EFFECT OF ELECTRONIC BASED TRANSACTIONS SYSTEM (EBTS) ON THE NIGERIAN ECONOMY, 2006-2017

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Abstract:
This study investigated the effect of Electronic Based Transactions System (EBTS) on the Nigerian economy. Specifically the study sought to,. (a) evaluate the long-run effect of Point of Sale (PUS) on Gross Domestic Product (GDP) in Nigeria (b) ascertain the responsiveness of NIBSS Instant Payment (NIP) on Gross Domestic Product (GDP) in Nigeria (c) determine the degree of relationship between Mobile Inter scheme Transaction (MIT) on Gross Domestic Product (GDP) of Nigeria. (d) determine the impact of NIBSS Electronic Funds Transfer (NEFT) on Gross Domestic Product (GDP) of Nigeria. The researchers adopted time series data from 2006 to 2017 which were drawn from CBN e-payment statistics and National Bureau of Statistic. The data obtained was subjected to an advanced econometric technique. Multiple regressions estimation of ordinary least square (ULS) was adopted as the tool for analysis. The result of the study indicates that Mobile inter scheme Transaction (MIT) has a negative and no significant relationship with Gross Domestic Product. NEFT has positive and no significant impact on GDP. NIP has negative and no significance effect on GDP. PUS has positive and significance effect on GDP. The study concludes that there is a great need for the Government and Stakeholders to be sustain the developmental tempo of e- payment channels to enhance diversification of Nigerian economy.
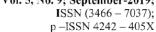Keywords: E-payment, Point of Sale, NIBSS Instant Payment (NIP,), Mobile Inter scheme transactions (MIT) and Electronic Fund transfer (NEFT,)

1.1 Introduction

The coming on board of electronic payment (e-payment) system can be traced back to 1918, when the Federal Reserve Bank of USA first moved currency via telegraph. According to Okafor (2017) electronic payment systems exist in a variety of forms which can be divided into two groups: wholesale and retail payment systems. Wholesale payment systems exist for non- consumer transactions. High-value wholesale payments flow through the three major interbank funds transfer systems: Chips, Swift and Fed wire. Retail electronic payment systems encompass those transactions involving consumers. These transactions adopted the use of such payment mechanisms as credit cards, automated teller machine (ATM), debit cards, point-of-sale (POS) terminals, home banking, and telephone bill- payment services.

Payments through these mechanisms are conducted online and flow through the check truncation system and Automated clearing house (ACH). A number of innovations have taken place in the area of retail electronic payments known as electronic money (c-money). These innovations, which are still at a relatively early stage of development, have the potential to challenge the predominant role of cash for making small-value payments and could make retail transactions easier and cheaper for consumers and merchants. High cash usage encourages corruption, fund leakages and money laundering, amongst other cash-related fraudulent activities.

The introduction of e-payment in Nigeria was initially to eliminate the un-acceptable delay in the payment of government contractors by minimizing interactions between contractors and government officials who have role to play in the payment system. Government was inundated with allegations of corruption in the Federal Civil Service. The Federal Government through its treasury circular reference to TRY/B8/2008 of 22nd October, 2008 directed that payments for all funds for it be made electronically effective 1st January 2009 (Asaolu, Ayoola and Akinloye, 2011).

For many years, cheques had been the sole alternative to cash in Nigerian economy for many years. In the Nigerian context, e-payment is making payments from one end to another, through the medium of electronic devices such as POS, ATM, mobile phones and computers. It usually involves digital and automated processes which the only manual functions required are, the user inputting the transaction data which includes – bank card number (Permanent Account Number), PIN, savings or current account number, customer ID .In Nigeria, it is a type of transaction used to pay vendors and suppliers of services, for goods and services rendered through the use of a gateway, which is powered by electronic data services *(Sourced online at https:nibss-plc.com.ng/pos2/, 2018)*

Despite the excitement and ongoing advancement in technology with international e- payments, options and tighter security, there are still unique payment challenges with e- payment platforms that will continue to impact businesses of all sizes around the world, it is fraud. Fraud has always been with us and the trend has no signs of slowing down now. It will never be broken; however, we can keep arming ourselves with the vigilance to contend with this problem so we can have better protection against these fraudsters (Rampton, 2017)

Another major challenge for business owners in the online payments industry comes in the form of chargeback, which can create excess costs and ruin brand equity. Too many chargeback can even mean the end - curtains -for a business. Most business owners don't factor in the amount of chargeback and how it will impact the rate they are getting with their processor.

