Journal of Economics, Finance and Management Studies

ISSN (print): 2644-0490, ISSN (online): 2644-0504

Volume 08 Issue 03 March 2025

Article DOI: 10.47191/jefms/v8-i3-42, Impact Factor: 8.317

Page No: 1846-1854

e-Naira Implementation and Financial Inclusion in Nigeria: A Review of Literature

Sadat Ibn Adam, PhD[1], Yakubu Shaba, PhD[2]

[1,2]Department of Business Administration, Faculty of Management Sciences, Usmanu Danfodiyo University, P. O. Box, 2346, Sokoto, Nigeria

ABSTRACT: The implementation of the e-Naira – Nigeria's central bank digital currency (CBDC) - represents a transformative shift in the nation's financial ecosystem. This review explores the impact of the e-Naira on financial inclusion, assessing its potential to bridge the gap between the banked and unbanked adult populations. Drawing on existing literature, this study examines the key motivations behind the e-Naira initiative, including its role in enhancing digital transactions, reducing cash dependency, and promoting economic growth. The review highlights the challenges associated with e-Naira adoption, such as technological barriers, regulatory concerns, and public awareness. Further, it discusses the comparative success of similar digital currencies worldwide and their implications for Nigeria. The findings suggest that while the e-Naira presents significant opportunities for financial inclusion, its success hinges on robust infrastructure, effective policy implementation, and increased public trust. This study contributes to the discourse on digital financial innovation and provides insights for policymakers, financial institutions, and stakeholders in Nigeria's financial ecosystem.

KEYWORDS: e-Naira, Implementation, Financial Inclusion, Digital Currency

1. INTRODUCTION

The emergence of digital currencies has restructured the global financial landscape, pushing several central banks to explore and implement Central Bank Digital Currencies (CBDCs). Interestingly, Nigeria is the leading economy on the African continent (Kaminska, 2021; World Bank Open Data, n.d) and the first to launch its CBDC, the e-Naira. This is not unconnected with the fact that it has an estimated population of about 214 million people (World Population Prospect, 2022) out of which 80% of the adult population owns mobile devices (Wezel & Ree, 2023). Further, whilst the internet penetration of the said population stood at 37%, mobile internet users slightly above same percentage, internet subscribers recorded a whooping70% (Oseni, 2023). Moreover, out of the 106 million which is estimated to be the population of adult Nigerians in 2020, 44.8% of them were banked, while 13.6% were served by other informal financial service providers leaving a staggering 41.6% unbanked adult population despite Nigeria's financial inclusion campaign which began in 2012. In fact, a survey reported by the Enhancing Financial Innovation and Access (EFInA) - a development finance organization - revealed that the financial inclusion measures adopted by the CBN have yielded positive results with the percentage of financial excluded adults in Nigeria decreasing from 53% in 2008 to 42% in 2016 and projected to reduce further to 36% in 2020 (EFInA, 2018).

However, despite this milestone, the report also showed that population growth has out-spaced the rate of financial inclusion growth in Nigeria as the actual number of excluded adults increased from 36.6 million in 2018 and forecast to increase to 38.1 million in 2020 (EFInA, 2018). Though, comparing Nigeria with sister countries, the report indicates that Nigeria's adult financial exclusion rate is higher compared to many Sub-Saharan countries such as South Africa (7%), Rwanda (7%), Kenya (11%), Namibia (22%) and Tanzania (22%). Nonetheless, the focus of financial inclusion is to provide a platform under which the unbanked and the underbanked population can access long-term financial services.

There global shift towards cashless economies and the desire to expand digital assets prompted the CBN to launch a full CBDC on October 25, 2021, making it the second in the world to launch a digital currency after Bahamas (Ree, 2022). The motivations for e-Naira launch according to the regulatory agency are to increase financial inclusion, facilitate remittance and reduce informality. In recognition of the above objectives as well as achieve 95% financial inclusion in Nigeria by 2024, the CBN took a bold and innovative step by launching the e-Naira in 2021. By design and philosophy, researchers and practitioners argue that the e-Naira is envisaged to bring in a monetary system that is more inclusive of people who have been historically excluded from financial products and services (Akpan & Umaru, 2024). e-Naira is therefore the digital form of the Naira which is issued by the CBN in line with Section 19 of the CBN Act, 2007. Accordingly, it is a direct liability of the bank, a legal tender and will form part of the currency-in-circulation and will be at par with the physical Naira (CBN, 2012).

