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EFFECT OF CRYPTO CURRENCY ON THE DEVELOPMENT OF NIGERIA BANKING SYSTEM WITH PARTICULAR REFERENCE TO THE FIRST BANK NIGERIA PLC.

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Keywords: *Crypto, Currency, Development, Nigerian, Banking system*

Abstract: *The study examined the effect of crypto currency on the development of Nigerian banking system with particular reference to the first bank Nigeria Plc. The study specifically examined the effect of Bitcoin (BTC) payment system Litecoin (LTC) payment system on the profit for the year of first bank Nigeria Plc. Data for the study was sourced through annual reports and accounts of first bank Plc for a period of 10 years, data collected were analysed using multiple regression analysis. Result of the analysis shows that Bitcoin (BTC) payment system has a positive and significant effect on the profit for the year of first bank Nigeria Plc. It was also observed that Litecoin (LTC) payment system has a negative significant effect on the profit for the year of first bank Nigeria Plc. The study concluded that a significant number of people are now fully persuaded that the digital currency is genuine and has value. It was recommended that there is need for Nigerian Government to set up policies that will be very favourable for Bitcoin (BTC) payment system in the country and that regulatory agencies should help in the implementation of Litecoin (LTC) payment system to enhance Nigerian international transaction base.*

INTRODUCTION

1.1 Background to the Study

The global financial system is no doubt embracing the current transition from physical currency to almost virtual currencies through the medium of technology. This wave has ushered in the birth of crypto currencies. There have been many attempts at creating a digital currency during the 90s tech boom, with systems like Flooz, Beenz and Digi Cash emerging on the market but inevitably failing. In early 2009, an anonymous programmer or a group of

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programmers under an alias Satoshi Nakamoto introduced Bitcoin which is a form of crypto-currency. This virtual currency has been defined in a number of related forms. Crypto-currency has been defined as a digital record-keeping device that uses balances to keep track of the obligations from trading and that is publicly known to all traders. Some of the forms of crypto currencies include Bitcoin (BTC), Litecoin (LTC), Ethereum (ETH), Ripple (XRP), Bitcoin Cash, Neo, Iota, Dash, Qtum, Monero and Ethereum Classic. A cryptocurrency system is defined by two parameters: money growth rate $\mu \geq 0$ and transaction fee charge at a rate $\tau \geq 0$. Since the creation of Bitcoin in 2009, numerous private cryptocurrencies have been introduced but Bitcoin has been widely adjudged as the most successful one. Since the advent of crypto-currency, it has been getting a lot of media attention, and its total market value has reached 128.78 billion USD in 2019. It operates based on a technology called ''Blockchain''. Crypto currencies are largely designed to operate without sovereign regulation and are protected from being discovered by government authorities for supervision. More importantly, many central banks started recently to explore the adoption of cryptocurrency and blockchain technologies for retail and large-value payments. For example, the People's Bank of China aims to develop a nationwide digital currency based on blockchain technology; the Bank of Canada and Monetary Authority of Singapore are studying its usage for interbank payment systems.

According to Bartoletti, Carta, Cimoli, & Saia, (2017) the universal financial system is absolutely embracing the current evolution from physical currency to almost virtual currencies through the medium of technology. However, there have been many attempts at producing a digital currency during the 90s tech boom (Bech, 2017). Bitcoin was introduced in early 2009 by a group of programmers under the alias Satoshi Nakamoto. Cryptocurrency is described as a digital record-keeping device that uses balances to keep track of trading obligations, which is publicly known to all traders. Some of the forms of crypto currencies include Ethereum, Bitcoin etc. However, since the introduction of Bitcoin in 2009, several private cryptocurrencies have been introduced, but Bitcoin has been generally adjudged as the most successful one. According to Gilbert & Loi (2018), cryptocurrencies are mainly designed to function without independent regulation and are protected from being exposed to government authorities for control. Moreover, many central banks begin to discover the adoption of blockchain technologies and cryptocurrency for retail and large-value payments. (Bartoletti et al., 2017).

There are now no less than a thousand types of cryptocurrencies globally, the most prominent of which is Bitcoin. Bitcoin's trading volume has sometimes peaked to about $4 billion1 and one bitcoin equals about $14,000 in value.2

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Cryptocurrencies, also known as virtual currencies, are changing the face of commerce and investment globally, Nigeria inclusive.

