

CASHLITE POLICY AND PROFITABILITY OF BANKS IN NIGERIA

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Abstract

The study investigates the relationship between cashlite polices and Banks profitability in Nigeria for the period of 2011 – 2013. Secondary data from Central Bank of Nigeria statistical Bulletin and financial statements of the selected banks of Nigeria were collected and analysed using Regression Analysis and Statistical package for social sciences (SPSS). The study revealed that mobile banking, point of sale and Nigerian interbank settlement scheme transactions do not have a significant relationship with profit before tax and net profit of banks in Nigeria. However, mobile banking transactions have the greatest likelihood of effecting the bank's profitability over time. Based on the findings, the study concludes that Cashlite polices have positive relationship but not significant on both the Net Profit and Profit before Tax of Banks in Nigeria. In view of the findings and conclusion, the study recommends among other things that the positive but insignificant relationship noticed calls for some more reforms and a lot of effort and sensitization especially for low income customers of banks who are currently deeply rooted in using cash and see it as a convenient and easy way of receiving and making payments. The sensitization exercise would require the combined effort of various stakeholders, including government, financial institutions and non-bank providers of payment services.

1.0 INTRODUCTION

The banking system remains the major channel for monetary control by the Central Bank of Nigeria (CBN) and the monetary authorities in general. Unfortunately, it is estimated that 65% of the cash in circulation in the Nigerian economy is outside the banking system, thus severely limiting the impact of the CBN's efforts at price and economic stabilization (CBN 2011). Consequently, the amount of money in the form of deposit available to banks for the creation of more money is reduced. The profitability of the banks, which to a large extent depends on the amount of money at their disposal for lending, is therefore affected by the large size of this informal sector.

The breakthrough in Information Communication Technology (ICT) has revolutionized human society in terms of Communication; efficiency in process, general exchange of information, and in the exchange of goods and services. Businesses are carried out on line across different geographical location making it impossible for physical cash to be used as medium of such exchanges. Indeed, the world has become a global village and the economic competitiveness depends largely on the effectiveness of economic agents to adopt technology for their activities and service delivery. Particularly, the banking institutions as major player in the process of financial intermediation, and important economic agents in the payment system, must be strongly equipped with the relevant information technology that would encourage trade, commerce and industry while promoting globalization by easing global access to fund without any Barrier. Customer in recent time demand more than the traditional role of safe-keeping their money. They require their banks to meet financial obligations for E-transaction almost on real time basis. But in reality, not all Nigerians have access to E-banking Services (This day newspaper, Mar 12, 2013, pg 6), Nigeria and the Democratic Republic of Congo have the largest gaps between populations living in poverty and those with access to financial services – 50 million in Nigeria and 48 million in the Congo (Itah and Ene, 2014). From the foregoing and with today's uncertain economy, Banks are searching for alternative methods to keep ahead of their competitors by effectively driving sales through different settlement systems and by cost reduction. Banks as well as other companies do not stand a chance in today's environment if they do not have an appropriate settlement system intact.

Cashlite policy has been used in the Western World but the system is new in Nigeria. Information technology (IT) is now a key element of economic development and a backbone of knowledge based economics in terms of quality delivery and efficiency of services and operations. Knowledge driven innovation has become a decisive factor in competitiveness of nations, industries, firms and organizations. This is one of the 11 pillars that the world economic forum uses in measuring national competitiveness.

Banks are operating in a sea of water, but some banks are swimming towards new forms of competitive advantage by adopting cashlite policy. Competitors focus not just on using cashlite policy for better access and reporting, but on using insights gleaned from this policy as a discipline to make more effective decisions that deliver better outcomes to the bottom line and drive profitability. High performers are many times more likely than their competitors, to view cashlite capabilities as core to the banking sector. For many others seeking high performance (profitability), the opportunities to move in that direction by making cashlite a competitive discipline are substantial.

