THE EFFECT OF CASHLESS POLICY ON THE PROFITABILITY OF COMMERCIAL BANKS IN NIGERIA. 2006-2013

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ABSTRACT

Using time series data for the period 2006-2013, this study examined the effect of cashless banking on the profitability of commercial banks in Nigeria. Data were collected from secondary sources though annual reports sand statistical bulletin of Central Bank of Nigeria. The effect of Cashless Banking was measured using the tool return on equity of commercial banks and ATM, POS and internet transactions in Nigeria. Return on equity was regressed on ATM, POS and internet transactions using multiple regression technique. The study revealed that positive relationships exist ROE and ATM usages, and also between ROE and POS usages. On the other hand, there was a negative relationship between ROE and IT. It was discovered that the existing business environment in Nigeria poses a challenge to the smooth running of Cashless Banking. It is therefore recommended that banks that want to improve their profitability, performance and efficiency must offer numerous products/services through mobile phones and the internet in an efficient and cost effective manner and create awareness of the availability of these services. They must also make mobile banking application all mobile phones enabled so that those customers who cannot afford Java enabled mobile phones can also use the product.

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INTRODUCTION

Change they say is the only constant thing. The financial system has witnessed evolution for the period of barter systems to cashless system. In the primitive days, man was almost completely independent and there was no need for exchange. The barter system was the first exchange system recorded throughout the course of history. During that time people produced for personal need as well as for others. However, the problems of barter system such as double coincidence of wants, absence of a common means of measure, lack of specialization, indivisibility of some goods, poor measure of deferred payment and also poor store of value among other necessitated the introduction of money as a means of exchange. The introduction of money as a medium of exchange facilitated the establishment of commercial banks in Nigeria. There cannot be money without banking, for it is banks that issue and trade in money. The history of the Nigeria a banking system dates back to 1892 when the Africa Banking Corporation (ABC) was established. Since then, the industry has witnessed a lot of regulatory and institutional changes. Like other countries, Nigeria is moving from a purely cash based economy to a cashless one for the purpose of development. They have in the last few years transformed from manual to automated systems. This is because Nigerian banks have invested so much on technology for delivering a wide range of value added products and services. With the cashless banking, individuals can check their account balances and make payments without having to go to the banking hall.

The introduction of electronic banking has the tendency of improving banking efficiency and economic activities. Profit is generally described as the surplus accruing to entrepreneur after all factor costs have been deducted from the total revenue. Commercial banks operate as a profit making venture. The introduction of cashless policy is meant to increase the efficiency of commercial banks, hence their profit. This will in turn influence banks profitability. It is in this vein that the study aimed at examining the operations of cashless banking and profit returns of commercial banks in Nigeria. In its survey on the extent of cashless banking adoption by Nigerian banks, the Central Bank of Nigeria, in September 2002, found out that of the 89 licensed banks in the country, 17 were offering internet banking, 24 were offering basic telephone banking, 7 had ATM services, while 13 of the banks were offering other forms of e-banking. This implies that as at then, only 19.1 percent of the banks were offering internet banking. This is very discouraging because cashless banking is a driving force that is changing the landscape of the banking industry particularly, towards a more competitive industry. Cashless banking has blurred the boundaries between different financial institutions, enabled new financial products and services, and made existing

financial services available in different packages (Agbada, 2008). However, the influences of electronic banking go far beyond this.

The developments in cashless banking, together with other financial innovations are constantly bringing challenges to and changing people's understanding of the financial system. Customers have increased their demand for efficient and fast personal services. It is not surprising that the application of cashless banking in Nigeria, just like every other policy introduced has encountered numerous challenges. One of the major problems is the poor state of Information and Communication Technology (ICT) in Nigeria. Communications over the internet are insecure and often congested. The financial institutions would also have to contend with other internet challenges including security, quality of service and some aberrations in electronic finance. Besides the existing business environment, there are other challenges that affects the smooth operations of cashless banking in Nigeria. Some of these operational challenges include; epileptic power supply, dominance of cash transaction in the economy, low level of awareness among Nigerians etc. (Agbada, 2008). It has already been established that cashless banking is beneficial for customers who would rather avoid the stress of banking halls and prefer the ease of an automated bank. However, previous studies identify high cost of internet banking. This is because banks spend a lot on the acquisition of computers, POS machines and other telecommunication gadgets. Irrespective of these challenges, it is expected that the latest developments in the banking sector must have impacted positively on the returns of banks. Therefore, this work shall be to examine the perks of cashless banking in Nigeria and its impact on banks profitability.

