

## RESEARCH ARTICLE

# Appraising the impact of currency redesign on the nigerian construction artisans in the informal sector

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## ABSTRACT

The currency redesign era may complicate financial transactions for construction artisans in the informal sector and threaten to achieve sustainable development goals (SDGs) (1 and 2). The majority still need a bank account which may increase unemployment and hunger. Therefore, the study investigated Nigerian construction artisans' challenges in the informal sector and proffered measures to mitigate future currency redesign challenges and, by extension, improve achieving Goals 1 and 2. The study employed a qualitative research design and engaged 28 knowledgeable participants in Lagos, Nigeria. The research achieved saturation with the selected participants and used a thematic analysis to analyse the collected data. The study shows that currency redesign is germane to construction sector advancement and developing economies at large. The impact includes increased unemployment, hunger, low patronage and productivity. These are threats to achieving Sustainable Development Goals 1 and 2. Among the top-ranked measures suggested are encouraging bank account openings, currency redesign should be in sequence and planned, public education and cash handler education purposes, and skills training (reskilling and upskilling). The study extends currency redesign and the construction artisans in the informal sector literature by showing that currency redesign is pertinent to the sector's growth.

**Keywords:** Currency redesign; construction sector; informal sector; Naira; Nigeria; sustainable development goals 1 and 2

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## 1. Introduction

Globally, over 180 currencies are circulating in 197 countries<sup>[1]</sup>. This includes the British Pound (GBP), the European Euro (EUR), the United States Dollar (USD), the Japanese Yen JPY, the South African Rand (ZAR), the Nigerian Naira (NGN), etc. Pillah<sup>[1]</sup> opined that there are 162 official currencies. However, 47

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currencies are tied to one another with a fixed exchange rate, while the British Pound Sterling is the oldest currency used for over 1,200 years. The Central Bank of countries enacts policies and regulations to stimulate collective demand and money supply, including interest rates. In Nigeria, the Central Bank of Nigeria (CBN) plays this role and is critical in redesigning the currency (Naira). Currency redesign is one of the CBN monetary policies that mop up a huge amount of cash that is not within the banking system's control. It was estimated that about NGN2.73 trillion, or about 85% of the total cash in circulation, is outside the banking system's control<sup>[1]</sup>. Thus, the currency redesign policy became pertinent and announced by the Central Bank of Nigeria in early October 2022 to redesign NGN200, NGN500, and NGN1,000. The currency redesign may have affected every sector of the economy, especially the informal stakeholders in the construction sector. The policy may have affected many artisans who need bank accounts, especially artisans in the informal sector. The construction sector is unique to every developing and developed economy. A sector worth over \$10 trillion yearly<sup>[2]</sup>.

The construction sector is strongly linked with many other economic sectors, and what happens directly or indirectly affects these other sectors. Frimpong et al.<sup>[3]</sup> acknowledged the sector as the wealth of a country. In Ghana, the sector is a significant driver of economic activities and contributes to overall GDP and industrial output. Ghana Statistical Service<sup>[4]</sup> reported that the sector contributed a GDP of 13.7% in 2016 and 13.7% in 2017. In Tanzania, Gervas<sup>[5]</sup> reported that the construction sector is the largest driver of GDP, with a contribution of 13.2 percent in 2019. The industry contributes more to developing countries' GDP than developed countries<sup>[6]</sup>. They affirmed that within European Union countries, it contributes about 11% to its GDP. In Nigeria, the construction sector plays a significant role in all sectors of the economy<sup>[7]</sup>. There is a mutual interdependence between the sector and other economic sectors. Thus, they concluded that there is a strong relationship between the sector and other sectors. The submission validated Okoye<sup>[8]</sup> and opined that besides the strong relationship between the sector and the GDP, about 50 percent of the real GDP is attributed to the sector. Construction activities in most developing countries remain labour-intensive with less special technical skills. Therefore, it allows generally skilled, semi-skilled, and unskilled workers to enter the sector<sup>[9]</sup>. A substantial part of construction activities is undertaken by the informal sector<sup>[10]</sup>, which is subcontracted to perform construction activities by main contractors. Depending on the context, there are different schools of thought regarding the terms "informal and what is not" <sup>[11]</sup>. The study used the word "construction artisans in the informal sector" when referring to the informal workforces (skilled, semi-skilled, or unskilled workers) hired on a day-to-day with minimum support from government and unions to execute construction activities. This cut across major construction trades.