However, many have argued that cash lite has positive relationship on profitability of banks due to the revolutionized way and manner transactions are carried out while some are of the view that cash lite have impacted little or nothing to the profits of banks due to poor implementations and bottlenecks associated with cash lite. The call for slow implementations and bottlenecks associated with cash lite policy due to cost convenience and awareness has no justification. Therefore, the objective of this research is to determine the relationship between cashlite policy and profitability of banks in Nigeria.

2.0 THEORETICAL / CONCEPTUAL FRAMEWORK AND HYPOTHESES FORMULATION

Most banks in Nigeria under cash based economy are known for the huge profit they declare each year, notwithstanding the fact that such system is characterized by high cost of operations. Cash based economy is not without cost to the banking system, government and individuals. High cash usage results in high cost of processing across the value chain for example, the cost of printing new notes as a result of frequent handling of cash is said to cost a colossal amount annually and it cost banks so much to move cash from one region to

another. Generally, cost of cash in Nigeria's financial system is high and on the increase (CBN, 2011; Niveke, 2012). Osazerbara, Sakpaide and Ibabane (2014) examined the compact of cashless policy on the profitability of Nigerian banks, against the backdrop that these banks in a cash based economy are known for their huge profits even in the face of associated high cost of operations. Secondary data were collected and analyzed using content analysis comparing profits under cash based policy with cashless regime. The results revealed that cashless economic policy positively impact on banks' profit through reduction in cost of operations and banking the unbanked. According to (Cobb, 2005), "Electronic Payments can thus lower transaction costs stimulate higher consumption and GOP, increase government efficiency, boost financial intermediation and improve financial transparency" she further added that "Government play a critically important role in creating an environment in which these benefits can be achieved in a way that is consistent with their own economic development plans". However, experts in the financial sector have stressed that unless something radically innovative, and functional is introduced, which accounts for attitudes as well as the hugeun-banked population, the country's dream of building a functionally cashless society in the shortest possible time could be elusive (Ackorlie, 2009). Siam (2006) examined the effects 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 between 1999-2004. The result of the study showed that there is a correlation between electronic banking and banks profitability on the long run due to bottleneck associated with initial startup. Thus, managers and banks employees in the area prefer their banks to expand their electronic operations in serving customer but not converting all banks to total electronic banks. Hermando and Nieto (2007) attempted to fill this gap by identifying and estimating the impact of the adaptation of a transactional wabsite 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 result shows that the adoption of the internet as a delivery channel involves a gradual reduction in overhead expenses which translates into an improvement in banks profitability in terms of Return on Assets after one and a half year and Return on Equity (ROE) after three years.

Also Onay, Ozsoz and Ash (2008) investigated the impact of internet banking on banks profitability in Turkey between 1996 and 2005 using specific macroeconomic control variables, Return on Asset (ROA) and Return on Equity (ROE) as Proxies for profitability. The findings was in conformity with Hernando and Nieto (2007) in that internet banking starts contributing to return on equity (ROE) with a time lag of two years while a negative impact is also observed for one and half years of its adoption.

Madure (2010) studied the impact of ICT on banking efficiency in Nigeria with a survey of 13 banks. Based on the CAMEL rating and a transcended logarithmic functions of the banks, it was revealed that the efficiency values obtained through the CAMEL rating system were higher during post adoption era than before adoption. It was found that a 1% increase in ICT capital on average leads to 0.9185 Naira increase in bank output post ICT adoption era.

2.1 CBN POLICY ON e-PAYMENT

As part of concerted efforts to promote e-banking, the CBN introduced a policy on cash-based transactions which stipulated a ‘cash handling charge’ on daily cash withdrawals or cash deposits that exceeded N500,000 for individuals and N3,000,000 for corporate bodies. The policy, made against cash-based transactions (withdrawals & deposits) in banks, was aimed at reducing, but not eliminating the amount of physical cash in form of coins and notes circulating in the economy and encouraging more electronic-based transactions. According to the CBN policy, only CIT licensed companies are allowed to provide cash pick-up services while banks are asked to cease cash in transit lodgment services rendered to merchant-customers. Any bank that continues to offer cash in transit lodgement services to merchants are liable to sanction while third party cheques above N150,000 are not to be eligible for encashment over the counter and the value for such cheques is to be received through the clearing house. The service charges/fees were applied on March 30, 2012, to give people time to migrate to electronic channels and experience the infrastructures that have been put in place. As a result, banks were asked to continue to encourage their customers to migrate into available electronic channels, and where possible, demonstrate the costs that would accrue to those that continued to transact high volumes of cash.

