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## **Influence of Central Bank of Nigeria Digital Currency on Financial Inclusion of Lecturers and Students of the Three Public Colleges of Education in Kano State**

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### **Abstract**

**Purpose:** The study aimed to investigate the influence of the Central Bank Digital Currency (CBDC) e-Naira policy on financial inclusion, with a specific focus on its impact on the access and usage of financial services among lecturers and students in Colleges of Education in Kano State.

**Methodology:** The study adopted a descriptive survey method, and a sample size of 279 was selected using simple random sampling techniques from a population of 989 individuals. The participants were drawn from three public Colleges of Education in Kano State. Data were collected through a 4-point Likert scale questionnaire, and the analysis was done using the mean and standard deviation with the support of SPSS.

**Findings:** The study's findings revealed that the CBDC (e-Naira) policy does not significantly

influence the access to financial services for lecturers and students in Colleges of Education in Kano State. Additionally, the results indicated that the policy does not have a significant impact on the usage of financial services by this group.

**Unique contribution to Theory, Practice, and Policy:** The study's unique contribution lies in the discovery that the CBDC (e-Naira) policy has no significant influence on the access and usage of financial services among lecturers and students in Colleges of Education in Kano State. Based on these findings, the researchers recommend an aggressive awareness campaign be conducted by service providers, policymakers, and other stakeholders.

**Keywords:** *Central Bank of Nigeria Digital Currency, Financial Inclusion, E-naira*

## 1.0 INTRODUCTION

Nigeria's financial sector has experienced significant innovations, notably the introduction of electronic banking, including e-naira, mobile banking, and USSD codes, leading to reduced reliance on physical cash (Fabian, et al, 2022). The most recent development is E-naira, a virtual form of the country's fiat currency issued by the central bank, which was released on October 25, 2021, making Nigeria a median country with an official Central Bank Digital Currency (CBDC) (Yao, 2018; Suoye et al., 2022). This innovation is obtainable in numerous countries worldwide, since adopting e-currencies enhances financial inclusion (Global Financial Development Report, 2014). Tan (2023) claims that the use of digital money has helped to increase financial inclusion and bank a sizable unbanked population.

For instance, the IMF's regional study from 2023 found that various Asian nations had a high level of CBDC acceptance. China, India, Philippines, Thailand, Korea, Japan, Malaysia, Singapore, United Arab Emirates, and Nepal all experienced a rapid surge, according to the IMF. The Bahamas, Jamaica, Antigua and Barbuda, Grenada, Saint Christopher and Nevis, and Saint Lucia are among the countries on other continents where digital currency is accepted (Central Bank of Kenya, 2022). Leelanji and Senthilkumar (2019) contend that due to the internet and smartphones' influence on citizens' access to and use of digital currency, it is a need rather than a choice in India. Given that digital currency is still in its infancy in Kenya, it is clear that there is little awareness (access and usage) of it (Central Bank of Kenya, 2022). In a similar vein, some other African nations, like Zimbabwe, are looking into the feasibility of establishing CBDC.

Similar to other countries, Nigeria's CBDC innovation aims to accomplish three main goals: encourage the modernization of the financial system, reduce the cost of banking services, and improve the efficiency of monetary policy to control inflation and stimulate economic growth (Enhancing Financial Innovation and Access, 2021; Olajide, 2012). By ensuring simple and quick access to bank accounts and credit, improving payment convenience, maximising incoming funds, and providing access to basic financial services, this coordinated effort seeks to close the financial inclusion gap in Nigeria (Ozili, 2022; Chukwuere, 2021; Fabian et al., 2022; National Financial Inclusion Strategy, 2019).

The e-Naira has raised a lot of doubts, though, ever since it was introduced to Nigerians. Suoye et al. (2022) questioned if CBDC will help the economy of the nation and of Africa as a whole. Ozili (2023) contributes to the discussion by highlighting the interest that the general public has in the e-Naira given Nigeria's current enthusiasm for cryptocurrency. In line with Bloomberg (2022), barely 0.5% of Nigerians were using the e-Naira as of November 2022, underscoring the currency's poor adoption. Additionally, socioeconomic factors like Nigeria's economic downturn, security concerns, banks' limited distribution of e-Naira because it doesn't pay interest, and a lack of internet and electricity in rural areas of the nation are all factors that are slowing the growth of financial inclusion in Nigeria (Bloomberg, 2022; National Financial Inclusion Strategy, 2020).