There exists scanty literature on e-Naira and its effects on financial inclusion in Nigeria due to the fact that it was implemented in 2021. However, the available literature concentrates on how the digital currency offers opportunities such as the potential to improve the conduct of monetary policies, increase convenience, efficient payment and increase financial inclusion (Ozili, 2022). Some researches look at the e-Naira implementation and its ability to combat financing of terrorism and the likely challenges it might face such as poor culture of compliance, employee fraud and money laundering (Esoimeme, 2021). Chukwuere (2021) asserts that the e-Naira will assist Nigerians to assess their money quickly and the CBN can monitor and control transactions. By and large, majority of the studies on CBDC are centred on the choice of technology to enhance its security, interest rate bearing, the likely opportunities it could present in the financial system, as well as the challenges that exist (see Olga et al.,2017; Kochergin, 2021; Cunha et al., 2021; Li & Huang, 2021). These studies examined the benefits and the risks associated the adoption of the e-Naira.

In view of the above, the question is and has always been whether the CBN has been able to achieve its objectives. Prompted and motivated by this, a number of researchers and industry players are making efforts to unravel the successes or otherwise of the digital currency scheme in Nigeria.

The major goal of the e-Naira is to enhance financial inclusion, reduce transaction costs, and improve the efficiency of the Nigerian payment system. This paper reviews existing literature on the implementation of the e-Naira and its impact on financial inclusion in Nigeria. To achieve this objective, the paper is structured into four sections. The first section gives a general preamble which is followed by literature review. While the third section is an analysis and discussions on the implementation of the Nigerian e-currency and financial inclusion, the fourth section is the summary and conclusion.

2. LITERATURE REVIEW AND THEORETICAL FRAMEWORK

This section takes an intellectual excursion into the existing body of knowledge with a view to understanding the e-Naira and its dimensions. It covers concepts, empirical as well as the theoretical aspects of the subject matter.

2.1 Conceptual Clarification

This section discusses two key concepts of the study namely; e-Naira and financial inclusion. It harmonizes different views of scholars on the concepts and finally concludes with operational definitions for the study.

2.1.1 e-Naira

The e-Naira which is also regarded as the CBDC can be defined as a fiat digital money (Jia, 2020; Lee et al., 2021; Inozemtsev & Nektov, 2022; Ozili, 2023). According to Chukwuere (2021), the term e-Naira can also be called e-currency, digital money or cyber cash. In an earlier and similar submission, Berentsen (2005) also referred digital currency as an electronic currency, electronic cash, mobile money, e-cash, e-money, digital money, network money or digital cash. Adegbite and Aremu (2022) see digital currency as the alternative method of payment that occurs in an electronic form without holding physical currency. This definition corroborates with that of Jabbar et al. (2023) who are of the view that the CBDC is the digital equivalent of the paper money and it is a liability of the issuing central bank. Obiora (2023) also shares the views of these scholars asserting that it is an electronic version of cash and it is intended to serve all the purposes of money.

It is important to note that digital currency which exhibits some properties like traditional money, can be seen as a currency or money-like asset(s) that is(are) primarily managed, exchanged, and stored electronically on a digital computer system over the internet (Grinberg, 2011). In other words, Fabian et al. (2022) see digital currency as a means of payment or money that exists in a purely electronic form. The authors added that e-Naira has the capacity to improve the financial performance of Nigerian banks, improving the availability and usability of the central bank money and also increases the revenue generation of the country. Boar et al. (2020) opined that e-Naira is a digital banknote issued by central banks and could be used by individuals to pay businesses, or between financial institutions to settle trades.

In addition, Nwosu and Ike-Elechi (2023) maintained that the design of the CBDC varies from country to country based on certain factors which include types, architecture, infrastructure and access. Under the types, Neeta (2020) discussed wholesale and retail CBDCs. While the former is created for financial institution holding reserve deposits with the central bank and aims at improving payments and securities settlement efficiency, reducing counterpart and liquidity risk, the latter targets the public with the features of anonymity, traceability and all-day availability. Gregory (2021) looked at the architecture of the CBDC as direct model which allows the customer accounts and all service relating to CBDC payment to be domiciled and handled by the central bank. It is argued that the model eliminates reliance on the intermediaries.

It is in line with these views that the study, as a working definition, considers the e-Naira as a digital currency issued by the CBN and serves as a legal tender and complements as well as serves as physical cash.

2.1.2 Financial Inclusion

Financial inclusion has been conceptualized widely at different times and by different scholars, practitioners and regulators using different parameters. Hitherto, the Alliance for Financial Inclusion, AFI (2017) made concerted efforts to document country-specific definitions which take into consideration different parameters. For example, Burundi defined financial inclusion as the permanent access by the adult population to a set of financial products and services offered by formal and sustainable financial institutions governed by adequate regulations that are diversified, affordable and adapted to the needs of the said population. This definition only restricts financial inclusion to only supply from financial institutions which cover all financial products.