Admission of cryptocurrency into the Nigerian financial sector is gaining wide popularity but with fears and doubt about its functionality since no regulatory framework from the apex bank exists. But there is a broad call for Central Bank of Nigeria to begin a proper regulatory action. Nevertheless, it is appropriate to note that the Central Bank of Nigeria financial policy restrictions on foreign exchange have steered Nigerians to modernize bitcoin to access foreign exchange. Hence, eliminating the currency would be seen as unreasonable and unworthy of a country that seeks to promote domestic innovation. Thus, it may be found significant if they join several other countries to accept its operation in Nigeria. Therefore, the problem confronting this study is determining cryptocurrency's effect on the Nigerian economy.

1.2 Statement of Problem

Certain regulatory challenges pertaining to cryptocurrency confront regulators. One is the definition/categorization challenge which arises because cryptocurrencies combine properties of currencies, commodities, capital assets, security, and payments systems and their classification as one or the other will often have or attract varying legal implications and tax treatment. An illustration of this problem is that the US tax authorities classify cryptocurrency as “property” while others have treated them as “currencies”.

Another challenge is the global reach of cryptocurrencies arising from their decentralized and digital nature. Other challenges include difficulty in monitoring and strong connection with crimes like money laundering and terrorist financing.

These regulatory issues have tampered with the establishment of cryptocurrency as legal tender in many jurisdictions. This, in turn, has affected their growth and dampened public perception on the currency which is critical for the growth of the cryptocurrency system. It is against this backdrop that this study tends to examine the effect of crypto currency on the development of Nigerian banking system with particular reference to the first bank Nigeria Plc.

1.3 Objectives of the Study

The main objective of this research work is to examine the effect of cryptocurrency on the development of Nigerian banking system with particular reference to the first bank Nigeria Plc. The specific objectives of this research work include to;

1. Examine the effect of Bitcoin (BTC) payment system on the profit for the year of first bank Nigeria Plc.
2. Ascertain the effect of Litecoin (LTC) payment system on the profit for the year of first bank Nigeria Plc.

1.4 Research Questions

The following questions will guide the study;

1. What are the effect of Bitcoin (BTC) payment system on the profit for the year of first bank Nigeria Plc?

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2. How does litecoin (LTC) payment system affect the profit for the year of first bank Nigeria Plc?

1.5 Hypotheses formulation

The following null hypotheses were developed to guide the study

Ho1: Bitcoin (BTC) payment system does not have significant effect on the profit for the year of first bank Nigeria Plc.

Ho2: Litecoin (LTC) payment system does not have significant effect on the profit for the year of first bank Nigeria Plc.

1.6 Scope of the Study

This study focused the effect of crypto currency on the development of Nigerian banking system with particular reference to the first bank Nigeria Plc. The independent variables used in this study include; Bitcoin (BTC), Litecoin (LTC), Ethereum (ETH) and Bitcoin Cash (BTCC) while profit for the year (PFY) is the dependent variable.

REVIEW OF RELATED LITERATURE

2.1 Conceptual Framework

2.1.1 Cryptocurrency and Nigeria Economy

The creation of cryptocurrency as a cybernetic currency has been generating reactions in the global economy such as a country like Nigeria. There has been countless advantage and disadvantage discourse on cryptocurrencies' importance on the Nigerian economy. However, the Nigeria government through its governing agencies such as the Central Bank of Nigeria and the Securities and Exchange Commission has tried to place a ban on cryptocurrency. However, its legal status remains unclear, unlike in countries like Morocco and Algeria where there is an explicit prohibition on trading in Bitcoins such that a breach attracts hefty fines (Dierksmeier & Seele, 2016). The cautions are primarily designed to educate the citizenry about the difference between genuine currencies issued and guaranteed by the state and cryptocurrencies, which are not. Following the moves taken by the Central Bank of Nigeria and the Securities and Exchange Commission, lawmakers have also advised the regulatory authorities to speed up efforts in presenting a legal framework for cryptocurrencies in Nigeria.

The birth of cryptocurrency as a virtual currency has been generating waving reactions in the global economy even in a developing country like Nigeria. In the light of this outbreak, there has been a lot of positive and negative discourse on the value of crypto currencies on the Nigerian economy. Relatively, the Nigeria government through its regulatory agencies such as the Central Bank of Nigeria (CBN) and the Securities and Exchange Commission (SEC) has attempted to place a ban on crypto currency, although its legal status remains ambiguous unlike in countries like Morocco and Algeria where there is a clear ban on trading in Bitcoins such that a breach attracts heavy fines. The warnings are largely designed to educate the citizenry about the difference between actual currencies; which

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are issued and guaranteed by the state, and crypto currencies; which are not. Following the moves taken by the CBN and SEC, Nigerian lawmakers have also urged the regulatory authorities to speed up efforts in introducing a legal framework for crypto currencies in the country.