The commencement of a nationwide cheque truncation system in 2012 to enhance the efficiency of cheque clearing and settlement resulted in a reduction of both the clearing cycle to T+1 from T+2 and the float in the banking system.

The CBN's result for the second half of 2013 showed that electronic payment system has improved drastically.

The volume and value of inter-bank transfers through the Real-Time Gross Settlement (RTGS) System declined to 197,220 and N55,005.31 billion at end of June 2013, from 213,825 and N57,285.87 billion, respectively, at the end of December 2012, reflecting a decrease of 7.8 and 4.0 per cent, respectively, in volume and value. The decreases were attributed to increased use of other alternative payment platforms, such as the NIBSS Instant Payment and web-based payments.

2.1.2 NIGERIAN INTERBANK SETTLEMENT SCHEME (NIBSS)

The volume and value of NIBSS Instant Payment (NIP) rose to 5,924,602 and N4,178.76 billion at end of June 2013 from 3,293,216 and N2,872.77 billion respectively, at end December 2012, reflecting increases of 79.90 and 45.46 per cent, in volume and value. The significant rise was attributed to the growing usage of the scheme as a result of the implementation of the cash-less policy of the CBN. The volume and value of NIBSS Electronic Fund Transfer (NEFT) transactions decreased to 13,918,838 and N6,738.14 billion at end of June 2013, from 15,143,752 and N6,845.40 billion, respectively, at the end of December 2012, reflecting a decline of 8.09 and 1.57 per cent, respectively, in volume and value.

2.1.3 POINTS OF SALE TRANSACTIONS (POS)

The volume of Points of Sale (POS) transactions increased by 64.4 per cent to 3,207,788 in the first half of 2013, compared with 1,951,252 in the second half of 2012. Similarly, the value rose by 53.0 per cent to N57.2 billion over the level recorded in the preceding half year. The increase in volume and value was due to sustained public awareness and acceptance of its usage.

E-Payment Systems (EPS), apart from their convenience and safety, also have a significant number of economic benefits. The major economic benefits of EPS include mobilizing

savings and ensuring most of the cash available in the country are with the banks. This makes funds available to borrowers (business and individual). Furthermore, EPS has the ability to track individual spending and facilitate the design of products by the banks. This information is also useful to the government when making economic decisions. It also has the ability to reduce cash handling and printing costs as electronic banking is geared toward effective implementation of cashlite economy. Without electronic banking, cashlite will be a failure.

2.1.4 MOBILE BANKING (MB)

Mobile banking provides the convenience of banking transactions through mobile devices. Mobile banking has emerged as a strong competition to financial institutions in Nigeria. Initially cellular phones were developed to improve communication from the earlier primitive forms of communications. Financial institutions introduced ICT as an improvement to the banking channels. This has thus enabled bank customers' access information relating to their accounts. In this regard mobile phone service providers have taken mobile money services deeper into the financial sector by offering a range of financial service through their networks.

The CBN and National Communication Commission (NCC) have allowed service providers to offer mobile money service as there appears to be no reprieve as competition in the mobile money business is still heating up with entry of new money transfer system which now allow transactions across all mobile telephone service providers like MTN and others.

2.2 CHALLENGES IN INFRASTRUCTURE

For electronic payments to be successful there is the need to have reliable and cost effective infrastructure that can be accessed by majority of the population. Electronic payment communication infrastructures include computer network such as the internet and mobile network used for mobile phone. Experience so far has shown that many people refuse to use payment cards because of system failure which often is associated with lack of electricity.