Similarly, in Tanzania, financial inclusion is viewed as the regular use of financial services through the payment infrastructure to manage cash flows and navigate shocks which are delivered by financial providers through a range of appropriate services with dignity and fairness. This definition, however, failed to mention the target groups and the financial products to be covered. Nigeria, on the other hand, sees it from the point of view of adults having easy access to a broad range of formal financial services that meet their needs and are provided at affordable costs.

In conclusion, from the range of definitions provided by the AFI, it is apparent that the point of convergence revolves around easy access, effective use, and affordability of financial services as well as financial literacy, consumer protection, range of services, regulated financial institutions and sustainability.

Ozili (2022) defined financial inclusion as the access to basic financial services for all people. The author earlier postulated that financial inclusion has to do with the availability of, and access to basic formal financial services to all members of the population; which means that individuals and businesses have access to useful and affordable formal financial services that meet their needs in a responsible and sustainable way (Ozili, 2022). Dev (2006) earlier argued that financial inclusion is the delivery of banking services at an affordable cost to the vast sections of the disadvantaged and low-income groups; particularly the poor and other excluded members of the population. To Grant (2024), financial inclusion refers to efforts to make financial products and services accessible and affordable to all individuals and businesses, regardless of their personal net worth or company size.

The World Bank Group (2015) reported financial inclusion indicators that can be used to help set national financial inclusion targets and monitor progress in reaching them. The report explained that if policy makers have reliable performance indicators and survey mechanisms, they can diagnose the state of financial inclusion, agree on targets, identify barriers, craft policies and monitor and measure policy impact.

Conclusively, this paper defines financial inclusion as the ability of the financial institutions to make available access to financial services to the majority of citizens in a country which hitherto were financially excluded.

2.2 Theories of Financial Inclusion

A number of theories have emerged in the extant literature explaining the rationale behind using digital instruments to achieve financial inclusion. Though some of the theories predate the CBDC initiatives, they provide a useful insight that could suit the theoretical context for the study. However, some of them came into existence after conceiving the idea by central banks, hence could adequately capture the rationale behind the objectives of the CBDC.

2.2.1 Diffusion of Innovation Theory

This theory was developed by Everett Mitchell Rogers, a communication theorist and sociologist, in 1962. It explains how new technologies are adopted over time within a population. Hitherto, the e-Naira's success depends on user awareness, perceived benefits, and trust.

2.2.2 Financial Inclusion Theory

Propounded by Ozili (2020), the financial inclusion theory highlights the importance of accessible, affordable, and available financial services in fostering economic development and reducing poverty.

2.2.3 Technology Acceptance Model

Propounded by Fred Davis in 1986, the theory posits that perceived ease of use and perceived usefulness influence the adoption of new financial technologies like the e-Naira. The thrust of this theory lies with how to shed light on the processes underpinning the acceptance of technology, in order to predict the behaviour of and provide a theoretical explanation for the successful implementation of technology.

2.2.4 Mises Regression Theory

Propounded by Ludwig Von Mises in 1912 in his book - Theory of Money and Credit - the theory posit that the value of money can be traced back to its value as a commodity. This means that the value of money must drive its purchasing power from the historical ties to a commodity that was valued in a state of barter. Jeffery (2014) argued that the theory traces the objective of exchange value of money only to the point where it is no longer the value of money, but just the value of a commodity. Simply put, the theory attaches the value of money not other than the value an object that is useful in some other way than as money.

The weakness of the theory lies in the fact that it only ties down the value of money in a certain commodity which limits the ability of money as a medium of exchange.

2.2.5 The Public Good Theory

This theory was developed by Ozili (2020) and argues that the State should treat financial inclusion as a public good such that everyone should benefit. Thus, the proponent argued that since it is regarded as a public good, the government will use every tool at its disposal to ensure that financial inclusiveness is enhanced, hence the adoption of CBDC as a tool to achieve financial inclusiveness.

2.2.6 Dissatisfaction Theory

This theory was also propounded by Ozili (2020) which states that people become financially excluded when they become dissatisfied with the actions of the financial institutions. This dissatisfaction by the customers will make them to exit from the financial system and return to the informal sector due to loss of confidence and trust. The theory further argued that the dissatisfied customers would rather trust the central bank than to trust the financial institutions, hence the central bank provides an alternative means to access the financial system without dealing directly with the financial institutions. One of such alternatives is the introduction of the CBDC such as the e-Naira.