LITERATURE REVIEW
Theoretical Framework

The theory that relates to the study is the Innovation Diffusion Theory (DOI). This theory was developed by Everett Rogers in 1962. It explains how an idea or product gains momentum and diffuses or spreads through specific population or social system. The end result of this diffusion is that people, as part of a social system, adopt a new idea, behavior or product. Innovation diffusion is a multidisciplinary field with contributions from sociologists communication researchers, organizational researchers, Information Technology researchers and many others (Kim and Galliers, 2004). The three characteristics of innovation according to Kimberly and Evanisko (1981) are characteristic of organizational leaders, characteristics of organization and characteristics of environment. Again, Tornatzky and Fleischer (1990) identified three

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different categories of factors; organizational technological and environmental factors. These factors influence the technological innovation decision. In summary, the managerial, organizational, technological and environmental are the factors of technological innovation found in literatures. The following environmental factors that relate to the adoption of internet technologies are: pressure from competitors, customers or suppliers, the role of government (incentives), partners' alliances, technological infrastructure, technology consultants, image of internet technology and users' expectations (Aguila-Obra and Padilla-Melendez, 2006).

Technology factors are related to barriers to technology adoption and its perceived benefits. The perceived benefits for managers could be direct, such as cost savings or income generation, or indirect such as potential opportunities in new markets, marketing or publicity (Poon and Swatman, 1999). Thus, when adopting an innovation, organizations must perceive the positive effects of the adoption and its potential value before starting the process (Vadapalli and Ro-mamurthy, 1997). The organizational factors that have been mostly cited in literature include IT users' community, organizational structure, firm's processes, firm size, technological capabilities of the organization's members, the technological and financial resources available, the culture of the organization, process of selecting and implementing IT, management backing and support for the project and the project leader (Aguila-Obra and Padilla-Melendez, 2006). Innovation studies conform to one or two general styles of research; adopter studies and diffusion modeling studies (Fichman, 2000). Adopter studies are basically concerned about understanding differences in adopter innovativeness. The usual approach is to survey organizations in some population of interest to capture data about the characteristics of those organizations and their adoption context and the timing and/or extent of adoption of one or more innovation. Diffusion modeling studies are primarily interested in what determines the rate, pattern and extent of technology diffusion (Kim and Galliers, 2004). Therefore, the research will be based on this theory. This is because, it is expected that innovation in the banking sector (cashless or e-banking) must have affected the profitability of banks positively.

Empirical Literature Review
The Cashless Policy in Nigeria
Cashless economy does not mean a total elimination of cash as money will continue to be a means of exchange for goods and services in the foreseeable future. It is a financial environment that minimizes the use of physical cash by providing alternative channels for making payments. The cashless economy policy of the Central Bank of Nigeria

(CBN) is designed to provide mobile payment services, breakdown the traditional barriers hindering financial inclusion of millions of Nigerians and bring low cost, secure and convenient financial services to urban, semi-urban and rural area across the country. You can pay for your purchases by any one of a plethora of credit cards or bank transfer (Roth, 2010). This has however become an albatross to some elites, the poor, the uneducated and traders. In Nigeria today, majority of transactions is done with cash. However, the CBN goal is to discourage cash transactions as much as possible. The CBN had set daily cumulative withdrawal and deposit limits of N150,000.00 for individuals and N1,000,000.00 for corporate entities. It has recently been reviewed to N500,000.00 and N3 million respectively. Penalty fees of N100 and N200 respectively now reduced to 3 percent and 5 percent respectively are to be charged per extra N1000 (Ezumba, 2011). This limit is meant for one day. Of recent, there are up to six different electronic payment channels in Nigeria. Automated Teller Machines (ATM), Point of Sales terminals, Mobile Voice, Web, Inter-bank branch and Kiosks. These are to be deployed across commercial points in the country. E-payment initiatives in Nigeria have been undertaken by indigenous firms and have been stimulated by improvement in technology and infrastructure (Babalola, 2008).