Also, there is the need for a coordinated and concerted industry efforts geared towards intensive awareness campaign on electronic fraud issues to protect consumers and boost their

confidence in electronic payments. Members of the public should be educated on how to protect their cheques and PIN (personal identification number).

There is existence of knowledge gap within key stakeholders in the fraud management chain such as the judiciary, security agencies as well as the lawmakers. The industry must organize to close the knowledge gaps that exist within the judiciary and among prosecutors and investigators. A series of trainings should be sponsored for the judges, lawyers and Police/EFCC among others. There is absence of adequate legal framework to support electronic payment transactions. Proposed bills which are critical to support of the systems' have been pending before the National Assembly. The Bill should be passed to protect stakeholders on electronic.

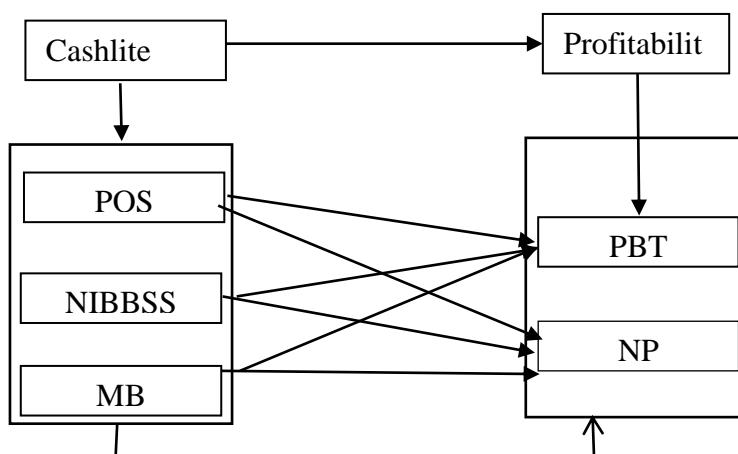
2.3 PROFITABILITY OF BANKS

Studies on bank profitability has been done since a long time ago. Among the studies that examine the deferments of conventional bank profitability include Dermirgue-Kunt&Huiznga (1998), Vong and Chan (2006), Fadzian&Royfaizd (2008), Masood et al (2009), and Rasiah (2010). Several research have also been done on this issue with respect to banking industry. Depending on the economic foundation assumed – cost minimization or profit maximization. Alternative models have appeared in the literature, but they are all of economic type aiming at the calibration of cost or profit functions... these functions can then be used to assess whether a given bank is operating at the most profitable (or least cost) point (Andreas and Stavros, 1997). In this study we focused on two dimension of profitability – profit before tax and net profit, this is because the implementation of net profit before tax eliminates the effects of convention of tax structure to profitability level; to identify the company's effectiveness in managing its resources.

In SFAC No.1, profit information is crucial in operating performance or responsibility of management, and profit information helps the stakeholders appraise the financial health of the organization in the long run. In financial report, profit also functions as parameter to evaluate management performances, so that the investors attention is only on profit information without paying attention to the procedure which is applied by the company to produce profit. This scenario propel managers in maximizing the ratio of profitability.

Rasiah (2010) who studied the reviews of the theoretical advantage of commercial banks define profits as the difference between total revenue and total cost in the banking sector. Management is an important factor that determines the performance of a bank. As part of the management strategy, is the adoption of cashless policy to enhance efficiency. Weak management, human resources and supervision, inadequate infrastructure will reduce the efficiency of bank (Fitriani,2010). Taxation is also one of the factors that affect bank profitability in terms of business and policy choices as they affect the competition of few instruments and different segments of financial markets (Greaning, 2008). Explicit tax rate (average) clearly applies to all banks in certain countries. Bashir (2000) and Bashir (2003) found a negative correlation between taxes and benefits of the bank,they show that financial repression lead to decreased performance of Islamic banks. However, the results of Bashir and Hassan (2004) found that taxes have a significant positive impact on bank performance. Reducing expenses improve the efficiency and hence raise the profitability of financial institution, implying a negative relationship between the operating expenses ratio and profitability (Bourke, 1989). Also, Guru, Staunton and Balashanmagan, 2002) revealed that efficient expenses management was one of the most significant high bank profitability.

