

CRYPTOCURRENCY AND E-NAIRA IN NIGERIA: THEORETICAL AND CONCEPTUAL ANALYSIS

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Abstract

The paper theoretically and conceptually examines the variance between cryptocurrency and e-naira as they affect the economic development. The Central Bank of Nigeria (CBN) on the 1st of October, 2021 launched the pilot scheme of its digital currency known as e-naira. The question is whether there is a distinction between cryptocurrency and e-naira in Nigeria. Cryptocurrency and e-naira now tend to be the new payments and transaction systems operating specifically in Nigeria today but not without great concern for the development of the system. The wallet of e-naira is expected to function exactly in the form of a bank account accommodating the digital currency and being created by licensed financial institutions in Nigeria with the authority of the Central Bank of Nigeria (CBN) which will be responsible for the ID verification as well as payment processing. There has been a lot of concern shoveling around the cryptocurrency leading to its ban and unban. The paper thereby tries to identify the underlying distinctions and similarities showering both cryptocurrencies and e-naira in Nigeria. The objectives are to examine the regulatory frameworks governing e-naira and cryptocurrency in Nigeria, analyse the technological infrastructure supporting e-naira and cryptocurrency adoption and to investigate user acceptance and perceptions of e-naira and cryptocurrency. Finally, it will provide viable suggestions and recommendations that will go a long way in addressing the problems of both currencies in the long run.

Keynotes: *cryptocurrency, e-naira, Central Bank of Nigeria (CBN), block-chain, Nigeria.*

Introduction.

Central Bank Digital Currencies (CBDCs) are a practical implementation of stable coins that can push cryptocurrency into the mainstream market since its introduction in 2009. The idea behind this, however, is to have a digital form of fiat money that can be used as legal tender, generated by the country's Central Bank generally. The term "Crypto" means secret, and "cryptography" is defined as the science of secret writing. When James Bond sends a message to Ms. Money penny at MI6 saying he doesn't want anyone to read, he probably must have used cryptography. Similarly, cryptocurrencies generally tend to rely on cryptography for privacy and security. In simple terms, cryptocurrency can be said to mean (i) Ease of use to perform transactions (ii) Fast transaction speeds at any time and place (iii) Transactions can be 100% verified on a public ledger (iv) Lower costs to send money around the world and (v) Improved security and technology (CoinMarketCap (2021). Cryptocurrency is an internet-based medium of exchange that uses crypto-graphical functions to conduct financial transactions. Cryptocurrencies leverage block-chain technology to gain decentralisation, transparency, and immutability. The most important feature of a cryptocurrency is that it is not controlled by any central authority: the decentralised nature of the block-chain makes cryptocurrencies theoretically immune to the old ways of

government control and interference. (Adhami, Saman & Giudici, Giancarlo & Martinazzi, Stefano, (2018).

Cryptocurrency is technically defined as a virtual currency secured by cryptography. It is designed to work as a medium of exchange, where individual ownership records are stored in a computerised database. This historical perspective tends toward a "block-chain", a block linking records to each other in such a way that each new block contains information about the previous blocks in the growing list of digital records. So that every member in the cryptocurrency network sees the same transaction history, a new block is accepted by agreement across the entire network. Cryptocurrencies can be transferred between two parties using minimal processing fees. Despite the advantages of cryptocurrencies, many countries reject their use as a legal tender as a result of their negative promotional activities, as in Silk Road Case in July 2013 a hidden internet marketer for drugs and illegal services that has been shut down by the FBI. This is so because Buyers used Bitcoin for a transaction and its main feature is that it makes the buyers anonymous all buyers make use of Bitcoin for transactions and its main feature is that it makes them anonymous.

(www.bbc.com/indonesia/bahasa_inggris/2013/10/131007_witn_silk_road_website.shtml).

The research is however concerned with the study of Nigeria e-naira and Cryptocurrency; a theoretical and conceptual analysis.

Literature Review

Conceptual definitions of cryptocurrency vis-à-vis e naira

A defining feature of cryptocurrencies is that they are generally not issued by any central authority, rendering them theoretically immune to government interference or manipulation.