Akeerebari<sup>[12]</sup>, Oxford Analytica<sup>[13]</sup>, and Pillah<sup>[1]</sup> reviewed currency redesign but not from the perspective of proffering measures to mitigate challenges facing the issues by artisans in the Nigerian construction informal sector. This may compound future issues if addressed later. Akeerebari<sup>[12]</sup> investigated the impact of currency shortage in circulation on unemployment and high inflation in Nigeria. Oxford Analytica<sup>[13]</sup> evaluated the mixed results because of the new Nigeria banknotes introduced by the CBN and the withdrawal of older notes (NGN200, NGN500, and NGN1,000) from circulation. Pillah<sup>[1]</sup> focused on the impact of currency redesign on Nigeria's monetary policy. This research seeks to redress the gap in currency redesign and the Nigerian construction artisans in the informal sector. It intends to propose measures to mitigate future challenges. Carpentry, tiling, plumbing, electrical, painting, welding, block/brick making, block/brick works, and aluminium fixing are major trades in the construction industry<sup>[14]</sup> where informal artisans can be found. Thus, this study adopted Afolabi et al.<sup>[14]</sup> identified trades. The study will mitigate future currency redesign challenges that may face Nigerian construction artisans in the informal sector and, by extension, improve achieving Goals 1 and 2. The construction industry can influence the achievement of

Sustainable Development Goals (SDGs), especially Goals 1 and 2. Goal 1 is about eliminating poverty and can be achieved through employment. Goal 2 is about zero hunger and correlates with employment. Also, the research is an emerging niche in a bid to stir Nigerian construction artisans to the digitalised financial world, especially artisans in the informal sector. Studies show that 1.7 billion people worldwide do not have bank accounts, as released by the World Bank<sup>[15]</sup>. Majority may be from developing countries, Nigeria inclusive. This is a threat to global digital financial services.

The currency redesign era may complicate financial transactions for construction artisans in the informal sector. Their low educational background may have contributed to them needing a functional bank account. Koto<sup>[16]</sup> affirmed that people with low academic qualifications dominate the informal sector. The study investigates the perceived challenges facing Nigerian construction artisans in the informal sector during the currency redesign. It proposes measures to mitigate currency redesign challenges in the future and, by extension, improve achieving Goals 1 and 2. Oxford Analytica<sup>[13]</sup> affirmed that the new CBN policies might negatively impact the cash-dependent informal sector. Studies about the challenges facing Nigeria's construction artisans in the informal sector during the currency redesign are scarce. Therefore, the study investigates Nigerian construction artisans' challenges in the informal sector, and proffers measure to mitigate future currency redesign challenges and, by extension, improve achieving Goals 1 and 2. The study will fill the emerged theoretical gap via the following objectives:

- a) To evaluate the relevance of currency redesign to the construction industry.
- b) To investigate the perceived encumbrances facing Nigerian construction artisans in the informal sector during the currency redesign.
- c) To suggest measures to mitigate currency redesign challenges in the future and, by extension, improve achieving Goals 1 and 2.

The study is structured as follows. First, a short overview of global currency, including Nigeria is provided. The literature review's background regarding construction artisans in the informal sector is followed, and the third is the description of the research method adopted. Next is the findings and discussion section that addressed the study's three objectives. The fifth section is the study's implications. The study's limitations and areas for further studies followed. The research concludes with a conclusion and recommendations section.