The problem of this study therefore is to investigate the effect of electronic based transactions system (EBTS) on Nigerian economy. The specific objectives are to; determine the impact of NIBSS Instant Payment (NIP) on gross domestic product of Nigeria, ascertain the effect of Point of Sale (POS) on gross domestic product of Nigeria, determine the relationship between Mobile Inter scheme transaction (MIT) and Gross Domestic Product of Nigeria, determine the effect of Electronic Funds Transfer (NEFT) on Gross Domestic Product (GDP) of Nigeria. The rest of the research paper is organized into four sections as follows: section 2, review of existing literature in the area of study, section 3,enlists the methodology applied for analysis, section 4, discusses the empirical result/findings while section 5, concludes after the summary.

2.1 Review of Related Literature

2.1.1 Electronic based transactions system/ Electronic Payment (e-payment) system

Briggs and Brooks, (2011), define e-payment system (EPS) as a form of inter-organizational information system (IOS) for monetary exchange, linking many organizations and individual users. E-payment (EPS) requires complex interactions between stakeholders, the technology and the environment. EPS encompasses the total payment process, which includes all the mechanisms, technological systems, institutions, procedures, rules, laws etc that come into play from the moment a payment instruction is issued by the end-user. Different kinds of rules, regulations, mechanisms, technology and arrangements have therefore been put in place by trading partners, markets, and governments (stakeholders involving in EPS development) in all countries and throughout time to develop effective infrastructure of monetary exchange, commonly referred to as payment system (Rampton, 2017).

Ukpere and Ayo (2010), refers to e-payment system as the automated processes of exchanging monetary value among parties in business transactions and transmitting this value over the information and communication technology (ICT) networks. They stated that the common channels include the payment cards (debit and credit), online web portal, point of sales (POS) terminals, automated teller machine (ATM), mobile phones, automated clearing house (ACH), direct debit/deposit and real time gross settlement (RTGS) system. From a general perspective, e- payment system is said to offer an endless convenience of transaction possibilities, and at the same time reduce transfer/processing fees, increase processing/transaction

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pg. 85

time. offers multiple payment option and gives immediate notification of all transaction on customer's account (Ukpere and Ayo. 2010). Under this system, it is believed that people can actually pay all their utility bills from the comfort of their room with their mobile phones or by just walking down the street to use a POS terminal.

2.1.2 Types of e-payment channels in Nigeria

(1) NIBSS Instant Payments (NIP). This is a new payment scheme introduced in 2011. It offers real-time inter-bank account-to-account electronic funds transfers. The scheme, operated by NIBSS and offered by all major banks in Nigeria, has met with overwhelming approval from the user community as witnessed by the impressive adoption rate.

NIP allows the payer to confirm the account holders' name before sending funds. It uses the central switch to pass the payment instructions real-time to beneficiary bank which applies funds on receipt. Settlement occurs once per day in the NIBSS 3rd clearing cycle at 15:30 hrs.

In 2012, NIP represented 8.5% of all payment transactions by volume and 15.5% by value, and in June 2013. NIP transaction exceeded cheque payments by volume for the first time.

According to Okafor (2017), the Nigeria Inter-Bank Settlement System Plc (NIBSS) was set up by the decision of the Bankers Committee in 1992, as a Banking Industry Shared-Service, to help streamline inter-bank payments and settlement mechanisms, and to promote electronic payments in Nigeria. Incorporated in April 1993 it commenced operations on 13th June 1994.

NIBSS is owned by all licensed banks in Nigeria, and the Central Bank of Nigeria. The Board consists of representatives of banks, two Executive Directors and the Managing Director of NIBSS with Deputy Governor (Operations), Central Bank of Nigeria, as the Chairman. The shareholding of NIBSS is periodically realigned based on the volume of payments from participant organizations (CBN, 2013)

The scope of operations of NIBSS in the Nigerian financial sector is such that fulfils its mandate as enshrined in the company's Memorandum and Articles of Association:

> ➤ ·To carry on business as a service oriented institution that provides the mechanism for same day clearing and settlement of inter-bank transfers and payments;

> ➤ ·To provide infrastructure for the automated processing and settlement of transactions between banks acting on their own account as regards deposit placements, Treasury Bills transactions, Naira settlement on interbank foreign exchange transactions;

> ➤ ·To initiate and develop an integrated nationwide network for the electronic or paperless payments, funds transfer and settlement of transactions.