### Statement of the Problem

Globally, achieving widespread financial inclusion has proved difficult. The World Bank estimates that 54.0% of adults globally are financially excluded (don't have access to or use financial services). The issue is much worse in developing economies, since certain nations like Nigeria had

financial exclusion levels that were below the global average standard in 2011, 2014, and 2017 (World Bank, 2019).

Based on the foregoing, the result of the recent launch of the Central Bank Digital Currency, e-Naira, is predicted to prevail on low-wage workers, farmers, students, and lecturers to experience financial inclusion. In light of this, the purpose of this study is to assess the degree to which the CBDC's e-Naira policy has an impact on financial inclusion and, in particular, how it has an impact on the indicators of financial inclusion related to access and usage among lecturers and students at colleges of education in Kano State.

### **Objectives of the study**

This study has two specific objectives:

1. To investigate the influence of the CBDC (e-Naira) policy on the access to financial services for lecturers and students of Colleges of Education in Kano State/
2. To assess the impact of the CBDC (e-Naira) policy on the usage of financial services by lecturers and students of Colleges of Education in Kano State/

The outcomes of this study will provide significant insights for policymakers and stakeholders to emphasis on the importance of implementing an active awareness campaign for lecturers and students at Kano State Colleges of Education.

## **2.0 LITERATURE REVIEW**

### **Central Bank Digital Currency (CBDC)/e-Naira**

The e-Naira, also known as electronic currency (e-currency) or digital money, is a Central Bank Digital Currency (CBDC) that represents a digital format tied to the value of fiat currency (Chukwuere, 2021). Unlike cryptocurrencies, eNaira is not built on blockchain technology but draws inspiration from blockchain innovation and the cryptocurrency revolution. The Nigerian government's efforts to promote blockchain adoption have been instrumental in driving digital innovation in the country.

The e-Naira is issued by the Central Bank of Nigeria (CBN) and made available and accessible through e-Naira Wallets, which serve as digital storage for the currency (Central Bank of Nigeria, 2021). The CBN distributes the eNaira to financial institutions, which then further distribute it to customers. To enhance financial inclusion, Nigeria introduced USSD codes for eNaira, including the new code \*997#, launched in Kano in August 2022 (Central Bank of Nigeria, 2022). By leveraging digital advancements and introducing innovative solutions like eNaira and USSD codes, Nigeria aims to foster financial inclusion and facilitate easier access to digital financial services across the nation.