## **2. Literature review**

### **2.1. History of global currency: a focus in Nigeria**

History shows that in the fifth century BC, the Greek drachma, coin, the French Franc, the Arab dinar of the Middle Ages, the Byzantine solidus, and the Roman denarii were some of the international currencies<sup>[1]</sup>. Between the 13th and 16th centuries, the Venetian ducat and the Florentine Florin became the gold-based currency for Europe and the Arab world. Also, the accepted Spanish silver dollar emerged between the 16<sup>th</sup> to 19<sup>th</sup> centuries. It was recognised in Asia, Europe, and America<sup>[17]</sup>. The Dutch money served as the model for bank money and reserve currencies stabilised by central banks and birthed the Bank of England in 1694 and the Bank of France in the 19th century, respectively. **Table 1** summarised the global currency history to date. Also, **Table 2** summarises the Nigerian currency's history to date. Oxford Analytica<sup>[13]</sup> reported that on October 26, 2022, the Central Bank of Nigeria (CBN) Governor announced the withdrawal of older currency notes from circulation, effective from 31<sup>st</sup> January 2023 and later extended to 10 February 2023. The CBN argued this was necessary to mitigate counterfeiting, mop up currency outside the banking system, and mitigate inflation. Ifeanyi<sup>[18]</sup> reported that the CBN Governor claimed that 85% of

the circulation currency is outside our commercial banks' vaults. This reveals that N2.73 trillion out of the N3.23 trillion currency in circulation was outside commercial banks' vaults across the country. Also, the CBN Governor has recorded substantially higher counterfeiting rates in NGN500 and NGN1000 bank notes. The redesign of the currency is long overdue, and last redesigned about 20 years<sup>[18]</sup>.

**Table 1.** History of major events in the global currency (Snodgrass<sup>[17]</sup>, Coyle et al.<sup>[19]</sup>, and Pillah<sup>[1]</sup>).

Year	Authors	Event
In the 5 <sup>th</sup> century	Snodgrass <sup>[17]</sup> and Coyle et al. <sup>[19]</sup>	International currencies in the past have (excluding those discussed below) included the Greek drocfima, coin.
13 <sup>th</sup> to 16 <sup>th</sup> centuries		The Vientiane ducat and the Florentine Florin became the gold-based currency of choice between Europe and Arab.
16 <sup>th</sup> to 19 <sup>th</sup> centuries		Spanish silver dollar created the first global reserve currency recognised in Europe, Asia, and America.
17 <sup>th</sup> to 18 <sup>th</sup> centuries		The Dutch guilder was a reserve currency of lesser scope and was used between Europe and the territories of the Dutch colonial Empire.
1694		The Dutch served as the model for bank money and reserve currencies. The Bank of England and the Bank of France were established.
19 <sup>th</sup> century	Snodgraa <sup>[17]</sup> , Coyle et al. <sup>[19]</sup> , and Pillah <sup>[1]</sup>	The British pound sterling was used to dislodge the Spanish dollar's hegemony as the rest of the world transitioned to standard gold.
1925		The British Gold Standard Act reintroduced the Gold Bullion Standard Act of 1925, followed by many other countries.
1931		Speculative attacks on the Pound forced Britain entirely off the golden standard.
After World War 11		A formal agreement and the Bretton Woods System under this system governed the International Financial System. The USD was placed deliberately as an anchor of the system.
Late 1960s and early 1970s		The system suffered setbacks because of issues pointed out by Triffin's dilemma.
1971	Coyle et al. <sup>[19]</sup> and Pillah <sup>[1]</sup>	President Richard Nixon suspended the convertibility of the USD to gold. Thus, creating a fiat global reserve currency system.
2020	Pillah <sup>[1]</sup>	Following the economic recession, the IMF opined about the emergency of "a new Bretton Woods Moment," which could imply the need for a new global reserve currency system.

*Source: Compilation and modification from Snodgrass<sup>[17]</sup>, Coyle et al.<sup>[19]</sup>, and Pillah<sup>[1]</sup>*

**Table 2.** History of major events in the Nigerian currency (CBN<sup>[20,22]</sup>, The Guardian<sup>[21]</sup>, and Pillah<sup>[1]</sup>).