2.4 CONCEPTUAL FRAMEWORK AND HYPOTHESES FORMULATION



From the above, the following hypotheses are formulated

Ho₁: There is no significant relationship between POS and PBT

Ho₂: There is no significant relationship between POS and NP

Ho₃: There is no significant relationship between NIBSS and PBT

Ho₄: There is no significant relationship between NIBSS and NP

Ho₅: There is no significant relationship between MB and PBT

Ho₆: There is no significant relationship between MB and NP

This work fits well with Alao S and Chima N (2010) who studied the benefit of electronic banking to financial statement of banks and found that electronic banking has enormous benefits to banks; it reduce the quantity of notes in circulation thereby reducing the cost of printing new notes. They asserts that a electronic banking thrived on the operation of magnetic ink recognition character (MICR) cheques to beat competition, engendered by the banking industry revolution of the period.

3.0 METHODOLOGY

The data collected for this study were from secondary sources. This was collected from the annual financial cashless transaction statements of three (3) banks, Fidelity Banks, Zenith and Access Bank PLC which were judgmentally sampled from the total of 25 banks quoted on the Nigeria Stock exchange for three years (2011-2013). These are the period the financial statement were available for study considering the time cashlite was introduced in the banking system in Nigeria. The choice of the banks is that they are new generation banks with large customers' base and the required information are accessible unlike other old generation banks in Nigeria, whose current financial information are not accessible largely due to fear of competitors. In this study, the dependent variable is profitability represented

by profit before tax (PBT) and Net profit (NP) while the independent variable is the cashless policy represented by NIBSS, POS and MB. Data collected were analyzed with regression analysis using statistical package for social sciences.

3.1 MODEL SPECIFICATION

$$\begin{aligned}
 PBT &= Bo + B_1(POS) + \epsilon \\
 PBT &= Bo + B_1(NIBSS) + \epsilon \\
 PBT &= Bo + B_1(MB) + \epsilon \\
 NP &= Bo + B_1(POS) + \epsilon \\
 NP &= Bo + B_1(NIBSS) + \epsilon \\
 NP &= Bo + B_1(MB) + \epsilon \\
 PBT &= Bo + B_1(POS) + B_2(NIBSS) + B_3(MB) + \epsilon \\
 NP &= Bo + B_1(POS) + B_2(NIBSS) + B_3(MB) + \epsilon
 \end{aligned}$$

Where:

$$\begin{aligned}
 PBT &= \text{Profit before tax} \\
 NP &= \text{Net profit} \\
 NIBSS &= \text{Nigerian interbank settlement scheme (Proxied by volume of transaction in Naira value)} \\
 POS &= \text{Point of sale (proxied by volume of transaction in Naira value)} \\
 MB &= \text{Mobile banking (proxied by volume transaction in Naira value)} \\
 bo &= \text{Constant term (or Y intercept)} \\
 b_1 &= \text{Coefficient of the independent variable} \\
 \epsilon &= \text{Error term measuring the extent to which the model cannot fully explain the dependent variable.}
 \end{aligned}$$

4.0 RESULTS AND DISCUSSION

The results of the tested hypotheses are shown in appendix 2.

H_{01} : shows P- value ($0.958 > 5\%$), $R = .021^a$ ($Bo = 30103332.922$, $B_1 = 4.243E - 006$).

H_{02} : P-value (0.97) > 5%, R = .015 (Bo = 27314984.470, B₁ = -3.024E - 006).

H_{03} : P - value (0.955) > 5%, R = .022^a (Bo = 30089114.771, B₁ = 8.890E - 007).

H_{04} : P - value (0.972) > 5%, R = .014^a Bo = 27305200.344, B₁ = -5.551E - 007.