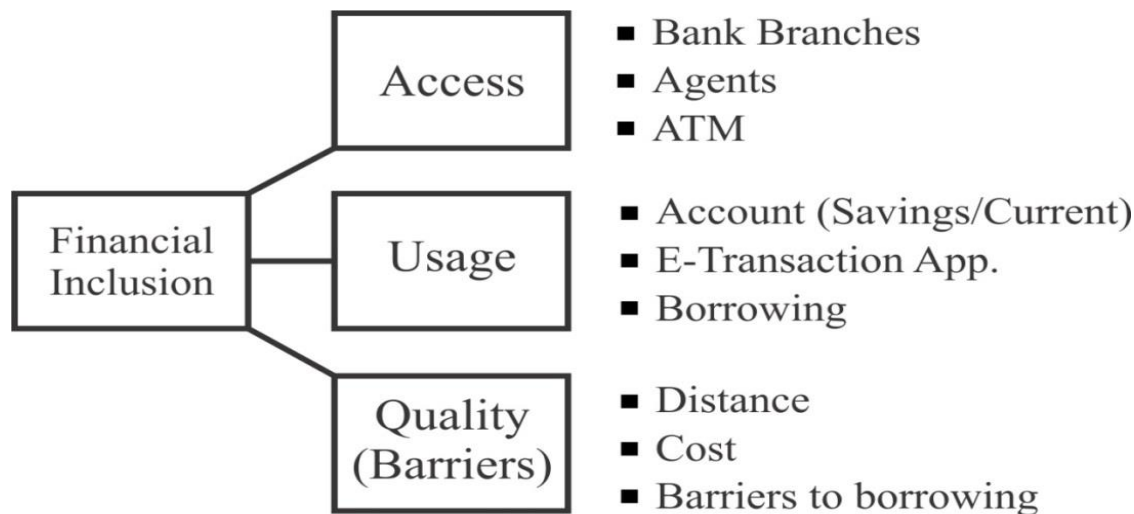
### **Financial Inclusion**

Financial inclusion refers to ensuring that all individuals, especially those from financially disadvantaged groups, have timely, adequate, and affordable access to financial services from formal financial institutions (Joshi et al., 2014). According to the World Bank (2019), financial inclusion involves access to reasonably priced financial goods and services that cater to one's needs while being ethical and sustainable. Camara and Tuesta (2017) further define financial inclusion

as the effective availability of credit, savings, payments, and insurance from recognised service providers to all working-age adults, with services being affordable and sustainable.

According to Irving (2015) assessing financial inclusion comprehensively, two dimensions are considered. The first dimension focuses on access, measuring how many people have access to formal financial services. Key indicators include having at least one active financial account (savings or current), possessing a financial institution app for mobile transactions, and securing loans from formal financial institutions (Irving, 2015).

The second dimension tracks utilisation, which gauges how extensively individuals use the financial services they have access to. A comprehensive financial system aims to be widely used by people. Utilization can be measured by the extent of using various financial products and services, such as actively using financial accounts for payments and savings, engaging in mobile transactions through financial institution apps, and availing loans from formal financial providers. Figure 1 summarises the bank services that measure the three dimensions of financial inclusion, while the quality of services can be assessed through obstacles to access.



*Source: Irving Fisher Committee on Central Bank Statistics, 2015*

### Reviewing Access and Usage of Financial Services

Several studies on the e-naira and its impact on financial inclusion in Nigeria have been undertaken. Suoye et al. (2022) discovered that e-Naira had a favourable impact on financial inclusion and revenue in the rising Nigerian economy. It lacks, however, direct and visible welfare initiatives for citizens. Ozili (2022) recognised e-Naira's potential to improve monetary policy conduct, increase payment convenience and efficiency, and increase financial inclusion, but also highlighted concerns like digital illiteracy and cyberattacks.

In the same mood, Esoimeme (2021) identified e-Naira's potential to increase financial inclusion and mitigate money laundering and terrorism financing. Nevertheless, the study warned of challenges related to poor compliance culture, employee fraud, and money laundering. Corroborating, Chukwuere (2021) argued that the e-Naira facilitates quick access to money and enables the central bank to monitor transactions, yet trust issues remain viable. Fabian et al. (2022)

demonstrated that e-Naira can enhance Nigerian banks' financial performance, central bank money availability, and revenue generation. Ozili (2023a) and Ozili (2023b) found that e-Naira CBDC significantly increases financial inclusion in Nigeria.

Studies by Ejoh and Okpa (2014) and Nwankwo and Eze (2013) focused on e-Naira's viability, readiness, and impact on Nigeria's economy. They highlighted Nigerians' awareness of the policy and its influence on the economy, including electronic payments. Ekong and Ekong (2022) explored digital currency's role in enhancing financial inclusion in Nigeria and found positive results. On the other hand, Shannon (2019) reported Nigeria's ongoing struggle with financial inclusion, attributing the high level of poverty to financial exclusion. Also, Grimes et al. (2021) studied the relationship between financial literacy and economic education and its impact on financial inclusion. They found that economic education reduces the likelihood of being unbanked, while Abdullahi (2019) discovered that infrastructure, consumer/user value propositions, and awareness play crucial roles in financial inclusion. Additionally, Edwin and Adele-Louise (2014) investigated the adoption and usage of mobile phone banking services in Nigeria, highlighting factors such as cost, education, poverty, and infrastructure availability that affected the situation.

These studies collectively contribute to understanding the effects of e-naira and financial inclusion in Nigeria, shedding light on challenges and opportunities for fostering inclusive financial practices in the country.

### **Theoretical Framework**

This study is based on Fred Davis's technology acceptability theories from 1993 (Fred, 1985). The theory explains how individuals embrace and adapt to new technology, contributing to economic growth. Davis proposed two beliefs, perceived usefulness, and perceived ease of use, as determinants of technology acceptance. Perceived usefulness refers to how capable the new technology is in improving users' financial activities, while perceived ease of use relates to the ease of employing the technology. Given Nigeria's previous cash-based economy, these beliefs are relevant to this study, as public confidence in e-Naira's simplicity, accessibility, and benefits will promote financial inclusion for lecturers and students and drive economic growth.