The POS terminals deployed will serve like the Automatic Teller Machines (ATM). In this case, upon completing a transaction and the value ascertained, the amount is entered into a POS terminal into which the electronic card has been slotted. The cash equivalent of the amount is transferred from the payer's account into the account of the payee automatically (Olaegbe, 2011). There are different types of terminals; coin and note, credit card and payroll deductions terminals. There are alternative means of payment they are: cheques, bank drafts. The cash policy aims at curbing the negative consequences associated with the high usage of physical cash in the economy. These challenges are high cost of cash printing cash, high risk of using cash, high subsidy, informal economy inefficiency, corruption among many others.

Cashless Policy and Commercial Banks in Nigeria

Many studies have been carried out on cashless policy and commercial banks, few of such studies are reviewed here: Osazevbaru, Sakpaide and Ibubune (2014) conducted a study on a topic cashless policy and banks profitability in Nigeria. The study examined the impact of cashless policy on the profitability of Nigerian banks against the bank drop that these banks in a cash based economy are known for their huge profits even in the face of associated high cost of operation. The result revealed that cashless economic policy positively impacts on banks' profit through reduction in cost of operations and

banking the unbanked populace. Alao and Sorinola (2015) examined cashless policy and customers' satisfaction: a study of commercial banks in Ogun State, Nigeria. The study sought to investigate the customers' satisfaction of the recently introduced cashless policy in Ogun State with some bank customers in Abeokuta. Data was collected with a well structural questionnaires and analyzed with descriptive statistics. The findings of the study revealed that cashless policy contributed significantly to customers' satisfaction through electronic channels. Omotunde, Sunday and John-Dewole (2013) conducted a study on a topic impact of cashless economy in Nigeria. The study applied survey research using questionnaire to collect data, descriptive statistics was used to analyzed the data. The result shows that cashless policy reduces cash related corruption and attract foreign investment. Another study was conducted by Tajudeen (2013) on a topic the effect of cashless policy on corruption in Nigeria. The research also used descriptive statistics to analyzed both primary and secondary data collected for the study. The result shows that no single strategy can address all types of corruption and that the cashless policy can only reduce petty corruption which is the lowest level of corruption as against all forms of corruption.

METHODOLOGY

Secondary data was used for this study. The quarterly time series type of data was also used. This quarterly data was obtained from various compilations of Central Bank of Nigeria (CBN) publications, Statistical Bulletin and Annual Statement of Accounts Publication. Data was gotten from textbooks, journals, articles, and manuals that are relevant to the subject matter. This research employed Ordinary Least Square (OLS) method of log-linear multiple regression analysis to examine the effectiveness of the CBN cashless banking policy on the profitability of commercial banks in Nigeria. The OLS was used considering the fact that it is the most appropriate in view of the test for fitness and it's easy to understand. The estimation of the model was carried out using the econometric computer software package E-view. The relevant variables comprise of return on equity, number of ATM and POS transactions and volume of internet banking transactions provided by banks. Quarterly data was used for all variables spanning from the period of 2006 to 2013 which covers the period of the introduction of the cashless policy in Nigeria. The econometric model used in this research considered ATM, POS and Internet Transactions as the explanatory variables and Return on Equity as the dependent variable. These variables were used as constant prices; this was used to obtain reliable parameter in the time series regression.

Following the theoretical framework, it is expected that investments on new innovations will increase the returns of commercial banks, the following model needed to test the hypothesis is specified as

$ROE = f(ATM, POS, IT)$ ----------------(1)

Where;

ROE = Total net profit of commercial banks

ATM = total transactions carried out on the automated teller machines

POS = Total number of POS transactions

IT = Total number of transactions done over the internet or by using mobile phones.