2.3 Theoretical Framework

The theoretical foundation for this paper is the public good theory which ensures financial inclusiveness - the fundamental reason behind the establishment of the e-Naira in Nigeria. Furthermore, other theories such as the dissatisfaction theory has not been able to prove beyond all reasonable iota of doubt that dissatisfied customers or lack of trust in the financial system motivated the central bank to provide an option. Moreover, if a client is dissatisfied with a bank, the probability that such a client switches to another is very high. Thus, the arguments put forward by the dissatisfaction theory are irrelevant. Similarly, the Mises regression theory major weakness lies in subjecting the value of money to the value of a certain commodity which ignores the medium of exchange function of money.

2.4 Empirical Review

A number of researches are currently building up in the literature on the effect and/or impact of e-Naira on the Nigerian financial system in particular and the world in general. This is not unconnected to the global interest in the CBDC by different scholars. Whilst some of the scholars made attempts to understand whether the CBDC has been able to address the barriers in achieving financial inclusion, others made efforts to understand the macroeconomic and financial market implications of the adoption of the CBDC. This section, discusses the divergent intellectual submissions by these scholars.

Eze and Egoro (2016) examined the effect of electronic banking on the profitability of commercial banks in Nigeria. The study used four e-banking channels comprising ATM, electronic mobile banking, internet banking and Point of Sale (POS) services as independent variables on after tax profit of commercial banks for the period, 2006 through 2014.The findings revealed a significant effect of electronic banking on after tax profit when the combined effect is regressed. However, the result showed that the individual effects of the variables differ.

Similarly, Oladejo (2016) assessed the effect of four e-payments comprising ATM, POS, web/internet and mobile as e-payment variables as well as some bank specific variables on profitability of DMBs. Secondary data were obtained from the annual reports and accounts of a sample of ten DMBs. Using Panel Logistic regression technique, the findings lent credence to a positive association between e-payment system and performance of the DMBs in their sample.

The effect of mobile banking transactions on bank profitability in Nigeria was investigated by Asidok and Micheal (2018). The paper used some selected banks data which were obtained from the electronic payment system offices from 2007 through 2016. The paper which employed Panel Unit Root and SURE model estimation techniques revealed a positive and significant relationship between Automated Teller Machine (ATM) of the old and new generation banks.

Gopane (2019) argued that one advantage of a CBDC is that it can be used to broaden financial inclusion positing that it is positively correlated with financial inclusion but is negatively affected by digital inequalities among various segments of the population especially older people.

e-Naira Implementation and Financial Inclusion in Nigeria: A Review of Literature

Motivated by the low acceptability of digital currency transactions by many African countries to enhance cashless economies, Igoni et al. (2020) examined the impact of digital currency operations. The study which sourced fourth-month ending quarterly data from central bank Digital Currency and the South Africa Reserve Bank from April 2013 through December 2019, tested the praxis of financial dualism for digital currency and monetary policy. The Autoregressive Distributed Lag (ARDL) results indicate insignificant negative relationships between the dependent variable, monetary policy rate (MPR) on one hand and market capitalization and volume of crypto-currency on the other. The study suggested among others, the need for the CBN to provide adequate education and public enlightenment about digital currency and its acceptability as a legal tender in order to foster financial inclusion in Nigeria as well as generate revenue.

Driven by the evolution of technology and the emergence of the digital world and the resultant digital inventions including but not limited to digital currency, smart devices and social media, Chukwuere (2021) examined the opportunities and challenges of e-Naira in Nigeria. The paper, after extensive review of relevant literature, found that the Nigerian digital currency presents some opportunities for the CBN and Nigerians at large. The paper further discovered that while e-Naira faces trust and other challenges, customers enjoy the advantage of quick access to their funds.

Zuluaga (2021) argued that central banks always cite financial inclusion as a justification for issuing a central bank digital currency because it helps to reduce high fees which make them very appealing to unbanked adults. But the success of CBDC in increasing financial inclusion depends on whether central banks rely on private firms to competitively deliver user interfaces such as digital wallets, mobile applications, and customer service. The study further maintained that even if CBDC becomes attractive to many unbanked households, there will be some unbanked adults whose needs CBDCs cannot satisfy. The author further argued that even though technology is helping to increase financial inclusion through CBDC, progress in this area is not automatic and it may take many years to achieve.