2.1.2 Bitcoin

Bitcoin is a digital currency created in January 2009. It follows the ideas set out in a whitepaper by the mysterious and pseudonymous Satoshi Nakamoto. The identity of the person or persons who created the technology is still a mystery. Bitcoin offers the promise of lower transaction fees than traditional online payment mechanisms and, unlike government-issued currencies, it is operated by a decentralized authority.

Bitcoin is a type of cryptocurrency. There is no physical bitcoin, only balances kept on a public ledger that everyone has transparent access to. All bitcoin transactions are verified by a massive amount of computing power. Bitcoin is not issued or backed by any banks or governments, nor is an individual bitcoin valuable as a commodity. Despite it not being legal tender in most parts of the world, bitcoin is very popular and has triggered the launch of hundreds of other cryptocurrencies, collectively referred to as altcoins. Bitcoin is commonly abbreviated as "BTC."

Bitcoin was launched in 2009, bitcoin is the world's largest cryptocurrency by market capitalization. Unlike fiat currency, bitcoin is created, distributed, traded, and stored with the use of a decentralized ledger system, known as a blockchain. Bitcoin's history as a store of value has been turbulent; it has gone through several cycles of boom and bust over its relatively short lifespan. As the earliest virtual currency to meet widespread popularity and success, bitcoin has inspired a host of other cryptocurrencies in its wake.

The bitcoin system is a collection of computers (also referred to as "nodes" or "miners") that all run bitcoin's code and store its blockchain. Metaphorically, a blockchain can be thought of as a collection of blocks. In each block is a collection of transactions. Because all the computers running the blockchain have the same list of blocks and transactions, and can transparently see these new blocks being filled with new bitcoin transactions, no one can cheat the system.

Anyone—whether they run a bitcoin "node" or not—can see these transactions occurring in real-time. To achieve a nefarious act, a bad actor would need to operate 51% of the computing power that makes up bitcoin. Bitcoin has around 10,000 nodes, as of June 2021, and this number is growing, making such an attack quite unlikely. But if an attack were to happen, bitcoin miners—the people who take part in the bitcoin network with their computers—would likely fork to a new blockchain, making the effort the bad actor put forth to achieve the attack a waste. Balances of

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bitcoin tokens are kept using public and private "keys," which are long strings of numbers and letters linked through the mathematical encryption algorithm that was used to create them. The public key (comparable to a bank account number) serves as the address published to the world and to which others may send bitcoin.

The private key (comparable to an ATM PIN) is meant to be a guarded secret and only used to authorize bitcoin transmissions. Bitcoin keys should not be confused with a bitcoin wallet, which is a physical or digital device that facilitates the trading of bitcoin and allows users to track ownership of coins. The term "wallet" is a bit misleading, as bitcoin's decentralized nature means it is never stored "in" a wallet, but rather decentrally on a blockchain.

Bitcoin is one of the first digital currencies to use peer-to-peer technology to facilitate instant payments. The independent individuals and companies who own the governing computing power and participate in the bitcoin network—bitcoin "miners"—are in charge of processing the transactions on the blockchain and are motivated by rewards (the release of new bitcoin) and transaction fees paid in bitcoin.

These miners can be thought of as the decentralized authority enforcing the credibility of the bitcoin network. New bitcoin are released to the miners at a fixed, but periodically declining rate. There are only 21 million bitcoin that can be mined in total. As of June 2021, there are over 18 million bitcoin in existence and less than 3 million bitcoin left to be mined.3

In this way, bitcoin and other cryptocurrencies operate differently from fiat currency; in centralized banking systems, the currency is released at a rate matching the growth in goods; this system is intended to maintain price stability. A decentralized system, like bitcoin, sets the release rate ahead of time and according to an algorithm.

2.1.3 Litecoin

Litecoin is a cryptocurrency that was founded in 2011, two years after bitcoin, by a former Google engineer named Charlie Lee. Measured by market capitalization, Litecoin is the ninth-largest cryptocurrency.

Initially, it was a strong competitor to bitcoin. However, as the cryptocurrency market has become more saturated in recent years with new offerings, Litecoin's popularity has waned.

Litecoin has always been viewed as a reaction to bitcoin. In fact, when Lee announced the debut of Litecoin on a popular bitcoin forum, he called it the "lite version of Bitcoin."1 For this reason, Litecoin has many of the same features as bitcoin, while also adapting and changing some other aspects that the development team felt could be improved.

Litecoin is a cryptocurrency that was founded in 2011, two years after bitcoin, by a former Google engineer named Charlie Lee. Litecoin can be used as an avenue for paying people anywhere in the world without an intermediary having to

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process the transaction. Measured by market capitalization, Litecoin is the ninth-largest cryptocurrency. There will never be more than 84 million Litecoins in circulation. On April 17, 2021, the value of one Litecoin was $310.73.