Year	Authors	Event
Following the colonial ordinance of 1880	Pillah <sup>[1]</sup>	The first major currency in Nigeria was the Shillings and Pence, legal tender currencies in British West Africa.
Up till 1912		Units of coins managed by the Bank of England were one Shilling per Pence, ½ Penny, and 1/10 Penny, distributed by a private bank and the Bank of British West Africa.
1912 - 1959		The West African Currency Board (WACB) issued the first set of banknotes and coins in Nigeria, Ghana, Sierra Leone, and Gambia.
1962		The currency was changed to reflect the country's republican status.
1973	CBN <sup>[20]</sup> , The Guardian <sup>[21]</sup> , and Pillah <sup>[1]</sup>	The name of the Nigerian currency was changed. One Pound (1 Pound) ceased to exist, and the one naira, which was equivalent to ten Shillings, became the major unit, while the minor unit was called the Kobo, hundreds of which made one naira.
11 <sup>th</sup> Feb 1977		A new banknote with twenty naira notes (N20) was issued. It was the highest

Year	Authors	Event
Dec 1972		denomination introduced then because of the economy's growth. Also, there is a preference for cash transactions and a need for convenience. The name "naira" was coined from the word Nigeria by Chief Obafemi Awolowo, First Premier of Western Nigeria, who later became federal commissioner of finance. It replaced the Nigeria Pound at a rate of 2 naira to 1 Pound.
April 1984		The colours of all the banknotes in circulation in Nigeria were changed, except the 50 Kobo banknote, to arrest the currency trafficking prevalent at the time.
1991		In 1991, the 50K and one naira were both coined.
28 <sup>th</sup> Feb 2007		NGN20 was issued for the first time in a polymer substrate, while the CBN reissued the 50, 10, and five banknotes, and NGN1 and 50K coins in new designs, and the two coins were introduced.
30 Sept 2009		The CBN converted the redesigned NGN50, 10, and 5 banknotes to polymer substrate following the successful performance of the 20 (polymer) banknotes. Thus, all lower denomination banknotes were now printed in the polymer substrate.
29 <sup>th</sup> Sept 2010		It issued the NGN50 commemorative polymer banknote as part of the nation's 50 <sup>th</sup> anniversary of independence of its existence.
19 <sup>th</sup> Dem 2014		It issued the NGN100 commemorative polymer banknote as part of the nation's 100 years of existence.
2022	CBN <sup>[20]</sup> , The Guardian <sup>[21]</sup> , and Pillah <sup>[1]</sup>	The Central Bank of Nigeria Governor, Godwin Emiefele observed that from the over three trillion-naira notes in circulation, a trillion have been accounted for by the banks. Then, CBN got approval from Mr President for redesigning N200, N500, and N1000, which ceased to be legal tender on January 31 <sup>st</sup> , 2023, and later extended first to 10 <sup>th</sup> Feb 2023, and later indefinitely.

*Source: Compilation and modification from CBN<sup>[20,22]</sup>, The Guardian<sup>[21]</sup>, and Pillah<sup>[1]</sup>*

## 2.2. Construction artisans in the informal sector

The informal sector is unregistered and hidden from the state to enforce regulations but is germane to any economy, especially developing economics. The International Labour Organisation (ILO) and World Trade Organisation (WTO) <sup>[23]</sup> reported that the informal sector accounts for about 65% of employment and 30% of output in developing countries. This shows that the informal sector is pertinent to countries' economic growth, especially developing countries<sup>[16]</sup>. Koto's findings corroborated Steel and Snodgrass<sup>[24]</sup> and found that Africa's informal sector accounts for about 50% to 80% of GDP. Nnabuife et al. <sup>[25]</sup> found that the sector is a major job provider in emerging economies. The informal sector, construction inclusive, varies across regions in its share of the total economy. It has a significant role in the economic development of all countries, especially low-income economies in Africa<sup>[26]</sup>. Most construction artisans who went through informal skills development belong to this category. The construction sector depends on artisans to execute different stages of construction projects. Osuizugbo et al. <sup>[27]</sup> affirmed that skilled artisans assist in building the sector. In India, the construction sector best represents the informal workforce. Dha<sup>[28]</sup> reported that the sector employs about 36.12 million informal workforce. These workers flock together in a particular place in the early morning daily to find a wage client/provider. This study describes construction artisans in the informal sector as skilled and semi-skilled workers that sell their labour daily via hiring by individual house owners or construction contractors. It cut across major construction trades. This includes carpentry, tiling, plumbing, electrical, painting, welding, block/brick making, block/brickworks, and aluminium fixing<sup>[14]</sup>. One attribute is that most are paid daily cash if engaged in construction work with minimum support from trade unions and government. The construction artisans in the informal sector are fully cash-dependent<sup>[13]</sup>. The difficulty in maintaining skilled workers on the payroll makes most construction contractors patronise these

artisans in the informal sector. The unavailable cash to engage them daily may enhance unemployment and hunger. These variables are threats to Goals 1 and 2.