The term e-naira is defined as the digital form of the naira, issued by the Central Bank of Nigeria, e-naira is a legal tender. Its operations are regulated by the CBN, maintaining the same value as physical currency while the term "crypto" on the other hand, means secret, and "cryptography" is defined as the science of secret writing. Similarly, cryptocurrencies tend to rely on cryptography for privacy and security. It can be said to mean a system that uses cryptographic functions to conduct financial transactions. Cryptocurrencies are digital assets, most often based on block-chain technology. Cryptocurrencies leverage block-chain technology to gain decentralisation, transparency, and immutability. In simplistic terms. It is a digitised asset spread through multiple computers in a shared network. The decentralised nature of this network shields them from any control from government regulatory bodies. It is digital money created from code, the money currency economy is monitored by a peer-to-peer internet protocol as well as being an encrypted string of data or a hash, encoded to signify one unit of currency. Cryptocurrency is a decentralised, encrypted virtual currency secured by cryptographic methods. The term decentralised denotes that they don't have any centralized networks and it is merely possible for government bodies to interfere in it. The record in July 2010 showed that the price of Bitcoin was USD 0.04951, and it went up as high as USD 19,870 in December 2017, increasing by 40,133,206 percent. These currencies are based on block-chain technology which ensures the integrity of the transactions. Adolphus, A. (2021).

The many uses of cryptocurrency can be attributed to the following:

Security: The concept of Cryptocurrency is thought-provoking to hack due to the nature of block-chain technology, while the users review it from time to time and from the privacy concept,

Cryptocurrency can offer privacy and anonymity thanks to its decentralized and digital nature. However, this is a bit of a double-edged sword. Cryptocurrency is also popular on the Dark Web among cyber-criminals for illegal or illicit transactions.

Speed: Cryptocurrency transactions are fast. While it may take a few days to send someone money in the other part of the world through a bank, sending cryptocurrency can take minutes.

Cost: Cryptocurrency transactions are usually cheaper than conventional ones because they cut out the middleman. You can also spend cryptocurrency wherever it's accepted when traveling without worrying about exchange rates and conversion fees. (Fantazzimi, D., & Zimin, S. 2020)

One interesting aspect of cryptocurrency is that it can easily be converted into cash. Many people use an exchange or a broker to cash out. However, you may have to pay taxes and fees based on your local regulations and your broker. The shortcomings of traditional currency like paper notes are that counterfeit gangs can easily and comfortably duplicate paper notes which are vulnerable to physical damage. Also, among others, the central authority can significantly alter the value of paper notes within the shortest notice as found during the Buhari/Idiagbon regime from 1984 to 1985.

Cryptocurrencies are entries about tokens in decentralised consensus databases. They are called Cryptocurrencies because the consensus-keeping process is secured by strong cryptography. Cryptocurrencies are built on cryptography. They are not secured by people or by trust, but by mathematics. It is more feasible that an asteroid falls on your household than that a bitcoin address is compromised. In describing the properties of cryptocurrencies, it is pertinent to separate between transactional and monetary properties. While most cryptocurrencies share a common set of properties, they are not carved in stone. (Nakamoto 2008).

The term e-naira is defined as the digital form of naira, issued by the Central Bank of Nigeria and thereby automatically qualifying it as a legal tender. It was indeed developed by a fintech company, Bitt, based in the Caribbean. This development has made Nigeria the first African nation in Africa to develop a digital currency, and there is a necessity for creation. Its operations. The wallet of e-naira is expected to function exactly in the form of a bank account accommodating the digital currency and being created by licensed financial institutions in Nigeria with the authority of the Central Bank of Nigeria (CBN) which will be responsible for the ID verification as well as payment processing. The e-naira will thus, maintain the same value as physical currency, which is one of the differences it has from cryptocurrency. It is regulated by CBN and is not likely to fluctuate to the rise and fall of the cryptocurrency.