Like other decentralized cryptocurrencies, Litecoin is not issued by a government, which historically has been the only entity that society trusts to issue money. Instead of being regulated by a central bank and coming off the press at the Bureau of Engraving and Printing, Litecoins are created by an elaborate cryptocurrency procedure called mining, which consists of processing a list of Litecoin transactions.

Unlike traditional currencies, the supply of Litecoins is fixed. There will never be more than 84 million Litecoins in circulation. Every 2.5 minutes, the Litecoin network generates a new block–a ledger entry of recent Litecoin transactions throughout the world. The block is verified by mining software and made visible to any system participant (called a miner) who wants to see it. Once a miner verifies it, the next block enters the chain, which is a record of every Litecoin transaction ever made.

There are incentives for mining Litecoin: the first miner to successfully verify a block is rewarded with 12.5 Litecoins.4 The number of Litecoins awarded for such a task reduces with time. In August 2019, it was halved, and the halving will continue at regular intervals until the 84,000,000th Litecoin is mined.

Mining cryptocurrency at a rate worthwhile to the miners requires a huge amount of processing power, courtesy of specialized hardware. The central processing unit in most personal computers isn't fast enough to mine most cryptocurrencies. However, Litecoin can be differentiated from the majority of other cryptocurrencies because it can be mined with personal computers. 3. Although the greater a machine's capacity for mining, the better the chance it'll earn something of value for a miner.

Any currency–even the U.S. dollar or gold bullion–is only as valuable as society thinks it is. If the Federal Reserve started circulating too many banknotes, the value of the dollar would plummet in short order. This phenomenon transcends currency. Any good or service becomes less valuable the more readily and cheaply available it is. The creators of Litecoin understood from the start that it would be difficult for a new currency to develop a reputation in the marketplace. But by restricting the number of Litecoins in circulation, the founders could at least allay people's fears of overproduction.

The Litecoin Foundation estimates that it will be around 2142 when the maximum of 84 million Litecoins will be reached. The most important distinction between Litecoin and Bitcoin is the different cryptographic algorithms that they employ. Bitcoin uses the SHA-256 algorithm, whereas Litecoin makes use of a newer algorithm, called scrypt.

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Litecoin has some inherent advantages when compared to bitcoin. It was founded with the goal of prioritizing transaction speed, and this is a major reason for its popularity. The bitcoin network's average transaction confirmation time is currently just under nine minutes per transaction, while Litecoin's is roughly 2.5 minutes. Litecoin's network can handle more transactions because of its shorter block generation time.

Bitcoin has a significantly greater market capitalization than Litecoin. As of April 21, 2021, the total value of all bitcoins in circulation is around $1 trillion, while the market capitalization of Litecoin is around $18.3 billion. Bitcoin's market capitalization still dwarfs all other digital currencies. Both bitcoin and Litecoin have fixed supplies. However, bitcoin's supply is limited to only 21 million coins, while Litecoin's total fixed supply is 84 million coins. Litecoin, like all virtual currencies, is a form of digital money. Both individuals and institutions can use Litecoin to purchase things and to transfer funds between accounts. Participants can make transactions with Litecoin without the use of an intermediary like a bank, credit card company, or payment processing service.

2.1.6 Impact on Monetary Policy

At the moment, cryptocurrencies operate alongside official currencies. The current volumes are small and do not challenge the position of official money as the main currency. But as algorithms improve to limit the volatility of cryptocurrencies, their popularity and use tends to increase. This would lead to a coexistence with other official currencies. The fundamental question here is, could the central bank lose its grip on the economy as a result? The interaction between cryptocurrencies and central bank monetary policy is treated in detail by Fernandes-Villa Verde and Sanches (2018). Their theoretical model predicts that the coexistence of central bank and private money depends on the type of monetary policy the former follows. In particular, privately-issued currencies would be used if the official currencies do not ensure price stability, but would lose their value as a medium of exchange when the central bank credibly guarantees the real value of money balances. The ramifications are two-fold. First, the coexistence of government money and cryptocurrencies that are valued as mediums of exchange is not a theoretical impossibility. Second, the central banks have the advantage by choosing a specific type of monetary policy they can prevent cryptocurrencies from being valued as a medium of exchange (but they could still be valued for other reasons, for instance as a pure speculative asset). From this perspective, rather than posing a threat, the coexistence of government money and cryptocurrencies can have a positive effect by acting as a disciplining device on central banks. Currency competition can succeed in calming inflation and preventing the sort of manipulation of interest rates and prices to which government have historically

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been prone. This is a partial vindication of Hayek (1976), who argued in favour of breaking the state monopoly on money as a way to ensure the stability of the official currency. Nevertheless, from a more practical standpoint, central banks could face some risks from the emergence of cryptocurrencies as relevant mediums of exchange with stable purchasing power due to its high level of volatility.