### 3. Research method

The study seeks to uncover the perceived challenges facing Nigerian construction artisans in the informal sector during the currency redesign and proffered measures to mitigate currency redesign challenges in the future. To address the study’s research questions, a qualitative research approach based on the process of interpretivism epistemology was employed. This aligns with Osuizugbo et al.<sup>[29]</sup>, which adopted a qualitative research approach to investigate issues influencing Nigerian apprentices’ career decisions in the construction sector. Bryman<sup>[30]</sup> described interpretivist epistemology as discussing with the participants in their natural settings within a construction environment. Also, Creswell and Creswell<sup>[31]</sup> avowed that a qualitative research approach is adequate for exploring issues where little is known about the issues under investigation. The researchers adopted face-to-face interviews for data collection. The research was carried out in two phases. First, relevant literature were reviewed to understand the state of knowledge. Second, the interviewees were selected from Lagos, Nigeria. Lagos is one of the top cities with a construction hub<sup>[32,33]</sup>. The study employed purposive and snowball sampling techniques. They are non-probability sampling techniques. Ebekozien and Aigbavboa<sup>[34]</sup> avowed that purposive sampling offers the sample to be chosen based on the research’s main aim and the traits of the population. Also, the researchers adopted the snowball sampling technique to enable the key participants to recruit other participants willing to participate in the study<sup>[31]</sup>.

**Table 3** presents the 28 participants and accomplished saturation. This includes bankers (P1 – P4), client/house owners (P5 – P8), building contractors (P9 – P12), and artisans (P13 – P28). The details were concealed as part of the study’s ethical policy. The designations of the participants prove they are knowledgeable in currency redesign, construction artisans in the informal sector in Nigeria, and SDGs as it relate to the industry. The interviews were conducted in the parks of the artisans and offices of the experts between early January 2023 and early February 2023. A pilot interview was conducted with four selected interviewees before the main interview. On average, the face-to-face interview took 30 minutes, and the audio was recorded with the participant’s permission, and later transcripts were made in English. The study adopted an inductive approach, and the transcript data were subjected to thematic analysis. Thematic analysis deals with the content of the narrative text. Thus, analysing the collated data involved structuring, categorising, and coding, examining and noting common themes, and refining themes within the participants’ narratives<sup>[35]</sup>. The covered letter and main semi-structured interview questions are presented in Appendix A. **Table 4** shows how the researchers guided the research design, data collection, and post-data analysis.

**Table 3.** Summary of participants’ description.

ID	Participant	Years of experience	Rank/Designation/Firm/Trade
P1	Banker	14 years	Head, Cash Unit
P2		20 years	Head, Customer Service
P3		22 years	Operation Manager
P4		12 years	Assistant Branch Manager
P5	Client/House owner	31 years	Civil Servant and House Landlord
P6		23 years	Businessperson and Landlord
P7		29 years	Entrepreneur and Landlord

ID	Participant	Years of experience	Rank/Designation/Firm/Trade
P8		26 years	Civil Servant and Landlord
P9		25 years	CEO, Building contracting firm
P10	Building contractor	30 years	Director, Utility maintenance firm
P11		30 years	Senior Project Coordinator, contracting firm
P12		23 years	Operation Manager, contracting firm
P13		25 years	Carpentry
P14	15 years		
P15		13 years	Tiling
P16		17 years	
P17		24 years	Plumbing
P18		23 years	
P19		19 years	Electrical
P20	Artisans	20 years	
P21		21 years	Painting
P22		20 years	
P23		20 years	Welding
P24	17 years		
P25		16 years	Block/brickworks
P26		20 years	
P27		16 years	Block/brick making
P28		14 years	Aluminium fixing