Similarities between Cryptocurrencies and e-naira

Similarities between Cryptocurrencies and e-naira abound as explained thus. 1) All forms of cryptocurrencies and e-naira are forms of medium exchange. The brain behind this is that both can be used for the purchase of goods and services in the economy. 2) both have legal tender properties acceptable for the purchase of goods and services. 3) Meanwhile, while e-naira is a legal tender in Nigeria alone, other cryptocurrencies like bitcoin are legal tenders in countries like El Salvador. 4) The e-naira and all other cryptocurrencies are digital currencies. These are currencies that cannot be physically touched. 5) Both have public acceptance except for the e-naira that is having some element of distrust within Nigeria, Bitcoin, however, has international recognition and acceptance. 6) Cryptocurrencies and e-naira both serve as a store of value. In this case, both can be used in the future whilst e-naira has e-wallets to collect digital currencies, and both have a database of recordings in code forms. 7) Both cryptocurrencies and e-naira run on block-chain technology. 8) The e-naira can conveniently be traced while cryptocurrencies are

difficult to be traced. This is a result of the decentralised features associated with cryptocurrencies' inability to be traced to remittances not noticeable to market regulators and regulations. The CBN governor, Godwin Emefiele, affirmed that traceability characteristics of e-naira are associated with the components of due diligence by not allowing fraudulent transactions involving e-naira. 9) The main purpose of introducing digital currencies is to substitute paper money while cryptocurrencies are also in consonant with this goal, the CBN said that the e-naira is not substituting paper Naira but rather serving as a complement to it. 10) The value of cryptocurrencies such as Bitcoin appreciates and depreciates concerning the demand and supply thus, making investors either want to buy the assets or sell them. On the other hand, the e-Naira does not appreciate or depreciate below or above the value of the paper Naira rather, its value remains the same as the value of the Naira. In this case, can we then say that the e-naira satisfies the store of value quality since the Naira depreciates in line with eroding power of money? 11) Cryptocurrencies are highly volatile as against the e-naira which is not in any way. 12) Crypto is speculative in demand as investors speculate that ups and down movements in other to make profits. This speculative demand tends to cause a sudden influx of money or selling off of the currencies leading to high volatility while this position makes it completely different from the e-naira.

The distinction between cryptocurrencies and e-naira.

First, the e-naira is affirmed to be the digital form of popular fiat money, the cryptocurrencies are not digital aspects of fiat money. Second, the e-naira is an establishment of the Nigeria Central Bank while the cryptocurrencies are not currencies of any nation. Third, while the e-naira can only be minted by the Nigerian Central Bank, anyone with resources and skill can mine cryptocurrencies. In this case, e-naira can only be minted while cryptocurrencies can only be mined. Fourth, no central regulation guiding cryptocurrencies while e-naira is controlled by the Central Bank of Nigeria. Fifth, the cryptocurrencies are not in any way complement any physical currency, the e-naira on the other hand is a complement of the Nigerian Naira. Above all, the e-naira is gradually gaining massive acceptance since its commencement of circulation. Within the first 24 hours of launching, speed wallet applications recorded over 100,000 downloads via the Google Store. Also, the speed wallet has shown a rating of 2.0 from 2,150 reviews on the Play store within the first 10 hours after officially launching it. A welcome implication of the e-naira is that it allows commercial banks to settle inter-bank payments using the currency of the Central Bank of Nigeria (CBN). It also allows convertibility between commercial and Central Bank money through the provision of banknotes. It provides contingent liquidity through CBN as the lender of last resort. (Adolphus Aletor, (2021)

Properties of cryptocurrency

1. Irreversible: After confirmation, a transaction cannot be reversed. By nobody. And nobody means nobody. Not you, not your bank, not the president of the United States, not Satoshi, not your miner. Nobody. If you send money, you send it. Period. No one can help you, if you sent your funds to a scammer or if a hacker stole them from your computer. There is no safety net.
2. Pseudonymous: Neither transactions nor accounts are connected to real-world identities. You receive Bitcoins on so-called addresses, which are randomly seeming chains of around 30 characters. While it is usually possible to analyse the transaction flow, it is not necessarily possible to connect the real-world identity of users with those addresses.

3. Fast and global: Transactions are propagated nearly instantly in the network and are confirmed in a couple of minutes. Since they happen in a global network of computers, they are completely indifferent to your physical location. It does not matter if Bitcoin is sold to a neighbour or someone on the other side of the world.
4. Secure: Cryptocurrency funds are locked in a public key cryptography system. Only the owner of the private key can send cryptocurrency. Strong cryptography and the magic of big numbers make it impossible to break this scheme. A Bitcoin address is more secure than Fort Knox.
5. Permissionless: You do not have to ask anybody to use cryptocurrency. It's just software that everybody can download for free. After you installed it, you can receive and send Bitcoins or other cryptocurrencies. No one can prevent you. There is no gatekeeper.