### **3.0 METHODOLOGY**

The research will utilize the descriptive survey method, designed to gain insight into the thoughts, ideas, opinions, and attitudes of the population using questionnaires and observations (Shona, 2022). The population consists of 989 individuals, including 140 lecturers and 849 NCE III Business Education students of the 2022/2023 session, drawn from three public colleges of Education in Kano State (Federal College of Education (Technical) Bichi; Federal College of Education Kano and Saadatu Rimi College of Education Kano). The sample size of 279, comprising 60 lecturers and 73 students from each college, was selected through simple random sampling techniques. A 4-point Likert scale questionnaire will serve as the instrument, and data analysis will be done using mean and standard deviation with the support of SPSS.

### **4.0 FINDINGS**

In this section, we present the mean and standard deviation of the impact of the Central Bank of Nigeria's digital currency on the financial inclusion of lecturers and students in the three public colleges of education in Kano state. The study uses a decision mean scale where values between 3.00 and 4.00 are interpreted as "strongly agree," values between 2.00 and 2.99 are interpreted as "agree," values between 1.00 and 1.99 are interpreted as "disagree," and values between 0.99 and 1.00 are interpreted as "strongly disagree."

**Table 1: Distribution of Influence of CBDC (E-Naira) Policy on Access to Financial Services Provided to Lecturers and Students of Colleges of Education in Kano State**

S/N	Item	Sum	Mean	SD	Decision
1	One factor is accessibility, which refers to the diversity of financial services that customers have access to or can receive. The e-naira will enhance remittances, promote trade, improve financial inclusion, and facilitate welfare payments among Kano College of Education instructors and students.	248	1.77	.693	disagree
2	The availability of formal financial services indicates that people have the option to use them, the e-naira police increase access, ensuring that the e-Naira, like the physical Naira, is accessible by everyone in colleges of Education in Kano	248	2.02	.890	Agree
3	By improving the aggregate margin of accessibility, e-naira police may raise the frequency with which financial services are used by both lecturers and students of Colleges of Education in Kano.	248	1.88	.846	Disagree
4	Increasing accessibility is anticipated to promote financial inclusion through an increase in e-money accounts with the introduction of e-Naira and e-wallets in Colleges of Education in Kano.	248	1.86	.770	Disagree
5	The utility gained from using various financial products, such as having at least one active financial account either a savings or current account that allows for the sending and receiving of payments and can be used to store money has increased since the introduction of e-naira among lecturers and students of Colleges of Education in Kano.	248	1.82	.805	Disagree
6	The introduction of the e-naira has influenced having an active financial institution app for mobile transactions to promote financial inclusion among lecturers and students of colleges of Education in Kano.	248	2.05	.837	Agree
<b>Grand Mean/Standard Deviation</b>			<b>1.90</b>	<b>.806</b>	<b>Disagree</b>

Table 1 presents the responses from a total of 248 participants regarding the influence of the CBDC (e-Naira) policy on access to financial services for lecturers and students of Colleges of Education in Kano State. Items 1, 3, 4, and 5 in the table fall within the mean benchmark of 1.00-1.99, indicating disagreement, while items 1 and 6 fall within the mean benchmark of 2.00-2.99, indicating agreement. The grand mean also falls within the mean score of 1.00-1.99, signifying disagreement. Additionally, the standard deviation ranges from .693 to .890, indicating a minimal degree of dispersion.

According to the presentation, the majority of respondents disagreed with the assumption that the CBDC (e-Naira) policy had a substantial influence on access to financial services for lecturers and students at Kano State Colleges of Education.