*Source: Authors work*

**Table 4.** The study's quality assessment methods (Yin<sup>[36]</sup>).

Method	Assessment Strategies	The Phase of Research
Reliability	Interviewers' well-guided (consistent)	Data collection
Validity	The adoption of a recognised method (semi-structured face-to-face interviews)	Data collection
Generalisability	Recognition of limitation due to sample size potential interviewer bias	Data analysis
Transferability	Compare the study's implications against the reviewed literature.	Post data analysis
Credibility	Theme approach to establish a pattern from the data	Data analysis
Dependability	Developing semi-structured interview guidelines (Appendix A).	Research design

*Sources: Modified from Yin<sup>[36]</sup>*

As previously described, the research utilised thematic analysis concerning coding the transcripts and developing the codes. The researchers utilised a manual method of analysis. First, the 28 documents were read many times by the investigators who doubled as the coders. Ebekozen<sup>[37,38]</sup> adopted a similar approach to generate the initial coding system for their work. This first coding is also known as open coding<sup>[39]</sup>. Second, this phase encompasses using the 75 codes generated from the first coding into sub-themes and re-read to discover new constructs. The study's objectives aided in the development of the main themes. The

themes emerged from seven sub-themes and were based on recognised patterns. The researchers utilised triangulation, member checking, and researcher reflexivity as the validity techniques of the collected data. Likewise, narrative, *in vivo*, and themeing techniques were adopted for the data coding. The coding was conducted manually. The research team conducted the theme's internal validation with the help of an independent validator/researcher who was not part of the study, in line with Hayfield and Huxley<sup>[40]</sup>. Nowell *et al.*<sup>[41]</sup> opined that internal validity enhances qualitative research credibility. Also, the preliminary results were validated to mitigate confirmation bias in alignment with Rubin and Babbie<sup>[42]</sup>. They affirmed that preliminary results should be subjected to reconfirmation by selected participants. There were no significant contradictions with the preliminary findings as revealed.

## **4. Findings and discussion**

Studies about the perceived encumbrances facing Nigerian construction artisans in the informal sector during the currency redesign are scarce in developing countries, including Nigeria. This may enhance future currency redesign encumbrances if not addressed. The main findings are presented in three themes as follows:

### **4.1. Theme one: relevance of currency redesign**

The sub-section examines the participants' viewpoint regarding currency redesign's relevance to Nigeria's construction industry. One key point from the theme is that currency redesign is for economic reasons, and the construction industry is a critical sector for economic advancement and infrastructure development. Many other sectors directly or indirectly depend on the construction industry (P3, P6, P11, P19, & P28). It implies that whatever affects the economy affects the construction industry. Findings agree that the construction sector will benefit from currency redesign since it is for economic reasons. Findings identify fourteen benefits of currency redesign. Among the top-ranked benefits of currency redesign are enhancing banknote security, preventing counterfeiting, minimising money's influence on the country's electoral process (general election vote-buying), improving the health of the monetary system, and checking security threats such as laundering, terrorism, and kidnapping. Others are:

To protect the nation's legacy (P1 -P4, P7, P12, P22, P25, & P27).

To manage the money in circulation (P1 – P4, P14 – P20, & P27)

To decrease the total cost of currency management (P3, P5, & P22).

To reduce inflation (P1 – P4).

To combat counterfeiting (P4, P6, P17, & P25).

To check financial insecurity (P1 - P4).

To reduce the money in circulation (P1 – P3, P12, P24, & P28).

To rid the economy of a lot of 'black money' (P2 & P4)

Increase financial inclusion (P1 – P2, P14, & P27).