In the determination of the value, it is considered that cryptocurrencies should be capable of easing financial assets by eliminating intermediaries, reducing the costs of transacting businesses, total privacy as well as the accessibility of users to the internet. However, Ethereum's Ether remains not adequately clear to users, the real economic value is found in the transactions of freely floating cryptocurrencies such as Bitcoin's BTC

The individual can arrive at the market value of cryptocurrencies by comfortably looking at their exchange rates about existing fiat currencies because cryptocurrency exchanges provide a nearly continuous price record for all actively traded even though the resulting exchange rates are highly volatile, showing that cryptocurrencies have a non-zero value for those prepared to pay fiat currency to purchase them. (Yao Yue, Xuerong Li, Dingxuan Zhang; 2021)

The Monetary properties of cryptocurrency

The monetary properties of cryptocurrency can be identified as 1) Controlled supply in which cryptocurrencies limit the supply of the tokens. In Bitcoin, the supply decreases in time and will reach its final number sometime around the year 2140. All cryptocurrencies control the supply of the token by a schedule written in the code. This means the monetary supply of a cryptocurrency at every given moment in the future can roughly be calculated today. There is no surprise. 2) No debt but bearer which relates to the Fiat money on the individual bank account which is created by debt, and the numbers, found on individual ledger accounts represented nothing but debts. It is a system of IOU. However, cryptocurrencies do not represent debts; they just represent themselves.

To understand the revolutionary impact of cryptocurrencies, one needs to consider both properties. Bitcoin as a permissionless, irreversible, and pseudonymous means of payment is an attack on the control of banks and governments over the monetary transactions of their citizens. You cannot hinder someone to use Bitcoin, you cannot prohibit someone to accept a payment, which transaction you cannot undo.

As money with a limited, controlled supply that is not changeable by a government, a bank, or any other central institution, cryptocurrencies attack the scope of the monetary policy. They take away the control Central Banks take on inflation or deflation by manipulating the monetary supply. (Matheus Grasselli; 2021).

The economic and financial applications of cryptocurrencies

Many kinds of literary works on cryptocurrency have enunciated the risks inherent in holding them. Few among them are those of Dow and da Costa Werlang (1992), Caballero and Krishnamurthy (2008), Vinogradov (2012), Fantazzini and Zimin, (2020), and Figà-Talamanca (2020) among others. For (Fantazzini and Zimin (2020, opined that Cryptocurrency prices tend to fall dramatically as a result of a revealed scam or suspected hack, as much as other hidden problems. For instance, Bitcoin in 2019, lost more than 10 % of its value in price in just a twinkle of an eye due to crashes of the Coinbase digital exchange resulting in possible illiquidity with declining value.

According Dow and da Costa Werlang (1992), looking at it from the perspective of pessimism, opined that uncertainty about fundamentals leads to zero trading in financial markets, but does not appear to apply to cryptocurrencies.

In the work of Caballero and Krishnamurthy (2008) uncertainty leads to "flights to quality" as found in traditional asset markets, which, if properly applied to cryptocurrencies, could also explain the crashes observed.

In Vinogradov (2012) not only does the no-trade outcome depend on the degrees of optimism and pessimism, which may vary, but it also manifests only under high risk (in the standard sense). Still, again, although cryptocurrency returns exhibit high volatility, trade volumes are significant.

According to Figà-Talamanca (2020), the intensity of the internet search for cryptocurrency-related keywords significantly affects cryptocurrency volatility (but not return); this impact vanishes once one controls for "relevant events". In the case of uncertainty, getting relevant information is not as easy as assumed hence, investors tend to go for the option of watching and copying other, presumably better informed, investors' decisions, resulting in herding

Fantazzini and Zimin (2020), in their study, propose a set of models for estimating the risk element of cryptocurrencies which were back-tested on 42 digital coins which to him, is associated with the failure of the counterparty to pay and to distinguish the risk between Mask and credit risks. To him, there is a strong possibility of credit risk losing credibility and thus, becoming value-less believing that the market risk of cryptocurrencies is driven by Bitcoin, suggesting some degree of homogeneity in the crypto-market. In the case of credit risk, the traditional credit scoring models based on the previous month's trading volume, the one-year trading volume, and the average yearly Google search volume work remarkably well, suggesting indeed a similarity between the newly defined credit risk for cryptocurrencies and the one traditionally used for other asset classes.