While soliciting primary data vide Google form, Adegbite and Aremu (2022) employed ANOVA, Chi-square, MANOVA and correlation as econometric tools to examine the effect of digital currency adoption on the Nigerian economy. The findings revealed among others that education, block chain, government policy, human behaviour and personnel are the main drivers of e-Naira adoption in Nigeria. The paper therefore recommends among others that a proper enlightenment programme should be put in place for citizens to key into the digital revolution of the currency.

In a related study, Ozili (2022) analysed weekly data extracted from Google Trends database to determine the role of financial technology (FinTech), crypto currency and CDBC in enhancing financial inclusion in Nigeria. Using OLS and correlation as econometric tools, the empirical findings show among others a significant and positive correlation between interest on financial technology information and that of financial inclusion information. The authors suggest the need to educate Nigerians with adequate information on FinTech and e-Naira.

Fabian et al. (2022) investigated the relationship between e-Naira and financial performance of listed DMBs in Nigeria. The study which employed survey design by administering structured questionnaire to the staff of selected DMBs, used Kendall's Coefficient of Concordance as a tool of data analysis. The findings revealed that e-Naira Digital Currency has a positive and significant relationship with financial performance of listed DMBs. It was recommended based on the findings that monetary authorities should intensify their public enlightenment efforts on the benefits and importance of using the e-Naira.

Murakami et al. (2022) assessed the effects of CBDC on financial inclusion of the underserved and unbanked population to ascertain if there is significant improvement across border payments and receipts and equally facilitate fiscal transfers. The study found out that there are many unresolved issues in the use of CBDC. The study used a two-agent framework to show that CBDCs can increase financial inclusion if households use them as savings vehicles to smooth consumption. Their findings further revealed that the digital currencies are more useful and beneficial in economies that have low levels of financial inclusion.

Igoni et al. (2022) examined the evolution of e-Naira for re-engineering the Nigerian emerging market economy. The study adopted a descriptive survey design and used a census sampling comprising the thirty-six (36) branch controllers of the CBN. The study which sourced and analysed primary data found out that the e-Naira positively and significantly re-engineer financial inclusion and the revenue base of the Nigerian economy. The study further found that e-Naira does not support direct and transparent welfare intervention for the Nigerian citizens. Thus, the authors recommend the need for the CBN to provide a platform and user-friendly infrastructure that will provide a comprehensive data base for citizens operating businesses in Nigeria.

Using OLS as a regression tool as well as Generalised Methods of Moments (GMM) and Two-Stage Least Squares (2SLS) as regression methods for robustness, Ozili (2023) investigates the determinants of interest in e-Naira and financial inclusion information using interest over time data. The inferential results show positive and significant correlations among the variables. For instance, information on interest in FinTech and e-Naira information are positive and significant determinants of interest in financial inclusion information and vice versa. The paper further argued that interest in information about new financial innovations, such as FinTech and e-Naira stimulates interest in information about financial inclusion.

e-Naira Implementation and Financial Inclusion in Nigeria: A Review of Literature

Using Technology Acceptance Module, Adam et al. (2023) evaluated the acceptance of the e-Naira for financial transactions in Nigeria. Sourcing primary data through administration of questionnaire and retrieved from two hundred and eight (208) respondents, the study utilised descriptive statistics as method of data analysis. The authors concluded that for the e-Naira to gain acceptance by potential users, there is need to tackle privacy apprehension by consistently advocating for advancement in internet security technology.

International Monetary Fund, IMF (2023) in a working paper, reflected on the first year of the introduction of the country's digital currency. The study concluded that despite the laudable achievement recorded at the first year of implementation, the CBDC project has not gone beyond the initial wave of adoption which is caused by network challenges. The study recommended the need for a strategy to set the right relationship with mobile money.

Nwosu and Ike-Elechi (2023) analysed the effects of e-Naira on transferable deposits in Nigeria using a scenario-based approach. The study assessed the effects of the adoption of CBDC on the structure of deposits in the financial system. The results revealed that the volume and adoption rate of e-Naira have not significantly impacted the transferable deposits of banks. Although, the study showed that the volume of e-Naira in circulation has increased, transferable deposits have declined. The study revealed that the CBN should sustain efforts towards increased adoption of the e-Naira to drive financial system stability. This could be achieved by introducing interest payment to make the e-Naira more attractive and cause a shrink in the level of deposits in banks.