From the above equation, the Net profit is dependent on cashless banking (ATM, IT, and POS) which are the independent variables

Specifying equation (1) in an exponential regression model we have

$ROE = \beta_0 + \beta_1 ATM + \beta_2 POS + \beta_2 IT + \mu$ -------------(2)

In this form the coefficients b_1 and b_2 can be directly estimated by applying log-linear regression techniques via logarithmic transformation and those coefficients are the elasticity. Taking natural logs of both sides of the equation we have

$Log ROE = log\beta_0 + \beta_1 log ATM + \beta_2 log POS + log IT + \mu$ -------------(3)

Where:

B_0 = The autonomous parameter (or intercept) μ_1 = the stochastic error term or random variable,

β_2, β_3 = the parameters to be estimated.

PRESENTATION AND DISCUSSION OF RESULT
Pre-Estimation Diagnostics Tests
Unit Root Test

Unit root test was used to find out if the relationship between economic variables is spurious or nonsensical. As is the case with similar studies, the Augmented Dickey-Fuller (ADF) test was used to ascertain whether the four variables of the study exhibit unit root property.

Table 4.1.1 ADF test

Variables	ADF Test Statistic(at first difference)	Order of Integration
POS	-3.526535 (-3233456)***	I(0)
ATM	-3579866(-3.243079)***	I(1)
IT	-7.418621 (-4.273277)*	I(1)
ROE	6.418621 (-4.273217)**	I(1)

From the table 4.1.1 above, it was discovered that POS was found stationary at levels and at order zero at 10 percent level of significance. However, all the other two variables used in the analysis were found stationary at first difference. ATM, IT, and ROE were found stationary at 10 percent 1 percent and 5 percent level respectively; these stationary variables were subsequently used for analysis in computing and analyzing of our results.

Co-integration Estimate

If two or more-time series are not stationary, it is important to test whether there is a linear combination of them that is stationary. Economically, variables are cointegrated if they have a long term, or equilibrium relationship between them. It is a pretest to avoid spurious regression situations. Since the variables were found to be stationary at level and at first difference (that is at order I(0) and 1(1)), it was safe for us to employ and proceed with Johansen co-integration test

Table 4.1.2 Co-Integration Estimates

Unrestricted Cointegration Rank Test (Trace)

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.666065	60.27252	47.85613	0.0023
At most 1	0.469783	27.36821	29.79707	0.0929
At most 2	0.240539	8.334174	15.49471	0.4304
At most 3	0.002656	0.079784	3.841466	0.7776

Trace test indicates 1 cointegratingeqn(s) at the 0.05 level
* denotes rejection of the hypothesis at the 0.05 level
**MacKinnon-Haug-Michelis (1999) p-values

Unrestricted Cointegration Rank Test (Maximum Eigenvalue)

Hypothesized No. of CE(s)	Eigenvalue	Max-Eigen Statistic	0.05 Critical Value	Prob.**
None *	0.666065	32.90431	27.58434	0.0094
At most 1	0.469783	19.03404	21.13162	0.0958
At most 2	0.240539	8.254390	14.26460	0.3534
At most 3	0.002656	0.079784	3.841466	0.7776

Max-eigenvalue test indicates 1 cointegratingeqn(s) at the 0.05 level
* denotes rejection of the hypothesis at the 0.05 level
**MacKinnon-Haug-Michelis (1999) p-values

From the co-integrated result in table 4.1.2, the trace test indicates one variable co integrating equation at 5 percent level. Thus, the model shows that there exists a long-run equilibrium relationships among the three variables used in the analysis. It shows that the variables move together in the long run.