> ➤ ·To provide framework for elevating the level of efficiency in funds transfer services generally

NIBSS is responsible for the management and operation of the retail payments infrastructure, as well as offering some value-add services to payment systems participants (Okafor, 2017)

Key Benefits of NIP to consumers and businesses.

NIP offers great value to all parties in the value chain:

- Consumers benefit from the increased convenience.
- Corporate enjoy payment processing efficiency, increased liquidity and reduced payment risks
- And Banks and Other Financial Institutions are able to build services around it to meet their ever changing customer needs, particularly digital banking offerings.

(Sourced online at https://nibss-plc.comng/mobile-interscheme-transfer/, 2018)

(2) Mobile Inter scheme transaction

CBN has licensed 26 individual mobile money operators (MMO), allowing them to offer mobile payment schemes. Nigeria has adopted a 'bank-led' model for mobile payments, requiring the mobile money operator to work with a sponsoring bank. All client funds are held by the sponsoring bank in trust accounts and customer funds are covered by a deposit insurance scheme of the Nigeria Deposit Insurance Corporation (NDIC). All mobile money operators are required to provide interoperability to other mobile schemes, enabled through connection to the Central Switch operated by NIBSS. Adoption has been strong, and in 2012 mobile payments represented 3.0% of payment transactions by volume, although only 0.02% by value highlighting the usage of mobile money for small value person-to-person flows and mobile air-time top-up (CBN, 2013)

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pg. 86

Settlement of inter-scheme flows occurs once per day in the NIBSS 3rd clearing cycle at 15:30 hrs.

CBN has determined that sufficient MMOs now exist and has announced an increase in the capital requirements for new and existing MMOs. It is likely that this will result in fewer new applications and a potential consolidation amongst existing providers (Okafor, 2017)

(3) Point of Sale (POS) Terminal

A Point of Sale terminal or POS terminal is a portable device that enables shoppers pay for goods and services with electronic payment cards like ATM/Debit cards and credit cards. In this system, users are issued with electronic cards which can be slotted into the machine in order to effect payments. If a merchant installs a POS terminal in his/her store, super market, shopping mall, boutiques, or business office, customers will be able to use e-payment cards like InterSwitch Verve, MasterCard, Visa, eTranzact, etc to pay for goods and services on checkout.

The POS terminal is connected to a bank. After shopping, the shopper presents his e-payment card to the teller, who slots it into the POS terminal or swipes it on the POS terminal depending on the configuration of the terminal. The customer checks the bill and authorizes payment by entering his/her PIN. If all is well, funds will be electronically transferred from the shoppers account to a merchant account at a bank.

With an e-payment card, a customers can spend up to 1,000,000 Naira on goods bought from a shop with no need to carry cash. In addition, depending on the type of POS terminal, one may also be able to offer money transfer services as well as sell recharge cards as most POS machines can also print recharge cards.

There are different types of terminals: coin & note, credit card and payroll deduction terminals. The cards are simply inserted into the revaluation terminal and certain programmed instructions are followed, and money is added onto the electronic purse. This can then be used to pay for goods/services by inserting them into the POS terminals. When the card is inserted into the POS, and the transaction amount entered, the reader reads the amount and is quickly deducted from the e-purse (the card) (CBN, 2013)

It has to be noted that the operation of the cashless economy (electronic payment) system is not entirely free. Curiously, using the POS comes with a hefty price tag of 1.25 percent of the cost of every purchase or transaction that is affected in addition to the 5% for every 1000 Commission on Turnover that deposit money banks are allowed by CBN to charge every time money is taken from one's account (Amu and Nwezeaku, 2016)

(4) NIBSS Electronic Funds Transfer (NEFT)

An electronic fund transfer moves money from one account to another. The accounts can be at the same financial institution or two different financial institutions. The transaction is done electronically over a computerized network.