The extant literature reveals different perspectives in other climes akin to those of Nigeria. Hitherto, scholars from Latin America and the Caribbean (LAC) countries have contributed to the intellectual arguments. The point of convergence is that CBDC will facilitate the development of the financial system. For instance, Morales-Resendiz et al. (2021) argued that financial inclusion has been a major concern in LAC and that the issuance of a CBDC expands access to financial services. Banet and Lebeau (2022) also assessed the effects of introducing a central bank digital currency on financial inclusion in America. They acknowledged that there has been a growing interest in investigating the potential of a central bank digital currency to support financial inclusion because of the low-cost payments it offers.

Similarly, Armas et al. (2022) explored the potential role of CBDC implementation in promoting financial inclusion in Peru. They argued that CBDC increases financial inclusion by allowing the unbanked population to access digital payment instruments. They further argued that this can happen by funds transfers where the banking network is not present; payments on public transportation; payment of wages in the informal sector and rural areas; payments to small merchants' suppliers; programmes to promote social inclusion among the unbanked population (government to person); and extend accessibility of digital payments to the government. However, they argued that the development of the domestic payment system is limited by low financial inclusion.

3. THE JOURNEY SO FAR

The literature reveals that the CBDC has gained momentum amongst central banks which reflects the global shift towards cashless economies and the expansion of digital assets. Nigeria is the first country on the continent of Africa to launch a fully public CBDC (e-Naira). This section juxtaposes different submissions with a view to harmonizing arguments with respect to whether the implementation of the e-Naira has achieved one of the critical policy objectives of reducing the rate of financial exclusion in Nigeria.

From our review, the focus of some of the researchers is on the area of financial improvement as a result of CBDC. For example, Mancini-Griffoli et al. (2018) and Mariff (2020) were centred on the ability of digital currency to encourage financial inclusion by switching from cash holding to digital currencies. Similarly, they also looked at the informal sector to see if the digital currency has also encouraged financial inclusion.

In addition, documented evidences as seen in the work of Akpan and Umar (2024) have shown that there has been an improvement in financial inclusion in Nigeria within the period of implementation. However, they noticed that a serious setback of the policy is lack of rural agents' network. Similarly, EFInA (2024) have given statistical records that have shown that financial inclusion has grown significantly from 56% in 2020 to 64% in 2023, while the financial exclusion rate has reduced from 32% in the year 2020 to 26% in 2023.These submissions are in tandem with the position of Ibrahim et al. (2022) who concluded that the CBDC products and services have significantly enhanced financial inclusion. Fakunmoju (2023) also opined that currency digitalization has significantly improved stability in DMBs in Nigeria.

Conversely, the survey conducted by Akpan and Nwanja (2022) showed that despite the awareness of Nigerians on the implementation of the e-Naira, out of the 90 respondents that were surveyed, only 36.7% of them expressed willingness to install the e-Naira wallets on their phones; implying that a lot has to be done in the sensitization of the populace with respect to the inherent benefits associated to the CBN digital scheme.

4. SUMMARY AND CONCLUSIONS

A significant part of the literature shows a growing interest in CBDC globally. This is more interesting as the digitalization policy is meant to enhance financial inclusion by broadening the financial services to the unbanked population by leveraging on the recent technological development. However, the literature also shows that though there have been considerable successes recorded in the area of financial inclusion, there is still a lot to be done in the area of creating more awareness. Similarly, the digitalization of currency in a country like Nigeria requires strict regulatory and institutional frameworks which will serve as an enabler for successful implementation.

In conclusion, the e-Naira represents a significant step toward improving financial inclusion in Nigeria. While it offers numerous benefits, its success depends on addressing existing challenges, such as infrastructure deficits, digital literacy, and public trust. Effective collaboration between the government, financial institutions, and technology providers is necessary to ensure the e-Naira achieves its intended objectives. By addressing these, Nigeria can fully harness the potential of the e-Naira to promote financial inclusion and economic growth.