H_{05} : P - value (0.187) > 5%, R = .484^a (Bo = 16034338.786, B₁ = 0.012).

H_{06} : P - value (0.764) > 5%, R = .117^a (Bo = 23750121.015, B₁ = 0.003).

From the result above, it is revealed that the entire six null hypotheses tested were accepted. Although the regression analysis showed positive correlation but the relationships were not significant in all the tested hypotheses.

This therefore implies that the level of increased cashlite policies or activities in terms of mobile banking transactions, interbank settlement scheme, and point of sale activities do not necessarily reflect on the banks profitability in terms of its profit before tax as well as Net profit. This could be as a result of newness of the electronic banking activities, which is still in its infant stages in Nigeria. The level of acceptability of cashlite is low from the banking populace due to knowledge gap and awareness. The cost of deployment of cashlite software and staff training are in billions of naira. This billons of naira which will be amortized for five years suggest that the positive impact will be in the long run. The sample survey of three banks also may have affected the outcome of this research.

Appendix 2 shows that the multiple correlation coefficient is .513^a and 0.99^a respectively. This implies a positive but weak correlation exist between the combined effect POS, NIBSS, MB on Profit before tax (PBT) and NP respectively. The coefficient of determination R^2 = .263 and .010 implies that a 100% increase in POS, NIBSS and MB will increase profit before tax and Net profit by 26.3% and 1% respectively.

In the shortrun, the major benefit of the cashlite policy is the reduction of printing cost to banks.

It should be noted that banking system remains the major channel for monetary control by the Central Bank of Nigeria (CBN) and the monetary authorities in general. Unfortunately, it is estimated that about 65% of the cash in circulation in the Nigerian economy is outside of the banking system. Thus, severely limiting the impact of the CBN's efforts at price and economic stabilization (CBN 2011). Inspite of the introduction of cashlite policy in Nigeria, cash transactions thrive in the underground economy. Smuggling of petroleum products and other unregulated economic activities are on cash basis without going through banks. Consequently, the amount of money in the form of deposits available to banks for creation of more money is reduced. The profitability of the banks, which to a large extent depends on the amount of money at their disposal for lending, is therefore affected by the large size of this informal sector.

5.0 CONCLUSION

Apart from the above mentioned, the breakthrough in information Communication Technology (ITC) has revolutionalized human society in terms of communication, efficiency in processes, general exchange of information, and in the exchange of goods and services. Within seconds, businesses are carried out online across different geographical location making it impossible for physical cash to be used as a medium of such exchanges. Inspite of the result of study, prior studies shows that cashlite have the following identified benefits at the surface value; low operational costs, increased operational efficiency, speedy processing of financial transaction, removal of cost of cash transaction, multi – card and multi-application availability and reduction of congestions in banking halls.

Although in this study, cashlite policies have positive impact but not significant on the banks profitability in Nigeria, the result may be due to the fact that cashlite policies is in the infant stage in Nigeria. It takes a while for banks to reduce their transaction costs associated with its service provision. This is in line with Omotunde et al 2013.

We therefore conclude as follows that point of sale, Mobile banking and interbank settlement scheme transactions do not have significant impact on Banks profitability in terms of profit before tax – PBT and Net Profit (NP). However, Mobile banking has a more likely chance of impacting on the Banks profitability. This could be as a result of the penetration of mobile telephone to a relatively high number of the banking population in Nigeria. Despite the recent

introduction of the mobile banking policies, more people are embracing it. Cashlite policies takes some time for customers to embrace. This will enable banks to reduce their transaction and associates cost will service provisions.

6.0 RECOMMENDATIONS

- (i) The weak but insignificant relationship calls for more reforms in the banking industry and sensitization for low income customers of banks who are currently deeply rooted on using cash for their transactions.
- (ii) Regulatory authorities should ensure that cashlite policy is duly enforced through moral suasion to engender positive impact on the performance of the banks at the long run.
- (iii) Central Bank of Nigeria (CBN) and government should subsidize the transaction cost so as to improve the profits of Banks.
- (iii) The transformation from a cash centric economy to a cashless one would need more time. There is need for more infrastructures to be put in place to reduce operational cost.