Model Estimation Result

Table 4.1.4 Estimated Regression Results

Dependent Variable: ROE
Method: Least Squares
Included observations: 31 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-952331.3	1855761.	-0.513176	0.6122
ATM	0.017970	0.032397	0.554688	0.5838
POS	22.27870	1.766904	12.60889	0.0000
IT	-7.045901	6.338520	-1.111600	0.2765
ECT(-1)	0.338645	0.205609	1.647032	0.1116

R-squared	0.897551	Mean dependent var	8159082.
Adjusted R-squared	0.881789	S.D. dependent var	13163948
S.E. of regression	4525998.	Akaike info criterion	33.63526
Sum squared resid	5.33E+14	Schwarz criterion	33.86655
Log likelihood	-516.3466	Hannan-Quinn criter.	33.71066
F-statistic	56.94607	Durbin-Watson stat	1.742461
Prob(F-statistic)	0.000000		

$$ROE = -9.52 + 0.017ATM + 222.26POS - 7.051IT$$

$$SE = (18557) \ (0.032) \quad (1.766) \quad (6.338)$$

Model Evaluation

Serial Correlation

Table 4.1.5: Breusch-Godfrey Serial Correlation LM Test

F-statistic	1.724425	Prob. F(2,29)	0.291
Obs*R-squared	3.613715	Prob. Chi-Square(2)	0.162

The regression model is free of serial correlation going by the result of the serial LM test in table 4.1.5. Since the Prob. F-value is 0.2961, and greater than 0.05, we accept the null hypothesis that there is no serial correlation among the variables used in the model. Again, Durbin Watson (DW) test statistic was used to test for the presence of serial

correlation or autocorrelation among the error terms. The model also indicates the absence of autocorrelation; this is because Durbin Watson (DW) statistic is 1.74. It shows an unbiased estimate therefore; the model could be used for policy decisions.

Heteroscedasticity Test

Table 4.1.6:Heteroskedasticity Test: Breusch-Pagan Godfrey

F-statistic	0.706025	Prob. F(3,28)	0.5565
Obs*R-squared	2.250422	Prob. Chi-Square(3)	0.5221
Scaled explained SS	1.395686	Prob. Chi-Square(3)	0.7065

The heteroscedasticity test enables us to know whether the variance of the error term is constant as the variables increases. This heteroscedasticity results are captured in table 4.1.6

The result shows that the F-statistics at 0.5565 is greater than the 0.05 level of significance, thus indicating absence of heteroscedasticity in the estimated regression model. It shows that the estimated is homoscedastic.

The Coefficient

The result indicates that ATM is positively related to the dependent variable ROE. Similarly, POS also has a positive relationship with the dependent variable ROE and finally IT has negative relationship with ROE.

The R^2 (R-square)

The regression model result in table above indicates that the R2 (R-squared) approximately 89.75 percent, and this shows a very good fit, meaning that there is a strong relationship between the variables used. Thus, it shows that 89.75 percent (89.75%) changes or variation in ROE is explained by ATM, POS and IT, leaving 10.25 percent (10.25%) changes or variations in ROE to the error term. The goodness of fit result thus shows that there is a strong positive impact of cashless banks profitability.

F-Statistics

The F-statistic shall be used to test the hypothesis. The F-statistic examines the overall significance of a regression model including all the K variables. Therefore, by examining the overall fit and significance of the model, it could be observed that the model has better fit.

From the regression result in table 4.4, it could be observed that the model has better fit. That is, the probability F-statistic value of 0.00000 is less than 0.05. The F-statistics which measures the overall significance of the model shows that we cannot reject the alternative hypothesis.

Discussion of Research Findings

From the above result it was observed that ATM and POS are positively related to ROE, while IT related negatively with ROE. The ATM was found to be positively related to ROE but statistically insignificant at 5% level of significant. The positive sign of ATM is because, with the introduction of cashless banking policy, a lot of transactions has been made with the use of ATM, and has contributed positively to the performance of banks in the country. An easy cash withdrawal promotes banking activities and has also improved the ROE of the commercial banks in the country. However, the issue with the network and inability of some people to use the ATM correctly and efficiently maybe responsible for the insignificant value at 5%. POS was found to be positively related with ROE and statistically significant.

Finally, the IT was found to be negatively related to ROE of banks and also statistically insignificant. This is as a result of high rates of bank charges on online deposits, lack of proper awareness on internet banking sites like inter-switch, quick-teller customers do not patronize the product and also high level of cyber-crime in Nigeria. Therefore, non-usage of the IT for online deposits had created a negative impact on ROE of the banks.