REFERENCES

1) Adamu, Y., Aminu, U., & Odu, T. O. (2023). Sentiment Analysis of the Adoption of the e-Naira. *Economics of Digital Currencies*. A Book of Readings, 213-232.
2) Adegbite, T. A., & Aremu, M. A. (2022). The Effects of Digital Currency (e-Naira) Adoption on Nigeria Economy. *Journal of Social Sciences, 8(2)*, ISSN 2957-4013, e-ISSN 2957-4021.
3) Akpan, U., & Nwanja, T. F. (2022). Central Banks' Digital Currency and the Challenge of Monetary Policy in Nigeria. *Forthcoming.*
4) Akpan, U., & Umaru, A. (2024). Can the e-Naira Foster Financial Inclusion in Nigeria? Evidence from Structural Equation Model. *Research Square*, DOI: https://doi.org/10.21203/rs.3.rs-3861545/v1.
5) Alliance for Financial Inclusion (2017). Integrating Gender and Women's Financial Inclusion into National Strategies. *Guideline Note. No.27.*
6) Armas, A., Ruiz, L., & Vásquez, J. L. (2022). Assessing CBDC Potential for Developing Payment Systems and Promoting Financial Inclusion in Peru. *BIS Papers Chapters, 123, 131-151*.
7) Asidok, N. O., & Michael, A, A. (2018). Mobile Banking Transactions and Bank Profitability in Nigeria. *International Journal of Economics, Commerce and Management, 6(6), 692-716.*
8) Banet, J, & Lebeau, L. (2022) Central Bank Digital Currency: Financial Inclusion vs. Disintermediation. *Federal Reserve Bank of Dallas*, Working Paper 2218.
9) Berentsen, A. (2005). Digital Money, Liquidity, and Monetary Policy, *First Monday*, 89-117.
10) Boar, C., Holden, H., & Wadsworth, A. (2020). Impending arrival–a Sequel to the Survey on Central Bank Digital Currency. *BIS paper No. 107*.
11) Central Bank of Nigeria, CBN (2012). National Financial Inclusion Strategy.
12) Chukwuere, E. J. (2021). The e-Naira – Opportunities and Challenges. *Journal of Emerging Technologies, 1(1); 72-77.*
13) Cunha, P. R., Melo, P., & Sebastião, H. (2021). From Bitcoin to Central Bank Digital Currencies: Making sense of the Digital Money Revolution. *Future Internet, 13(7), 165.*
14) Enhancing Financial Innovation and Access. (2018). EFInA Access to Financial Services in Nigeria 2018 survey. https://efina.org.ng/reports/.
15) Esoimeme, E. (2021). A Critical Analysis of the Effects of the Central Bank of Nigeria's Digital Currency on Financial Inclusion and AML/CFT Measures. Available at: SSRN 3921396.
16) Eze, G. P., & Egoro, S. (2016). Electronic Banking and Profitability of Commercial Banks in Nigeria. *Journal of Finance and Economic Research, 3(1), 202-222.*
17) Fabian,O ; Emeka,O., & Chinenye, O. (2022). e-Naira Digital Currency and Financial Performance of Listed Deposit Money Banks in Nigeria, *International Journal of Trend in Scientific Research and Development (IJTSRD) 6(2).*
18) Fakunmoju, S. K. (2023). Naira Digitalization and Financial Stability of Selected Deposit Money Banks in Nigeria: Are Nigeria Banks Ready?, *Economics and Applied Informatics,* 2, 83-89.
19) Gopane, T.J. (2019). An Enquiry into Digital Inequality implications for Central Bank Digital Currency. *IST-Africa week conference (IST-Africa)*, 1–9.
20) Grant, M. (2024). Financial Inclusion: Definition, Examples, and Why It's Important. *Dotdash Meredith Publishing Family.*