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Appendix 1: Data extracted for analysis

		Variables on Cashlite polices and the Nigerian Economy							
Fidelity Bank Plc.	Year	POS Vol	POS (N'000)	NIBSS Vol	Nibss (N'000)	MB Vol	MB (N'000)	PBT(N'000)	NET PROFIT (N'000)
	2011	27,427	487,217,286	48,211	1,874,238,766	5,287	86,986,239	8,222,000	5,959,000
	2012	58,976	926,876,327	92,651	4,875,864,265	21,876	287,765,934	20,592,000	17,924,000
	2013	118,967	1,786,765,289	147,209	12,933,896,474	46,382	762,987,345	9,028,000	7,721,000
	Total	205,370	3,200,858,902	288,071	19,683,999,505	73,545	1,137,739,518	37,842,000	31,604,000
Zenith bank	Year	POS Vol	POS (N'00)	NIBSS Vol	NIBSS (N'00)	MB Volume	Mobile banking (N'00)	PBT(N'000)	NET PRPFIT (N'000)
	2011	39,487	939,386,985	74,986	5,987,846,873	14,987	167,934,264	57,144,000	41,301,000
	2012	91,983	1,298,034,876	132,983	11,983,945,924	58,945	1,798,347,917	94,048,000	95,803,000
	2013	182,076	5,134,987,874	276,987	31,984,947,845	87,948	3,037,896,347	94,108,000	84,853,000
	Total	313,546	7,272,409,735	484,956	49,956,740,642	161,880	5,004,178,528	245,300,000	221,957,000
Access bank Plc.	Year	POS Vol	POS (N'00)	NIBSS Vol	NIBSS (N'00)	MB Volume	Mobile banking (N'00)	PBT(N'000)	NET PROFIT (N'000)
	2011	36,876	876,854,467,00	67,349	3,675,897,345	8,987	124,768,436,00	16,016,762	13,660,448
	2012	72,876	1,345,876,879,00	123,456	8,794,980,986	35,987	1,354,876,356,95	36,259,530	35,815,611
	2013	156,467	4,349,765,349,00	203,786,00	21,987,786,984,00	64,987	2,768,987,465,00	31,365,396	26,211,844
	Total	266,219	2,222,731,346	394,591	12,470,878,331	109,961	4,248,632,258	83,641,688	75,687,903
	Grand total	785,135	12,695,999,983	1,167,618	82,111,618,478	345,386	10,390,550,304	366,783,688	329,248,903

Appendix 2: SPSS Output of Data

H₀₁: There is no significant relationship between POS and PBT

$$\text{Profit before Tax (PBT)} = \beta_0 + \beta_1 (\text{POS}) + \varepsilon$$

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig F Change
1	.021 ^a	.000	.142	31569191.17 540	000	.003	1	7	.958

a. Predictors: (Constant), POS

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
(Constant)		30103332.922	11203134.170		2.687	.031
1	POS	4.243E-006	.000	.021	.055	.958

a. Dependent Variable: PBT

H₀₂: There is no significant relationship between NIBSS and PBT

$$\text{Profit before Tax (PBT)} = \beta_0 + \beta_1 (\text{NIBSS}) + \varepsilon$$