EFT transactions are also referred to as electronic banking. Everything is done paper free, so there isn't a need for cash or paper checks.

Electronic fund transfers are regulated by the Electronic Fund Transfer Act (EFTA). It lays out the rights and liabilities for electronic fund transfers (Amu and Nwezeaku, 2016)

How does EFT payment work?

EFT payments are processed through the Automated Clearing House (ACH) network. ACH is a secure system that connects all Nigerian financial institutions.

Because the financial institutions are connected, you can authorize the electronic transfer of funds, and the money will be taken from your account and deposited in the recipient's account. There might be a fee for some EFT transactions. For example, you might have to pay for certain ATM transactions. However, other transactions might be free to you.

2.2 Types of EFT payments

There are many ways to transfer money electronically. Below are descriptions of common EFT payments you might use for your business (Kappel, 2017)

Direct deposit lets you electronically pay employees. After you run payroll, you will tell your direct deposit service provider how much to deposit in each employee's bank account. Then, the direct deposit provider will put that money in employee accounts on payday. Not all employers can make direct deposit mandatory, so make sure you brush up on direct deposit laws.

Wire transfers are a fast way to send money. They are typically used for large, infrequent payments. You might use wire transfers to pay vendors or to make a large down payment on a building or equipment.

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pg. 87

ATMs let you bank without going inside a bank and talking to a teller. You can withdraw cash, make deposits, or transfer funds between your accounts.

Debit cards allow you to make EFT transactions. You can use the debit card to move money from your business bank account. Use your debit card to make purchases or pay bills online, in person, or over the phone.

Electronic checks are similar to paper checks, but used electronically. You will enter your bank account number and routing number to make a payment.

Pay-by-phone systems let you pay bills or transfer money between accounts over the phone.

Personal computer banking lets you make banking transactions with your computer or mobile device. You can use your computer or mobile device to move money between accounts (Kappel, 2017)

According to the Electronic Fund Transfer Act (1978) an Electronic funds transfer (EFT) a funds transfer initiated through an electronic terminal, telephone, computer (including on-line banking) or magnetic tape for the purpose of ordering, instructing, or authorizing a financial institution to debit or credit a consumer's account.

EFT is electronic transfer of money from one bank account to another, either within a single financial institution or across multiple institutions, via computer-based systems, without the direct intervention of bank staff.

EFT transactions are known by a number of names across countries and different payment systems. For example, in the United States, they may be referred to as "electronic checks" or "e-checks". In the United Kingdom, the term "bank transfer" and "bank payment" are used, while in several other European countries "giro transfer" is the common term while in Nigeria it is called ETF *(Sourced online at https://thefinancialbrand.com/6852/top-payment-trend-banking-psp-digital, 2018)*

2.3 Advantages and Disadvantages of E-Payment Systems

- **Advantages**

The advantages of electronic payment (e- payment) systems according to Okifo and Igbunu are as follows;

1. Time saving:

Money transfer between virtual accounts usually takes a few minutes, while a wire transfer or a postal one may take several days. Also, you will not waste your time waiting in lines at a bank or post office.

2. Expenses control

Even if someone is eager to bring his disbursements under control, it is necessary to be patient enough to write down all the petty expenses, which often takes a large part of the total amount of disbursements. The virtual account contains the history of all transactions indicating the store and the amount you spent. And you can check it anytime you want. This advantage of electronic payment system is pretty important in this case.

3. Reduced risk of loss and theft

You cannot forget your virtual wallet somewhere and it cannot be taken away by robbers. Although in cyberspace there are many scammers, in one of the previous articles we described in detail how to make your e-currency account secure.

4. Low commissions

If you pay for internet service provider or mobile account replenishment through the unattended payment terminal (UPT), you will encounter high fees. As for the electronic payment system: a fee of this kind of operations consists of 1% of the total amount, and this is a considerable advantage.

5. User-friendly

Usually every service is designed to reach the widest possible audience, so it has the intuitively understandable user interface. In addition, there is always the opportunity to submit a question to a support team, which often works 24/7. Anyway you can always get an answer using the forums on the subject.

6. Convenience

All the transfers can be performed at anytime, anywhere. It's enough to have an access to the Internet.