**Table 2: Frequency of the Impact of CBDC (E-Naira) Policy on the Usage of Financial Services of Lecturers and Students of Colleges of Education in Kano State**

S/N	Item	Sum	Mean	SD	Decision
1	The introduction of the e-naira has enhanced financial inclusion among lecturers and students of Colleges of Education in Kano for national economic development	248	1.71	.663	Disagree
2	With the introduction of the e-naira in the financial system, users have easy access to bank transaction places such as Bank branches, ATMs, Pos services and financial institutions considering the availability of commercial bank branches per 100,000 adults predicted for 2020 as 7.6 and ATM/POS as 203.6 in Colleges of Education in Kano.	248	1.83	.855	Disagree
3	A.T.M/POS locations on campus are grossly inadequate to enhance financial inclusion with the introduction of e-Naira among lecturers and students of Colleges of Education in Kano.	248	2.02	.906	agree
4	The number of bank branches in Colleges of Education in Kano is optimally below the predicted figure for an effective e-naira policy among lecturers and students.	248	1.72	.786	Disagree
5	The introduction of the e-naira that is domesticated in the e-wallet as a policy to encourage financial inclusion has not influenced the usage of financial services among lecturers and students of Colleges of Education in Kano.	248	1.97	.826	Disagree
<b>Grand Mean</b>			<b>1.85</b>	<b>.807</b>	<b>Disagree</b>

Table 2 displays the distribution of the causal relationship between CBDC (e-Naira) policy and the usage of financial services by lecturers and students of Colleges of Education in Kano State. In the table, items 1, 2, 4, and 5 fall within the mean benchmark of 1.00-1.99, indicating disagreement, except for item 2, which falls within the mean benchmark of 2.00-2.99, indicating agreement. The grand mean also falls within the mean score of 1.00-1.99, signifying disagreement. Additionally, the standard deviation ranges from .663 to .906, indicating a minimal degree of dispersion.



According to this investigation, the majority of respondents disagreed with the notion that the CBDC (e-Naira) policy has a substantial impact on the use of financial services by Kano State academics and students.

### **Discussion**

The research explored two key questions related to the impact of the CBDC (e-Naira) policy on access and usage of financial services for lecturers and students in Colleges of Education in Kano State. For the first research question, it was found that CBDC (e-Naira) policy does not influence access to financial services for lecturers and students in Colleges of Education. This finding aligns with the theory of technology adoption, which emphasizes the importance of perceived usefulness in determining users' acceptance of new technology. It also resonates with Shannon's (2019) argument about Nigeria's ongoing struggle with financial inclusion, as only a small percentage of previously financially excluded individuals have gained access to financial services despite efforts to expand inclusion. And various socioeconomic factors, such as economic recession, security issues, poverty, financial literacy, infrastructural limitations, irregular internet network, and the activities of hackers, contribute to this situation (Abdullahi, 2019; Edwin and Adele-Louise, 2014; Grimes et al., 2021; National Financial Inclusion Strategy, 2020; Shannon, 2019; Suoye et al., 2022).

Concerning the second study question, the influence of the CBDC (e-Naira) policy on the use of financial services, the findings revealed that the CBDC (e-Naira) policy had no effect on the use of financial services among Kano State academics and students. This finding is consistent with the theoretical framework, which argues that perceived usefulness drives new technology uptake. This finding contrasts with prior research, such as Suoye et al. (2022) and Ekong & Ekong (2022), which emphasise the positive and considerable impact of e-Naira on financial inclusion and revenue growth in Nigeria. Furthermore, Edwin and Adele-Louise (2014) discovered that phone banking was more widely used than Internet banking and ATM services, demonstrating the potential for technology developments to improve financial inclusion.

## **5.0 CONCLUSION AND RECOMMENDATIONS**

### **Conclusion**

In conclusion, this study reveals that CBDC (e-Naira) policy in Kano State does not significantly impact the access and usage of financial services among lecturers and students in Colleges of Education. However, it is essential to consider various socioeconomic factors and technological advancements that may influence financial inclusion and usage in different contexts. Further research is necessary to gain deeper insights into the complex interplay between CBDC policies and financial inclusion efforts in Nigeria.

### **Recommendations**

The study's findings suggest the need for an aggressive awareness campaign among services providers, policymakers, and other stakeholders regarding the Central Bank Digital Currency (e-Naira) policy among lecturers and students of Colleges of Education in Kano State. This campaign aims to ensure that all relevant parties are well-informed about the policy and its potential impact on financial inclusion, access and usage of financial services. Thus, by raising awareness, it is

possible to promote understanding, acceptance, and effective implementation of the e-Naira policy, ultimately contributing to the advancement of financial inclusion and economic growth among lecturers and students of Colleges of Education in Kano State.

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