In neoclassical economics, ambiguity is associated with many of its predictions from unquantifiable risks to its inability to assign a probability value to events that may probably occur or otherwise. In the case of cryptocurrencies, the uncertainty of the sort could arise as a result of the two events that may or may not occur and the fundamental value of cryptocurrencies is very much unclear.

Information is critical in research, obtaining relevant information is critical to decision making especially that relating to uncertainty. According to (Trueman 1994; Devenow and Welch 1996), as found in the works of Haryanto et al. (2020) addressed critical issues relating to uncertainty. The loss aversion led Shefrin and Statman (1985) to formulate the 'disposition effect' in investment decisions: investors in traditional assets tend to keep assets that lose value too long and sell those that gain in value too early. Shiller (2003) observed that market participants are humans and can make irrational systematic errors contrary to the assumption of rationality. Such errors affect prices and returns of assets, creating market inefficiencies. Such reactions have been

attributed to limited investor attention, overconfidence, mimicry, and noise trading, explanations, many of which find roots in Kahneman and Tversky's (1979) prospect theory, which suggests that decision makers evaluate outcomes from the perspective of their current endowment (and are predominantly loss-averse) and "revise" probabilities of outcomes when making decisions (predominantly over-weighting probabilities of bad outcomes and under-weighting those of good ones).

In the socioeconomic aspect, Böhme et al. (2015) offer summary data that showed that at the beginning of the Bitcoin era, most transactions were used for drug purchases. Foley et al. (2019) estimate that about 46 % of Bitcoin transactions are associated with illicit activities, but that the illegal share of Bitcoin activity declined over time with the emergence of more opaque cryptocurrencies. On top of that, users appear unprotected as payments are often irreversible, and an erroneous transfer cannot be cancelled, unlike credit card payments (Böhme et al. 2015). Notwithstanding the negative impact of cryptocurrency, its development in the market contributes to the dynamics of access to finance (Adhami et al. 2018). Three main characteristics are said to distinguish cryptocurrency markets: investors are non-institutional, risk (volatility of returns) is high, and the fundamental value is unclear. Haryanto et al. (2020) however, study the disposition effect and the herding behaviour in the cryptocurrency realm by investigating the trading behavior at a crypto-exchange and hence, found a reverse disposition effect in bullish periods where the Bitcoin price increases with a positive disposition effect observed in bearish periods.

Global perspective (Global Cryptocurrency Bench-marking Study)

A recent report by consulting firm Verified Market Research (VMR) predicted that the non-fungible token (NFT) industry's value might shoot to \$231billion in 10 years. According to this report, the sector is expected to continue on an annual compound growth rate of 33.7% with music, films, and sports identified as drivers. ((BCG Report; 2022). Another report from McKinsey and company reported that the meta verse alone is capable of being valued at \$5trillion in 2030. (BCG, Bit-get, and Foresight ventures;2022). The international consulting company also surveyed consumers and companies across various countries and industries to identify patterns in consumer behaviour. Its findings showed that e-commerce is expected to be driving home a cash flow within the meta verse, making up to \$2.6 trillion in revenue by 2020. The Central Bank of China far back in the year 2013 the cryptocurrency has no value and is used as minimal legal protection (Hileman, G., & Rauchs, M. (2017). The outcome of this is the banning of all transactions using virtual currency as means of payment. In another development, a long list of all institutions that had banned the use of cryptocurrencies was given by the Malaysian Central Bank, and by the year 2014 but not withstanding, Bitcoin was considered not illegitimate for use as payment module (www.bbc.com, 2014).

Bank of Indonesia November 2016 officially passed a regulation prohibiting the use of virtual currency as a result of the adverse publicity given to it one of which is the volatility that could easily harm the financial system. Latest Developments regarding Cryptocurrency in India – The Cryptocurrency and Regulation of Official Digital Currency Bill 2021 are likely to be introduced in the winter session of the Parliament. It is a bill that would regulate Cryptocurrency in India. On December 7, 2021, Finance minister Nirmala Sitharaman asserted that the proposed Central Bank Digital Currency will not boost cryptocurrency in India. In one of the surveys, the US dollar, the Euro, as well as the British pounds, are the most widely traded against cryptocurrencies (Hileman and Rauchs (2017). The Chinese Renminbi (CNY) on the other hand, diminishes significantly by tightening the regulation by the Peoples Bank of the country.