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig F Change
1	.022 ^a	.000	.142	31568376.90 400	000	.003	1	7	.955

a. Predictors: (Constant), NIBSS

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	30089114.771	11214327.134		2.687	.031
1	8.890E-007	.000	.022	.058	.955
NIBSS					

a. Dependent Variable: PBT

H₀₃: There is no significant relationship between MB and PBT

$$\text{Profit before Tax (PBT)} = \beta_0 + \beta_1 (\text{MB}) + \varepsilon$$

Model Summary

Mod el	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig F Change
1	.484 ^a	.234	.125	27631241.40 602	.234	2.141	1	7	.187

a. Predictors: (Constant), MB

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
MB					

(Constant)	16034338.786	13418674.480		1.195	.271
1 MB	.012	.008	.484	1.463	.187

a. Dependent Variable: PBT

H04: There is no significant relationship between POS and NET

$$(NP) = \beta_0 + \beta_1 (POS) + \varepsilon$$

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig F Change
1	.015 ^a	.000	.143	31200007.2 3 864	000	.002	1	7	.970

a. Predictors: (Constant), POS

Coefficients^a

Model	Unstandardized Coefficients			Standardized Coefficients	t	Sig.
	B	Std. Error	Beta			
(Constant)	27314984.470	11072119.816			2.467	.043
1 POS	-3.024E-006	.000	.015		.040	.970

a. Dependent Variable: NP

Hos: There is no significant relationship between NIBSS and NET

$$(NP) = \beta_0 + \beta_1 (NIBSS) + \varepsilon$$

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig F Change
1	.014 ^a	.000	.143	31200499.41 670	000	.001	1	7	.972

a. Predictors: (Constant), NIBSS

Coefficients^a

Model	Unstandardized Coefficients			Standardized Coefficients	t	Sig.
	B	Std. Error	Beta			

(Constant)	27305200.344	11083642.604		.014	2.464	.043
1	5.551E-007	.000			.037	.972
NIBSS						

a. Dependent Variable:NP

H₀₆: There is no significant relationship between MB and NET

$$(NP) = \beta_0 + \beta_1 (MB) + \epsilon$$

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig F Change
1	.117 ^a	.014	.127	30988805.13 101	.014	.097	1	7	.764

a. Predictors: (Constant), MB

Coefficients^a

Model	Unstandardized Coefficients			Standardized Coefficients	t	Sig.
	B	Std. Error	Beta			
(Constant)	23750121.015		15049222.091		1.578	.159
1 MB	.003	.009	.117		.312	.764

a. Dependent Variable: NP

Multiple Regression

$$\text{Profit Before Tax (PBT)} = \beta_0 + \beta_1 (\text{POS}) + \beta_2 (\text{NIBSS}) + \beta_3 (\text{MB}) + \epsilon$$

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	Df 1	Df 2	Sig F Change
1	513 ^a	.263	.018	29273079.0 3536	263	1.072	2	6	.400

Coefficients^a

Model	Unstandardized Coefficients			Standardized Coefficients	t	Sig.
	B	Std. Error	Beta			

(Constant)	1866113.245	13003883.728		1.435	.201
1 NIBSS	5.665E-006	.000	140	.389	.711
MB	.015	,010	526	1.463	.194

Excluded Variables^a

Model	Beta in	t	Sig.	Partial Correlation	Collinearity Statistics
					Tolerance
1 POS	121.272 ^b	.534	.616	.232	2.700E-006

a. Dependent Variable: PBT

b. Predictors in the Model: (Constant), MB, NIBSS

$$(NP) = \beta_0 + \beta_1 (POS) + \beta_2 (NIBSS) + \beta_3 (MB) + \epsilon$$

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	Df 1	Df2	Sig. F Change
1	.099 ^a	.010	-.320	33537582.5 3099	.010	.030	2	5	971

a. Predictors (Constant), MB, NIBSS

Coefficients^a

Model	Unstandardized Coefficients			Standardized Coefficients	t	Sig.
	B	Std. Error		Beta		
(Constant)	25143547.845	14898290.105			1.688	.142
1 NIBSS	3.486E.007	.000		.009	.021	.984
MB	.003	,012		.101	.242	.817

a. Dependent Variable NP

Excluded Variables^a

Model	Beta in	t	Sig.	Partial Correlation	Collinearity Statistics
					Tolerance
1 POS	-296.219 ^b	-1.254	.265	-.489	2.700E-006

a. Dependent Variable: NP