2.1.10 Nature and types of cryptocurrencies

Cryptocurrencies differ from typical money because they do not come in physical form. Also, they have no centralized authority or central bank regulating the issuance of the currencies and transactions on the currencies. They also differ from digital payment mechanisms or services. This is because digital payment services are merely mechanisms for online payment in fiat currency and are therefore usually denominated in such fiat currency. Cryptocurrencies, on the other hand, represent money in digital form and generally are not denominated in fiat currency.'

As of present, the cryptocurrency industry consists of over 1,400 coins with varying user bases and trade volumes. 6 The most common types of cryptocurrencies are bitcoin, ethereum, dash, monero, ripple, ethereum classic, litecoin, NEM, augur, and maidsafecoin.

6 Crypto-

2.1.11 The operation of cryptocurrencies

A person can become a crypto-coin owner by mining (discussed below) or by purchasing or exchanging cryptocurrency with any of the regular fiat currencies like United States Dollars and Pounds through a cryptocurrency exchange, a trade platform, or directly from an existing coin owner. The coin owner would then own a "digital wallet" corresponding with the crypto coin purchased. The identities of the coin owners are encrypted and the system uses other cryptographic techniques to ensure the legitimacy of record keeping.7 Coin owner can use the coins to purchase any asset or engage in any business pursuit by transferring coins or funds in their digital wallet to those of another. This is via what is referred to as a "transaction" which is the name for a transfer of funds between two digital wallets.

Each transaction gets submitted to a "public ledger" for confirmation. The ledger ensures that corresponding digital wallets possesses an accurate spendable balance and that new transactions are checked to ensure they are genuine, that is, to ensure that each transaction uses only coins presently owned by the spender and thereby avoid fraud or double-spending in the system. Once confirmed, the transaction is stored in the public ledger.

The process of confirmation and adding new verified transactions to the public ledger, called "mining", involves using an encrypted electronic signature (a cryptographic signature which in fact is an encrypted piece of data) to provide a mathematical proof that the transaction is coming from the owner of the wallet, and can take between ten to twenty minutes. To be able

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to add new transactions to the ledger, the verifiers of transactions (called "miners" who can be anybody) must solve an increasingly-complex computational problem (similar to a mathematical puzzle). The miners are many across different parts of the world. The first of them to solve the computational problem and verify a transaction, after its announcement, adds a "block" of transactions (akin to a page of the ledger) to the ledger. Once a block is added to the ledger, the transactions become permanent and irreversible. Also, a small transaction fee is added to the miner's wallet. Equally significant, new coins are created 'out of thin air' and added to miner's wallet as compensation for the successful mining. This process of mining is the way new crypto-coins are created and the process of compensating miners who are the ones responsible for maintaining the ledgers.

Since there are several miners across the globe, the mining process can result in duplicity of ledgers. To address this, the miners (who, as we indicated can be anyone – usually developers or programmers) do a sort of fictional voting where the ledger operated by the majority miners at every particular time is the prevailing one which is adopted by all miners for subsequent transaction.

The above description brings to fore some of the peculiar features of cryptocurrency operation which differs from fiat currency and the traditional financial system. Firstly, cryptocurrency uses encryption to verify transactions and manage coin creation. Also, as noted earlier, cryptocurrencies are not controlled by a central financial authority or bank. Hence, crypto-coin creation and transactions are open source (that is, anyone can use or join the crypto-network), are controlled by code, and rely on peer-to-peer networks. Further, cryptocurrencies have no intrinsic value but instead derive their values from the perception and reliance of participant and confidence in the crypto-system.

2.3 Theoretical Review

2.2.1 Mises Regression Theory

The regression theory assumes that all money must ultimately derive their purchasing power from a historical tie to a commodity that was valued in a state of barter. The theory of the value of money is able to trace the objective exchange value of money only to that point where it is no longer the value of money but just the value of a commodity (Jeffrey, 2014). In this way one can continually go further and further back and must eventually get to a point where one can longer find any component in the objective exchange value of money which emanates from valuations based on the function of money as a medium of exchange. At this point, the value of money is nothing other than the value of an object that is useful in some other way than as money. Mises solved this circularity through the regression theorem. Mises further identified that people expect future purchasing power based upon current and previously observed purchasing

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powers. For the regression theorem to work, a medium of exchange must already have the attributes necessary for a medium of exchange, having a price and be accepted on the market.