Effect of e-naira on the economic development of Nigeria

The effect of the e-naira in the Nigerian economy is that it will have an impact on the economy, promoting financial inclusion and accelerated means of payment processes. It will limit the barriers to cross-border trade, which would impact trade relations positively. This also points to the fact that this initiative is people-oriented, and is making use of technology to connect businesses and individuals from all across the world. The benefits of e-naira include:

The introduction of electronic banking, online transactions, and mobile banking in Nigeria has systematically replaced the demand for physical cash in the economy. The growth and stability, efficiency, and effectiveness of the e-naira policy have given credence to the evolution of technology in Nigeria.

(Humphrey, 2004). In countries like Nigeria, for instance, it is possible to pay for a vending machine snack by simply dialing a number on an individual phone bill. In recent times, the mobile phone is increasingly used to purchase digital content (e.g., ringtones, music or games, tickets, parking fees, and transport fees) just by flashing the mobile phone in front of the scanner at either manned 'or unmanned point of sales (POS). In Nigeria, as it is in many developing countries, cash is the main mode of payment and a large percentage of the population is unbanked and this makes the country to be heavily cash-based economy (Ajayi and Ojo, (2006).

In the work of Humphrey (2004), The introduction of the Automated Teller Machine, ATM, The Point of Sales (POS), as well as purchases of digital content has promoted the technological advancement of the Nigerian economy. This can be related to the work of Ajayi (2006) who opined that one of the bases for national economic development is the promotion of a payment system that is affordable, very convenient, and well secured hence the moving away from the paper payment instruments towards the electronic system of payment. In many developing countries like Nigeria, cash is the main method of payment and a large percentage of the population is outside the banking system making the country to be a cashless economy (Ajayi and Ojo (2006).

The benefits of e-naira to Nigeria's Economy

The numerous benefits of e-naira include among others: 1) Promotion of economic growth by allowing access to capital and financial services. 2) Reducing the possibility of fraudulent activities as a result of its being highly regulated. 3) It eliminates the limitation of paper notes, like forgery, theft, and others. 4) It helps in the generation of revenue collection and lessens the cost of managing the physical case. 5) The impact of the use of e-naira tends to reduce the costs of transactions, as the cost of commodities is expected to become cheaper while obnoxious charges are eliminated compared to the usage of cash. 6) The use of middlemen will be eradicated, as fund owners can access and transact with their money conveniently. 7) It also helps ease the burden of security and management of banking details, as this is a transparent system where money transactions are traceable, speedy, and reliable payment system, and with the creation of awareness of this initiative, the results will be very promising. Nakamoto, (2008)

Methodology of the paper

The research methodology for this paper on cryptocurrency and e-naira in Nigeria involves only the qualitative approach. This methodology provides a comprehensive approach to exploring the research topic, ensuring validity, reliability, and ethical considerations.

The research design took into cognisance the qualitative method to provide an understanding of the research topic. It explored the current state of cryptocurrency and e-naira adoption in Nigeria by identifying trends, challenges, and opportunities. Secondary data was used in analysing the existing data from reputable sources, such as Central Banks, financial institutions, and cryptocurrency exchanges.

Findings / Results

This section outlines the findings in respect of the distinction between cryptocurrency and e-naira in Nigeria:

- i. Despite growing interest, cryptocurrency adoption remains low in Nigeria.
- ii. Many Nigerians are unaware of the benefits and risks associated with cryptocurrencies
- iii. Awareness of the e-naira is higher among Nigerians, particularly among the younger population.
- iv. The regulatory environment for cryptocurrencies in Nigeria is unclear, creating uncertainty for investors
- v. The Central Bank of Nigeria (CBN) has expressed concerns about the risks associated with cryptocurrencies.
- vi. e-naira regulation*: The e-naira is regulated by the CBN, providing a clearer framework for its use
- vii. Cryptocurrencies are seen as a hedge against inflation in Nigeria. Cryptocurrencies have the potential to disrupt the remittance market in Nigeria.
- viii. e-naira's impact*: The e-naira is expected to improve financial inclusion and reduce transaction costs.
- ix. Security concerns*: Cryptocurrency transactions in Nigeria are vulnerable to security risks, such as hacking and fraud.
- x. Cryptocurrency scams are prevalent in Nigeria, highlighting the need for investor education
- xi. The e-naira's security features are expected to mitigate some of the risks associated with cryptocurrencies
- xii. Younger Nigerians are more likely to adopt cryptocurrencies
- xiii. Higher-income Nigerians are more likely to invest in cryptocurrencies
- xiv. e-naira usage is expected to be higher among Nigerians with access to smartphones and internet
- xv. Nigeria's infrastructure challenges, such as limited internet access, hinder cryptocurrency adoption
- xvi. Clear regulations could provide opportunities for cryptocurrency growth in Nigeria
- xvii. The e-naira presents opportunities for financial inclusion, improved transaction efficiency, and reduced costs.