Disadvantages

Having specified the well-known advantages of electronic payment system, it is necessary to mention its drawbacks: (Okifo and Igbunu, 2015)

- Restrictions

Each payment system has its limits regarding the maximum amount in the account, the number of transactions per day and the amount of output.

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pg. 88

- The risk of being hacked

If you follow the security rules the threat is minimal, it can be compared to the risk of something like a robbery. The worse situation when the system of processing company has been broken, because it leads to the leak of personal data on cards and its owners. Even if the electronic payment system does not launch plastic cards, it can be involved in scandals regarding the Identity theft.

- The problem of transferring money between different payment systems

Usually the majority of electronic payment systems do not cooperate with each other. In this case, you have to use the services of e-currency exchange, and it can be time-consuming if you still do not have a trusted service for this purpose. Our article on how to choose the best e-currency exchanger greatly facilitates the search process.

- The lack of anonymity

The information about all the transactions, including the amount, time and recipient are stored in the database of the payment system. And it means the intelligence agency has an access to this information. You should decide whether it's bad or good.

- The necessity of Internet access

If Internet connection fails, you cannot get to your online account.

In general, the advantages of electronic payment system outweigh its disadvantages and they have bigger opportunities comparing with ones of traditional wire transfers. *(Retrieved online   at https://unichange.me/articles/advantages_of_electronic_payme nt_systems, 2018)*

3.1 Methodology

The method of research design is *ex-post facto* research design. It made use of secondary data from Nigerian Interbank Settlement System (NIBSS) and CBN e-payment Statistics for 2006 2017 as the main sources of data. The dependent variable is Nigerian Economy proxy as Gross Domestic Product (GDP) and the independent variable Electronic Based Transaction proxy, Nigerian Interbank Settlement System (NIP), Point of Sale (POS), Mobile Inter scheme Transaction (MIT) and Nigerian Interbank Settlement System Electronic Funds Transfer

(NEFT). The model of study is multiple regressions estimated using Ordinary Least Square (OLS), while E-view version 9.0 software packages were used to run the analysis.

Model Specification

Model Specification involved the determination of dependent and explanatory variables which were included in the model and the expectations about sign and size of the parameters of the functions (Inyiama and Ezeugwu, 2016)

The researcher converts the general least model into specific variables, it becomes

$$GDP = \beta_0 + \beta_1 LNIP + \beta_2 LPOS + \beta_3 LMIT + \beta_4 LNEFT + \mu_i \dots\dots\dots\dots Equ\ (1)$$

Where

GDP = Gross Domestic Product

LNIP = NIBSS Interbank Settlement System

LPOS = Point of Sale

LMIT = Mobile Inter scheme Transactions

LNEFT = NIBSS Electronic Funds Transfer

B_0 = Intercept for X variables

$B_1 - \beta_4$ = Co-efficient for the independent Variables X of Electronic Based Transaction

μ_i = Stochastic Error Term

The Apriori expectations of the coefficient of the model are presented as; $\beta_1, \beta_2, \beta_3, \beta_4 > 0$

Description of variables in the model

NIBSS Instant Payments (NIP) is an account-number based, online-real-time Inter-Bank payment solution developed in the year 2011 by NIBSS. It is the Nigerian financial industry's preferred funds transfer platform that guarantees instant value to the beneficiary. The NIP service commenced with only two (2) commercial banks as participants. However, today, the number of participants has grown to include all commercial banks, Micro-Finance banks (MFBs), and Mobile Money Operators (MMOs).

Point of sale (POS): A Point of Sale terminal or POS terminal is a portable device that enables shoppers pay for goods and services with electronic payment cards liked debit cards and credit cards. If a merchant installs a POS terminal in his/her store, super market, shopping mall, boutiques, or business office, customers will be able to use e-payment cards like InterSwitch

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pg. 89

Verve, MasterCard, Visa, e-Tranzact, etc to pay for goods and services on checkout.

The POS terminal is connected to your bank. After shopping, the shopper presents his e-payment card to your teller, who slots it into the POS terminal or swipes it on the POS terminal depending on the configuration of the terminal. The customer checks the bill and authorise payment by entering his/her PIN. If all is well, funds will be electronically transferred from the shoppers account to your merchant account at your bank.