CONCLUSION

Cashless Banking has moderately improved the performance and profitability of banks in Nigeria. Although, positive relationship exists between ROE and ATM and also between ROE and POS, Internet banking is yet to make any significant improvement on the profitability of Commercial banks in Nigeria. Cashless Banking has completely changed the way banking is conducted in Nigeria; it has brought a lot of numerous, convenient, flexible, efficient and interesting services to customers at relatively low cost. Customers can now check their balance, transfer funds, pay utility bills, view mini statement, buy goods and services, top up airtime etcetera. from the comfort of their bed room. Cashless Banking has indeed improved bank-customer relationship. Internet and mobile phones have become common media of information used by banks in getting across to their customers. Monthly account statements are sent to customers via e-mails by banks free of charge. We therefore conclude that cashless banking has significant relationship with bank profitability.

RECOMMENDATIONS

During the course of this study, it was observed that over the years, there have been great challenges hindering the improvement of cashless system in the banking sector. Some pertinent recommendations that would enhance cashless banking in the Nigerian banking sector are:

ii. *Uninterrupted Power Supply*

The government should endeavour to provide 24 hours uninterrupted power supply because without electricity, these products cannot be boosted and effective. Also, all

banks should have a high-powered standby generator in case of power failure. This is to help cover the deficiency of power failure.

ii.   Government Supports

In smooth functioning of the payment system the government have the major role to play, in aspect of financing the payment system which require a lot of capital to maintain and also in the aspect of creating awareness of these electronic products and their benefits to the public.

iii.   Provision of Skilled Manpower in Operation of the Payment System

Skilled manpower should be employed by every Bank, in order to stop or prevent fraudulent personnel and hackers from having access to and manipulating the Banks' data and stealing money from the Bank accounts of individuals. Provision and maintenance of public network system such as telephone (NITEL) which is a basic infrastructure fundamental to the efficient functioning of the payments system. Failure to maintain these infrastructures implies that the banks must be ready to provide their own communication networks.

REFERENCES

Agbada, A. O. (2008). Electronic Banking in Nigeria, Problems and Prospects from The Customers' Perspective. Central Bank of Nigeria Bulletin, 32(4), pp. 19-22.

Aguila-Obra, A.R.D.& Padilla-Melendez, A. (2006). Organizational Factors Affecting Internet Technology Adoption. Internet Research, 16(1), 94-110.

Alao A, Sorinola O (2015), Cashless Policy and Customers' Satisfaction: A Study of Commercial Banks in Ogun State. Nigeria. Research Journal of Finance and Accounting.6(2), Pp 37-47.

Babalola, R., (2008),"E-payment: Towards a Cashless Economy", A Keynote Address of the Finance Minister of State at Card Expo Africa Conference. [Online] Available: http://www.nigeriavillagesquare.com

CBN Annual Activity Report, (2013).

Central Bank of Nigeria (CBN) Statistical Bulletin, (2013).

Ezumba, S. (2011). The Transition to a Cashless Nigeria", Reinventing Rebuilding LLC, [Online] Available: http://www.allAfrica.com

Fichman, R.G. (2000). The Diffusion and Assimilation of Information Technology Innovations. In R.W. Zmud (Ed.) Framing the Domains of IT Management, Projecting the Future through the Past, (p. 105-127). Cincinnati: Pinaflex.

Kim, C. & Galliers, R.D. (2004). Towards a Diffusion Model for Internet Systems. Internet Research, 14(2), 155-166.

Kimberly, J.R. & Evanisko, M.J. (1981). Organizational Innovation: the influence of individual, organizational, and contextual factors on hospital adoption of technology and administrative innovations. Academy of Management Journal, 24(4) 689-713.

Olaegbe, R. (2011), "Road to Cashless Lagos", [Online] Available: The Nationline.Net/.../16388.   .

Omotunde M, Sunday T, John-Dewole A. T (2013), Impact of Cashless Economy in Nigeria.

Greener Journal of Internet, Information and Communication System. 1(2). Pp40-43.

Osazevbaru H, Sakpaide E, Ibubune R (2014), Cashless Policy and Banks' Profitability in Nigeria. European Journal of Accounting and Auditing and Finance Research. 2(10). Pp 1-12.