21) Gregory, B. (2021). Central Bank Digital Currencies: Costs, Benefits and major Implications for the U.S. Economic System. *Bank Policy Institute*, Staff Working Paper.
22) Grinberg**,** R. (2011). Bitcoin: An Innovative Alternative Digital Currency**,** *Hastings Science & Technology Law Journal, 4, 160.*
23) Ibrahim, M. L., Adamu, M. M., & Omojashola, A. O. (2022).Can the Central Bank Digital Currency facilitate Financial Inclusion in Maiduguri Metropolis of Borno State? *Yantara-Wala Journal of Arts, Management and Social Sciences, 2(2),272-286*
24) Igoni, S., Nwadioha, N. A., & Ogiri, I. H. (2022). Evolution of e-Naira for Re-engineering the Nigerian Emerging Economy. *Journal of Economics, Finance and Management Studies, 5*(10), 2866-2874. https://doi.org/10.47191/jefms/v5-i10-06.
25) Igoni, S., Onwumere, J. U. J., & Amaewhule, P. W. (2020). Digital Currency and Monetary Policy in the South African Economy: Praxis of Financial Dualism and Suggestion for Nigerians. *Asian Journal of Economics, Finance and Management, 2*(1), 49-*57.*
26) Inozemtsev, M. I., & Nektov, A. V. (2022). Digital Platforms for Cross-Border Settlement of CBDC in the Platform Economy, *Palgrave Macmillan*, *131-145.*
27) Jabbar, A., Geebren, A., Hussain, Z., Dani, S., & Ul-Durar, S. (2023). Investigating individual privacy within CBDC: A Privacy Calculus Perspective. *Research in International Business and Finance, 64, 101826.*
28) Jeffery, R. (2014). Reply to George Selgin on Austrian Business Cycle Theory.
29) Kaminska, I. (2021). The e-Naira's Time Has Come. *Financial Times.* https://amp.ft.com/content/efa0b41d-d891-4cca-b34e-92d717f15caf
30) Kochergin, D. (2021). Central Banks Digital Currencies, *World Experience*, 65(5), 68-77.
31) Kochergin, D. A., & Yangirova, A. I. (2019). Central Bank Digital Currencies: Key Characteristics and Directions of Influence on Monetary and Credit and Payment Systems. *Finance: Theory and Practice, 23(4), 80-98.*
32) Lee, C. C., Li, X., Yu, C. H., & Zhao, J. (2021). Does FinTech Innovation improve Bank Efficiency? Evidence from China's Banking Industry. *International Review of Economics & Finance, 74, 468-483.*
33) Li, S., & Huang, Y. (2021). Do Crypto Currencies increase the Systemic Risk of the Global Financial Market? *China & World Economy*, 28(1), 122-143.
34) Mancini-Griffoli, T., Peria, M. S. M., Agur, I., Ari, A., Kiff, J., Popescu, A., & Rochon, C. (2018). Casting light on Central Bank Digital Currency. *IMF Staff Discussion Note*, *8(18), 1-39.*
35) Morales-Resendiz, R., Ponce, J., Picardo, P., Velasco, A., Chen, B., Sanz, L., Guiborg, G., Segendorff, B., Vasquez, J.L., Arroyo, J., & Aguirre, I. (2021). Implementing a Retail CBDC: Lessons Learned and Key Insights. *Latin American Journal of Central Banking 2(1)*
36) Murakami, D., Shchapov, I., & Viswanath-Natraj, G. (2022). CBDCs, Financial Inclusion, and Monetary Policy. Available at SSRN 4102397.
37) Neeta, G. (2020, July 31). What are Retail and Wholesale Central Bank Digital Currencies (CBDCs). https://medium.com/akeo-tech/what-are-retail and-wholesale-central-bank-digital-currencies-cbdcs-5c49d81dbbcc.
38) Nwosu, K.C., & Ike-Elechi, O. (2023). Factors Influencing Continuous Intention to Use Mobile Payment Platforms in Southeast. *European Journal of Business and Innovation Research*, 11(8), 43-75.
39) Obiora, K. I. (2023). Economics of Digital Currencies. A Book of Readings, Central Bank of Nigeria.
40) Oladejo, M. (2016). E-payments adoption and Profitability Performance of Deposits Money Banks in Nigeria. *IPASJ International Journal of Information Technology (IIJIT), 4(3), 1-9.*
41) Olga, C. G., Enestor, D. S., Santiago, F., Alejandro, N. & Javier, S. (2017). Central Bank Digital Currencies: Assessing Implementation Possibilities and Impacts. *BBVA Research Working Paper*, 17/04.
42) Oseni, U. A. (2023). Case of Nigeria. Standing Committee for Economic and Commercial Cooperation of the Organization of Islamic Cooperation (COMCEC)
43) Ozili, P. K. (2020). Theories of Financial Inclusion in Uncertainty and Challenges in Contemporary Economic Behaviour. *Emerald Publishing Limited.*
44) Ozili, P. K. (2022). Central Bank Digital Currency Research around the World; A Review of Literature, *Journal of Money Laundering Control, 1368-5201.*
45) Ozili, P. K. (2023). Determinants of Interest in e-Naira and Financial Inclusion Information in Nigeria. The Role of FinTech, Crypto currency and Central Bank Digital Currency, *Digital Transformation and Society,2(2), 202-214,* ISSN: 2755-0761.
46) Ree, J. (2023). Nigeria's e-Naira, One Year after. IMF Working Paper No. 2023/104, Available at SSRN: https://ssrn.com/abstract=4529341 or http://dx.doi.org/10.5089/9798400242113.001.

47) Wezel, T., & Ree, J .J. (2023) Nigeria—Fostering Financial Inclusion through Digital Financial Services, *International Monetary Fund Amazon.com*
48) World Bank Open Data (n.d). Free Access to Global Development Data. https://data.worldbank.org/
49) World Bank (2015). The World Bank Annual Report 2015. *The World Bank Group*
50) World Population Prospect (2022). Department of Economics and Social Affairs, Population Division, United Nations
51) Zuluaga, D. (2021). Which type of Digital Currency for Financial Inclusion? *Cato Journal, 41, 413.*