Conclusion

The study aimed at providing a theoretical as well as a conceptual analysis of the distinction between the operations of the cryptocurrency and e-naira in Nigeria. In the development of the Nigerian economy. The paper revealed that there are both similarities and sharp differences in the operational working system of both currencies. Most important distinction is the fact that e-naira is minted while crypto is mined. The Central Bank of Nigeria released guidelines relating to

substantial aspects of interest. Introducing the two currencies is highly commendable, especially the e-naira which is an innovation in the Nigerian context. Secondly, the fact that the e-Naira has little confidence among Nigerians due to their assumption of hidden charges at the time of commencement, has today gotten a wide range of acceptance. Nigeria is today ranked first among the start-ups making Kenya drop. Recent information by Boston Consulting Group has shown that 3% of individual wealth is invested in crypto while 25% is invested in equity shares. The report, therefore, emphasised that by the year 2030, cryptocurrencies *are expected to clock 1 billion users. (BCG Report, 2023). In the final analysis, the report concludes that the shallow investment penetration shows that there is a lot of hope for more substantial growth and adoption within the cryptocurrency industry.

Despite regulatory uncertainty, there is growing interest in cryptocurrency among Nigerians. However, cryptocurrency adoption remains limited due to lack of awareness, infrastructure, and regulatory clarity why the e-naira has the potential to promote financial inclusion, improve transaction efficiency, and reduce costs. Regulatory challenges, including lack of clear guidelines and licensing requirements, hinder the development of the cryptocurrency market.

Recommendations

Based on the research findings, the following recommendations are made solely in support of the e-naira which has just been newly launched in Nigeria and making it the first in Africa. As found in a symposium with its theme: "block-chain Technology, Cryptocurrencies, and Central Bank Digital Currencies: Implications for the Global Financial Landscape" thus:

- i. Establish a clear and comprehensive regulatory framework for cryptocurrencies in Nigeria.
- ii. License and regulate cryptocurrency exchanges to ensure compliance with anti-money laundering (AML) and know-your-customer (KYC) regulations.
- iii. Develop guidelines for initial coin offerings (ICOs) to protect investors and promote transparency
- iv. Increase internet penetration and accessibility to enable more Nigerians to participate in the cryptocurrency market.
- v. Develop infrastructure to support cryptocurrency transactions, such as payment processors and wallets
- vi. Establish cryptocurrency hubs or incubators to support innovation and entrepreneurship.
- vii. Conduct public awareness campaigns to educate Nigerians about the benefits and risks of cryptocurrencies.
- viii. Provide investor education and training programs to promote informed investment decisions.
- ix. Collaborate with universities and research institutions to promote cryptocurrency research and development
- x. Continuously improve the e-naira infrastructure to ensure scalability, security, and usability.
- xi. Implement strategies to increase e-naira adoption among Nigerians, such as incentives and education.
- xii. Develop use cases for the e-naira, such as remittances, bill payments, and e-commerce.
- xiii. Implement robust security measures to protect cryptocurrency transactions and user data.

- xiv. Develop risk management frameworks to mitigate potential risks associated with cryptocurrencies.
- xv. Establish incident response plans to respond to potential security incidents.
- xvi. Collaborate with international organizations_: Collaborate with international organizations, such as the International Monetary Fund (IMF), to promote best practices and standards.
- xvii. Participate in global cryptocurrency forums and conferences to stay updated on global trends and developments
- xviii. Establish partnerships with foreign cryptocurrency exchanges to promote cross-border transactions and cooperation.

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