Mobile Inter scheme transaction (MIT)

CBN has licensed 26 individual mobile money operators (MMO), allowing them to offer mobile payment schemes. Nigeria has adopted a 'bank-led' model for mobile payments, requiring the mobile money operator to work with a sponsoring bank. All client funds are held by the sponsoring bank in trust accounts and customer funds are covered by a deposit insurance scheme of the Nigeria Deposit Insurance Corporation (NDIC). All mobile money operators are required to provide interoperability to other mobile schemes, enabled through connection to the Central Switch operated by NIBSS. Adoption has been strong, and in 2012 mobile payments represented 3.0% of payment transactions by volume, although only 0.02% by value highlighting the usage of mobile money for small value person-to-person flows and mobile air-time top-up (CBN,2013) Settlement of inter-scheme flows occurs once per day in the NIBSS 3rd clearing cycle at 15:30 hrs.

Instant (Interbank) EFTS is electronic transfer of money from one bank account to another, either within a single financial institution or across multiple institutions, via computer-based systems, without the direct intervention of bank staff.

It is an instant EFT payment system between two distinct entities when delivering from the sending entity to receiving entity takes peace within 1 minute (60 seconds). It is also a payment system where delivery to the receiving entity occurs beyond 1 minute is considered to be an ACH system.

4.0 Data Presentation and Analysis

Table 4.1

E-payment figures 2006 -2017 in volume

Year	POS	MIT	NIP	NEFT	GDP
2006	0.019769	-	-	-	18564.59
2007	0.09121	-	-	-	20657.32
2008	0.533376	1,1576,207	-	-	24296.32
2009	0.62731	7,471.388	-	-	24794.24
2010	535,767	7,471.388	-	-	54612.26
2011	523,666	7,041,250	3,222,600	24,541,510	50,929,890
2012	2,587,595	2,297,688	4,449,654	28,941,559	59,929,890
2013	9,418,427	15,930,181	17,112,158	29,834,317	63,218,720
2014	20,817,423	27,744,797	40,829,854	29,690,765	67,152,790
2015	33,720,933	43,933,362	71,223,545	29,935,605	69,023,930
2016	47,743,919	37,339,510	11,151,384	24,498,267	70,120,100
2017	32,774,728	11,559,108	128,266,151	10.05,688	72,009,345

Source: CBN e-payment Statistics and NIBSS data, 2018

4.1 Data Analysis

Table 4.2 Descriptive Statistics

	LNGDP	LNMIT	LNNEFT	LNNIP	LNPOS
Mean	17.97818	16.49053	16.66629	16.77890	16.16636
Median	18.02248	16.58373	17.18079	16.65530	16.85130
Maximum	18.09231	17.59818	17.21456	18.66962	17.68136
Minimum	17.74596	14.64741	13.82118	14.98570	13.16861
Std. Dev.	0.120289	1.042476	1.257755	1.385978	1.652389
Skewness	-1.059842	-0.663474	-2.019882	0.018076	-0.910510
Kurtosis	2.962619	2.353635	5.119256	1.637557	2.442001
Jarque-Bera	1.310884	0.635419	6.069857	0.541788	1.058013
Probability	0.519213	0.727814	0.048078	0.762697	0.589190

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pg. 90

Sum	125.8472	115.4337	116.6640	117.4523	113.1645	LNNEFT	0.068104	0.005398	12.61636	0.0504
Sum Sq.						LNNIP	0.001265	0.000168	7.537466	0.0840
Dev.	0.086817	6.520533	9.491692	11.52561	16.38233	LNPOS	0.078848	0.000524	150.5999	0.0042
Observatio ns	7	7	7	7	7					

Source: E-view-9.0 computation software, 2018

The descriptive characteristics of the variables are presented in the table 4.2 above. The mean values of the GDP(17.97818), MIT(16.49053) , NEFT(16.66629) , NIP(16.77890) and POS(16.16636), while the median variables which measure the centrality of variables are distributed in the following pattern 18.02248,for GDP, 16.58373 for MIT, 17.18079 for NEFT, 16.5530 for NIP 1685130 for POS respectively. The probability corresponding to the Jarque -Berra (JB) shows that the variables are not normally distributed given a high significance value of the p-value which is significantly greater the 0.05. The series for standard deviation are 0.120289 for GDP, 1.042476 for MIT, 1.257755 for NEFT, 1.385978 for NIP and 1.652389 for ROE respectively. GDP, MIT, NEFT and POS variables were negatively skewed towards normality as evidenced by the negative sign of the skewness While NIP was positively skewed towards normality as evidenced by the positive sign of the skewness. The kurtosis that measured the peakdness of the distribution of each of the variables is 2.962619, 2.353635, 5.119256, 1.637557 and 2.442001 for GDP, MIT NEFT, NIP and POS.