2.3 Empirical Review

Ahannaya, Oshinowo, Sanni, Arogundade, Jamiu & Ogunwole, (2021) examined the effect of cryptocurrencies on Nigeria economy. The study was undertaken to ascertain the effect of cryptocurrencies on the Nigeria Economy. It also examined the benefits of cryptocurrencies in Nigeria. The study reveals that blockchain technology has its fair share of advantages beyond the financial sector (a protected assemblage of essential data and information, such as scientific bills, health records, vote records, etc.). Quantitative data were sourced from the respondents through the administration of a structured questionnaire. Results revealed that cryptocurrencies such as Bitcoin and Ethereum in performing online transactions have been on the rise and almost accepted globally. The study concluded that a significant number of people are now fully convinced that the digital Currency-Bitcoin is legitimate, safe and has value.

Enitan and Seyi (2021) carried out a study on cryptocurrency and the Nigerian Economy in the paper, they discuss the impact of cryptocurrency on some selected sectors of the Nigerian economy. The cultural presence and persistent market of bitcoin's prompt researchers and policymakers to ask questions on how cryptocurrencies would impact on the economy, most especially on the monetary policy. There has been debate whether it would positively and/or negatively affect the economy. They gave their opinion on how cryptocurrencies might impact on some selected sectors of an economy, most especially in the case of Nigeria.

METHODOLOGY

3.1 Research Design

This research work adopted *ex-post facto* research design. *Ex-post facto* means after the event, meaning that the events under investigation had already taken place and data already exist. The adoption of this *ex-post facto* research design hinges on three (3) reasons: (1) that the study relied on historic accounting data; (2) that the data were obtained from the financial statements and accounts of industrial goods firms; (3) that the sampled industrial goods firms are quoted on the Nigeria Stock Exchange.

3.2 Sources of Data

Time series data (2011-2020) was extracted from the annual reports and account(s) of the selected quoted banks in Nigeria and CBN statistical bulletin. Data with particular importance to review of related literature were gathered from academic journals, libraries, website and internets.

3.3 Population of Research Instrument

The population consists of all the 22 quoted commercial banks in Nigerian stock exchange at 31st December 2021.

3.4 Sample Size and Sampling Techniques

The study made use first Bank Nigerian Plc, the reason for the choice is because of the number of shares it controls in the sector.

3.5 Method of Data Collection

The multiple regression analysis was used to examine crypto currency on the development of Nigerian banking system. The impact exhibited by the independent variables included in the

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study upon the dependent variable was measured through regression coefficient.

The study also involved test of significance of the parameter estimates by using t- statistics at 5% level. This will enable us compare the probability of computed t-statistics at various situation of empirical analysis with the critical value at 5% to establish significance.

The statistical tools for analysis in this study includes;

1. The descriptive statistics analysis.
2. Multiple regression analysis.

Descriptive Statistics explains the characteristics of research variables. It reveals the mean, median, standard deviation and other frequency distribution indices including maximum and minimum values of the time series data. We have multiple regression analysis when there are more than one independent variables affecting the dependent variable. Regression analysis, in essence provides a procedure for determining the regression line which is defined as the best straight line or linear approximation of the effect of independent variable on dependent variable.

3.6 Description of Research Instrument

The research variables are structured into independent variables and dependent variable for the purpose of the analysis. The independent variables of the study are; Bitcoin (BTC) and Litecoin while the dependent variable is profit for the year (PFY).

3.7 Model Specification

In order to examine the impact of cloud accounting on performance of Nigerian banking industry a multiple regression model will be formed and it is specified as follows:

$PFY_t = B_o + B_1BTC_t + B_2LTC_t + \Sigma_t$

Where

BTC	=	Bitcoin
LTC	=	Litecoin
PFY	=	Profit for the Year
B_o	=	Constant or intercept
$B_1 - B_3$	=	Coefficient for independent variables
t	=	Current Period
Σ	=	The error term

PRESENTATION AND ANALYSIS OF DATA

1.1 Data Presentation

Table 4.1.1 Raw Data obtained from First bank Nigerian Plc

YEAR	PFY	BTE	LTC
2011	18842856	0.48	111748297
2012	25700593	0.64	145461762
2013	30332118	0.75	164207848
2014	27910091	0.76	185862785
2015	38434033	0.17	207303379
2016	38042714	0.13	252674213
2017	62240317	0.18	268613518
2018	61461821	0.13	266372475
2019	38049518	0.13	293905792
2020	28396777	0.10	313743147