Poon, S., & Swatman, P.M.C. (1999). An Exploratory Study of Small Business Internet Commerce. Information and Management Journal, 35(1), 9-18.

Roth, B. L. (2010), "The Future of Money: The Cashless Economy - Part 1", [Online] Available: https://www.x.com/.../future-money-cashless-economy.

Tajudeen J. A. (2013), The Effect of Cashless Policy of Government on Corruption in Nigeria. International Review of Management and Business Research. 2(3). Pp 682-690.

ornatzky, L.G., & Fleischer, M. (1990).The Process of Technological Innovation. Lexington, MA: Lexington Books.

Vadapalli, A. & Ramamurthy, K. (1997). Business use of the Internet: an analytical framework and exploratory case study. International Journal of Electronic Commerce, 2(2), 71-94.

APPENDICE *Table 4.2: ATM usages, POS usages, WBT usages and ROE*

YEAR	QUARTERS	ATM USAGE IN VOLUMES	POS USAGES IN VOLUMES	IT USAGES IN VOLUMES	Return on Equity in MILLIONS
	1st Quarter	1,633,957.00	5,138.00	49,219.00	47,198.40
	2nd Quarter	1,974,065.00	14,633.00	51,563.00	109,037.00
	3rd Quarter	2,156,055.00	24,689.00	52,673.00	122,587.20
2006	4th Quarter	1,974,065.00	39,733.00	52,573.00	172,538.30
	1st Quarter	1,924,744.00	39,847.00	53,411.00	188,511.10
	2nd Quarter	2,840,723.00	51,311.00	168,126.00	302,380.00
	3rd Quarter	2,799,713.00	151,324.00	177,876.00	474,404.10
2007	4th Quarter	6,230,723.00	226,564.00	179,826.00	924,105.00
	1st Quarter	7,762,869.00	239,997.00	274,193.00	305,028.50
	2nd Quarter	11,192,073.00	295,379.00	311,770.00	398,210.00
	3rd Quarter	18,449,864.35	295,904.90	271,036.00	437,658.60
2008	4th Quarter	22,728,804.12	363,319.22	284,467.00	481,295.50
	1st Quarter	26,103,483.00	251,785.00	413,677.00	463,238.70
	2nd Quarter	29,947,212.00	238,387.00	474,180.00	1,358,276.10
	3rd Quarter	25,725,223.00	210,017.00	500,032.00	930,748.00
2009	4th Quarter	27,385,728.00	218,067.00	567,360.00	1,506,845.90
	1st Quarter	7,762,869.00	253,484.00	331,787.00	1,265,643.40
	2nd Quarter	11,192,073.00	237,435.00	353,120.00	1,296,356.90
	3rd Quarter	18,449,864.34	256,637.00	414,390.00	2,247,039.90
2010	4th Quarter	22,728,804.12	324,870.00	501,789.00	2,766,880.30
	1st Quarter	79,612,004.00	383,541.00	670,187.00	3,047,856.30
	2nd Quarter	85,143,051.00	425,574.00	532,849.00	3,753,277.80
	3rd Quarter	87,537,528.00	590,646.00	289,326.00	4,515,117.60
2011	4th Quarter	95,277,416.00	700,912.00	439,993.00	7,172,932.10
	1st Quarter	86,689,804.00	118,620.00	374,409.00	10,981,693.60
	2nd Quarter	91,802,445.00	485,173.00	723,755.00	15,919,559.80
	3rd Quarter	94,995,190.00	767,858.00	456,286.00	17,522,858.20
2012	4th Quarter	102,000,317.00	1,183,394.00	722,014.00	17,331,559.00
	1st Quarter	27601100.33	1,453,079.00	374,015.33	39,928,712.00
	2nd Quarter	30901201.33	1,537,421.33	369,435.67	37,656,872.00
	3rd Quarter	37,398,440.33	1,709,775.33	532,464.67	38,675,812.00
2013	4th Quarter	37,466,751.33	2,238,865.33	586,444.67	40,674,512.00

Sources: CBN Annual Activity Report, (2013); CBN Statistical Bulletin (2013).