Regression Analysis Result
Dependent Variable: LNGDP
Method: Least Squares
Date: 12/22/18 Time: 13:29
Sample (adjusted): 2011 2016
Included observations: 6 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	15.88469	0.093510	169.8718	0.0037
LNMIT	-0.022503	0.000750	-29.99121	0.0212

R-squared	0.999985	Mean dependent var	17.95915
Adjusted R-squared	0.999923	S.D. dependent var	0.119683
S.E. of regression	0.001048	Akaike info criterion	-11.00914
Sum squared resid	1.10E-06	Schwarz criterion	-11.18268
Log likelihood	38.02743	Hannan-Quinn criter.	-11.70381
F-statistic	16305.23	Durbin-Watson stat	2.991264
Prob(F-statistic)	0.005873		

Source: E-view software, 9.0, 2018
Regression Equation:
GDP= 15.88469 – 0.022503MIT + 0.068104NEFT + 0.001265NIP + 0.078848POS
SE= (0.093510)(0.000750)(0.005398)(0.000168)(0.000524)
Interpretation of Regression:
The regression model result shows that R^2 (R-square) is approximately 99.9%, and this indicates a very good fit, meaning that there is a strong relationship between the variables under study. It also shows that 99.9% changes or variations in GDP are explained by MIT, NEFT, NIP and POS leaving 0.1% variations in GDP to error term. The adjusted R square which indicates a figure greater than 50% implies that the independent variables were the major determinant factors of GDP of the Nigerian Economy. The Durbin-Watson statistic is 2.991264 while F-statistic is 16305.23 at p-value 0.005873

The regression analysis further indicates that MIT, NEFT and NIP have positive and no significant relationship with GDP. Only POS has both positive and statistically significant effect on GDP in the long-run.

5.1 Summary of findings, conclusion and Recommendations

(i) Point of sale (POS) has positive and statistically significant effect on GDP in the long-run

(ii) NIBSS Instant Payment (NIP) has positive and no significant response to Gross Domestic Product (GDP) in Nigeria.

(iii) Mobile Inter scheme Transactions (MIT) has a negative and no significant relationship with Gross Domestic Product (GDP)

(iv) NIBSS Electronic funds transfer (NEFT) has positive and no significant impact on GDP in Nigeria.

5.1.1 Conclusion

The broad objective of this study is to investigate the effect of Electronic Based Transaction System on the Nigerian Economy for the period 2006-2017. The specific objectives are; (i) evaluate the long-run effect of Point of sale (POS) on gross domestic product (GDP) in Nigeria. (ii) Ascertain the responsiveness of NIBSS Instant Payment (NIP) on GDP in Nigeria. (iii) Determine the degree of relationship between Mobile Inter Scheme Transactions (MIT) on GDP in Nigeria (iv) determine the impact of NIBSS Electronic funds transfer (NEFT) on GDP in Nigeria.

The study employed *ex-post facto* research design using CBN E-payment statistics and Nigeria Interbank Settlement (NIBSS) of various issues, 2006-2017.

The study finally concludes that there is a great need for the Government and Stakeholders to sustained the developmental tempo of e- payment channels to enhance diversification of Nigerian economy

5.1.2 Recommendations

1. Point of Sale (POS) should be deployed across commercial points in Nigeria to serve like the Automated Teller Machine

2. NIBSS Instant Payment (NIP) should be strengthened to maintain its mandate

3. The capital requirements for new and existing MMOs that were allowed to offer mobile payments should be sustained to enhance small value person to person flows and mobile air-time top-up

4. Development of NEFT payment system should be sustained in Nigeria.

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