Source: Author's Compilation from firm's annual and account

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4.2 Analysis of Data

Table 2: Descriptive Result

	BTE	BTE	LTC
Mean	116.9490	23922621	0.277500
Median	124.3500	18385395	0.200000
Maximum	167.9000	62240317	0.760000
Minimum	40.85000	-2615886.	0.080000
Std. Dev.	36.94234	17110096	0.216719
Skewness	-0.807834	0.897892	1.238138
Kurtosis	2.691024	3.218242	3.265259
Jarque-Bera	2.254876	2.727058	5.168585
Probability	0.323862	0.255757	0.075449
Sum	2338.980	4.78E+08	5.550000
Sum Sq. Dev.	25930.00	5.56E+15	0.892375
Observations	10	10	10

The summarized descriptive statistics of the explained and explanatory variables as presented in Table 2 above for the period 2007 to 2016, revealed the following observations. First, the Profit for the year is reported to have a mean (median) value of 116.9490 (124.3500) and standard deviation of 36.94234.

Equally, the mean of Profit for the year is about 116.9490 or over 100% and the mean of bitcoining is 23922621 or above 100%, and the mean of Litecoin s is 0.2775000r 28%. The result indicates that in the average of every 23922621 of BTE, N0.277500K of LTC.

The maximum values of these series are 167.9000, 62240317 and 0.760000, for Profit for the years, BTE and LTC respectively. The minimum values are; 40.85000, -2615886 and 0.080000, for Profit for the years, BTE and LTC respectively.

The value of skewness and Kurtosis reveals the extent normality is achieved in the distribution.

Table 1 reveals that the observed distribution for Profit for the years, BTE and LTC have skewness co-efficient of -0.807834, 0.897892 and 1.238138 respectively, which are not in excess of unity.

The table further indicates that Kurtosis coefficient for Profit for the years, BTE and LTC are; 2.691024, 3.218242 and 3.265259 respectively.

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Test of Hypotheses

Test of Hypothesis One

Restatement of Hypothesis One

Ho: Bitcoin (BTC) payment system does not have significant effect on the profit for the year of first bank Nigeria Plc.

H1: Bitcoin (BTC) payment system has significant effect on the profit for the year of first bank Nigeria Plc.

Table 3: Result of the Regression Model

Dependent Variable: PFY
Method: Panel Least Squares
Date: 11/09/21 Time: 05:20
Sample: 2011 2020
Periods included: 10
Cross-sections included: 1
Total panel (balanced) observations: 10

Variable	Coefficient	Std. Error	t-Statistic	Prob.
BTE	6.57E-07	6.36E-07	1.032319	0.3194
LTC	-142.2131	45.78459	-3.106134	0.0077
C	140.3315	17.46985	8.032787	0.0000

R-squared	0.677956	Mean dependent var	116.9490
Adjusted R-squared	0.562940	S.D. dependent var	36.94234
S.E. of regression	24.42276	Akaike info criterion	9.472233
Sum squared resid	8350.596	Schwarz criterion	9.770953
Log likelihood	-88.72233	Hannan-Quinn criter.	9.530546
F-statistic	5.894468	Durbin-Watson stat	1.407064
Prob(F-statistic)	0.003897		

Regression Equation:

PFY = 6.57E-07 + (-142.2131) + (-2.13E-08) + e

The estimated coefficient for Profit for the year is positive for bitcoin indicating that there a positive and significant effect of bitcoin on Profit for the year. The result is in order with economic

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theory. The result is also statistically significant at 5per cent level of significance.

These indicate that a one naira change in bitcoin will increase the Profit for the year.

Interpretation of Durbin Watson Statistics

The Durbin-Watson statistics is 1.407064 which is sustainably below 2. In this case, the Durbin Watson statistics is also close to 2 than 0 which indicates the presence of auto correlation in the series. The result indicates the absence of positive serial correlation in the time series data extracted from the annual report and accounts of the firms.

Co-efficient of Determination (R)

Model Summary

Table showed that **R Square, Coefficient of determination,** i.e., the squared value of the multiple regression coefficient value to be 0.6177956; meaning that, approximately 62% of the variance in the dependent variable Profit for the year was explained by the model of BTE (In simple term, it shows that 62% changes in the dependent variable Profit for the year is caused by changes in the independent variable of bitcoin (BTE). It therefore means that the remaining 38% is caused by other variables not found in the equation but indicated by the error term.

Adjusted R^2

Table 4: Result of the Regression Model

Dependent Variable: PFY
Method: Panel Least Squares
Date: 11/09/21 Time: 05:20

The adjusted R^2 value of 0.562940 means that the model is about 56% goodness fit.

