^b		

a. Dependent Variable: LnROA

b. All requested variables entered.

Model Summary^b

			Adjusted R	Std. Error of	Durbin-
Model	R	R Square	Square	the Estimate	Watson
1	.957ª	.916	.874	.15133	1.578

a. Predictors: (Constant), LnPOS, LnMB, LnATM

b. Dependent Variable: LnROA

ANOVA^a

	v		,	,	<i></i>	
Mode	l	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.501	3	.500	21.844	.000b
	Residual	.137	6	.023		
	Total	1.638	9			

Prof. Ihe Ndubuisi John &Okafor-Kelly KelechiInternational Journal of Accountancy, Finance and Taxation

a. Dependent Variable: LnROA

b. Predictors: (Constant), LnPOS, LnMB, LnATM

Coefficients^a

	Unstandardized		Standardized				
	Coefficients		Coefficients			Collinearity Statistics	
		Std.					
Model	В	Error	Beta	t	Sig.	Tolerance	VIF
(Constant)	7.490	7.579		.988	.361		
LnATM	006	.686	656	593	.646	.011	87.539
LnMB	0043	.060	095	196	.113	.059	16.990
LnPOS	154	.178	220	298	.014	.026	38.902

a. Dependent Variable: LnROA

Collinearity Diagnostics^a

				Variance Proportions			
Model	Dimension	Eigenvalue	Condition Index	(Constant)	LnATM	LnMB	LnPOS
1	1	3.963	1.000	.00	.00	.00	.00
	2	.034	10.791	.00	.00	.07	.00
	3	.003	34.420	.00	.00	.10	.08
	4	1.293E-5	553.512	1.00	1.00	.83	.92

a. Dependent Variable: LnROA

Residuals Statistics^a

				Std.	
	Minimum	Maximum	Mean	Deviation	Ν
Predicted Value	5086	.8999	.2880	.40835	10
Residual	18990	.22105	.00000	.12356	10
Std. Predicted	-1.951	1.498	.000	1.000	10
Value					
Std. Residual	-1.255	1.461	.000	.816	10
D. D. J. J. W. J.					

a. Dependent Variable: LnROA