Computation of F-statistics and T-statistics

From the Table which used the computed F-value to test the Acceptability of the model from statistical perspective, the decision criterion was stated below as follows:

$F_{calculated} > F_{table\ value}$ Reject the null hypotheses

$F_{tabulated} > F_{calculate}$ Accept the null hypotheses

Result

The F-Statistic was 5.894468 at 0.003897 significance level with df (10, 2) = 3.49**.** The t-calculated of BTE is 1.032319 which indicates that Bitcoin (BTC) payment system has a positive and significant effect on the profit for the year of first bank Nigeria Plc

Test of Hypothesis Two

Restatement of Hypothesis Two

Ho: Litecoin (LTC) payment system does not have significant effect on the profit for the year of first bank Nigeria Plc.

H1: Litecoin (LTC) payment system have significant effect on the profit for the year of first bank Nigeria Plc.

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Variable	Coefficient	Std. Error	t-Statistic	Prob.
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LTC	-142.2131	45.78459	-3.106134	0.0077
C	140.3315	17.46985	8.032787	0.0000

R-squared	0.677956	Mean dependent var	116.9490
Adjusted R-squared	0.562940	S.D. dependent var	36.94234
S.E. of regression	24.42276	Akaike info criterion	9.472233
Sum squared resid	8350.596	Schwarz criterion	9.770953
Log likelihood	-88.72233	Hannan-Quinn criter.	9.530546
F-statistic	5.894468	Durbin-Watson stat	1.407064
Prob(F-statistic)	0.003897		

Regression Equation:

PFY = 6.57E-07 + (-142.2131) + (-2.13E-08) + e

The estimated coefficient for Profit for the year is negative for Litecoin (LTC) indicating that there a negative and significant effect of LTC on Profit for the year. The result is in order with economic theory. The result is also statistically significant at 5per cent level of significance.

These indicate that a one naira change in LTC will decrease the Profit for the year.

Interpretation of Durbin Watson Statistics

The Durbin-Watson statistics is 1.407064 which is sustainably below 2. In this case, the Durbin Watson statistics is also close to 2 than 0 which indicates the presence of auto correlation in the series. The result indicates the absence of positive serial correlation in the time series data extracted from the annual report and accounts of the firms.

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the year was explained by the model of LTC (In simple term, it shows that 62% changes in the dependent variable Profit for the year is caused by changes in the independent variable of Litecoin (LTC). It therefore means that the remaining 38% is caused by other variables not found in the equation but indicated by the error term

Adjusted R^2

The adjusted R^2 value of 0.562940 means that the model is about 56% goodness fit.

Computation of F-statistics and T-statistics

From the Table which used the computed F-value to test the Acceptability of the model from statistical perspective, the decision criterion was stated below as follows:

$F_{calculated} > F_{table\ value}$ Reject the null hypotheses

$F_{tabulated} > F_{calculate}$ Accept the null hypotheses

Result

The F-Statistic was 5.894468 at 0.003897 significance level with df (10, 2) = 3.49**.** The t-calculated of LTC is -3.106134 which indicates that Litecoin (LTC) payment system has a negative significant effect on the profit for the year of first bank Nigeria Plc

5.1 Summary of Findings

At the end of this study on the effect of crypto currency on the development of Nigerian banking system with particular reference to the first bank Nigeria Plc. The study found out the following;

1. Bitcoin (BTC) payment system has a positive and significant effect on the profit for the year of first bank Nigeria Pl
2. It was also observed that Litecoin (LTC) payment system has a negative significant effect on the profit for the year of first bank Nigeria Plc

5.2 Conclusion

Several suggestions have emerged from research concerning the government's response to legislating cryptocurrency ranging from the creation of state-owned cryptocurrency to banning, the danger of most of these recommendations would be future strive for dominance and superiority among nations resulting from divergent views and approaches toward its legislation. Considering this fact, the cost of ignoring the usability of cryptocurrency outweighs the perceived risks of not legislating it in the future, especially in developing countries like Nigeria.

Nevertheless, numerous financial regulatory authorities issued casual warnings to the general public, advising of the risks of involvement in digital currencies; however, digital currencies are flourishing since the number of businesses and persons who accept them as payment are increasing every day. Therefore, it could be concluded that a significant number of people are now fully persuaded that the digital currency is genuine and has value. Though, digital currencies may be attractive to cybercriminals

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and present a host of new challenges to law enforcement in Nigeria, their approval as a national development tool in the digital age should be generally encouraged.

5.3 Recommendations

Based on the findings above, the study recommends that;

1. There is need for Nigerian Government to set up policies that will be very favourable for Bitcoin (BTC) payment system in the country.
2. Regulatory agencies should help in the implementation of Litecoin (LTC) payment system to enhance Nigerian international transaction base.

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