Regarding influencing the country's electoral system via vote, Participant P21 says, "..... this is timely, and we are witnesses to the cries of some alleged corrupt politicians intending to induce vote buying and other unethical practices during the process. In this matter, I stand with CBN and the Commander-in-Chief, President Buhari. We must do what is necessary to reduce the illegal supply in circulation. Nigerians must be allowed to vote their conscience against naira ...." Also, Participant P3 says, "..... politicians are worried, and I'm aware some went to court but refused to empower the security to protect her citizens' lives and properties and seek justice for several killings by bandits in their states. We must be allowed to vote our



conscience, not the other way round after the abject poverty created, never again!.....” Findings agree with Amassoma and Nwosa<sup>[43]</sup>, Oxford Analytica<sup>[13]</sup>, and Pillah<sup>[1]</sup>. Amassoma and Nwosa<sup>[43]</sup> affirmed that redesigning the CBN currency is a key tool for managing currency and strengthening investment growth. Oxford Analytica<sup>[13]</sup> avowed that the new CBN policy may hinder vote-buying for the 2023 general elections. This is because the policy would reduce cash availability. Pillah<sup>[1]</sup> suggested that the Central Bank of Nigeria (CBN) should provide leadership and ensure that the new currency redesign is not commandeered to buy voters’ conscience. Naira redesign can lower inflation, mitigate insecurity, and thwart counterfeiting (Participants P2 – P4, P7, P11, P15, & P24). Participant P7 says, “.... the cash in circulation is alarming to about 85% of all the country's cash. This is a threat to national security if not checked because the money is not within the banking system control....” Findings agree with CBN<sup>[20]</sup> and Pillah<sup>[1]</sup>. They reported that an estimated NGN2.73 trillion, about 85% of the cash in circulation, is outside the banking system’s control.

Besides vote-buying, the policy may offer opportunities for increasing financial inclusion and mitigating inflation. This is germane for growth and may bridge the gap between the rich and poor in society. Findings agree with Oxford Analytica<sup>[13]</sup> and found that converting old notes might create a platform for financial inclusion and restrain inflation. Periodical redesign is inevitable to ensure currency security. Participant P9 says, “.... CBN bank must be proactive and resistant to increasingly sophisticated counterfeit attacks. Critical security new features are integrated to keep cash safe and secure for the economy via advanced digital technology to mitigate any intending higher-quality counterfeits .....” The new currency notes will check for counterfeit and mop up naira notes outside the banking system<sup>[13]</sup>.

#### **4.2. Theme two: perceived encumbrances facing Nigerian construction artisans**

Theme two offers interviewees the platform to investigate the perceived encumbrances facing Nigerian construction artisans in the informal sector during the currency redesign. One key point from the theme is that low-income earners are the worst hit regarding policies because they are fully cash-dependent. Increased unemployment and hunger are inevitable. These factors threaten Goals 1 and 2 (eliminate poverty and hunger). Findings show that most artisans in the informal sector do not operate a functional bank account, so they cannot be involved in mobile banking. Findings agree with Oxford Analytica<sup>[13]</sup>, which found that the new CBN policies regarding converting old notes may negatively impact the cash-dependent informal sector. The outcome is increased unemployment, leading to more persons joining extreme poverty and hunger group. Thus, Goals 1 and 2 may be affected. Among the top-ranked encumbrances faced by the Nigerian construction artisans during the currency redesign era are scarcity of cash, buying Nigerian currency at high charges, economic uncertainty, absence of a functional bank account, negative impact on the cash-dependent artisans, and low patronage and productivity. Regarding economic uncertainty, findings show that when the currency redesign was first announced, the deadline was fixed for 31<sup>st</sup> January 2023. Later, CBN extended it to 10<sup>th</sup> February 2023. Within these periods, several court cases emerged, and an alleged in-house disagreement within the ruling party came up with the monetary policy. Three of the ruling party serving governors secured a Supreme Court’s Interim Order on the 8<sup>th</sup> February 2023, restraining the CBN from going ahead with the enforcement of its 10<sup>th</sup> February 2023 deadline until the matter for hearing on the 15<sup>th</sup> February 2023 (P1, P3, P7, P8, & P12). Findings agree with Olorok et al. <sup>[44]</sup> and reported that Nigerians, especially bank customers, were gripped with uncertainty over whether 10/2/2023 deadline by the Central Bank of Nigeria for the phasing out of the old naira notes remains or has been suspended following the Supreme Court injunction obtained by some state APC governors. Other encumbrances are:

Low level of education hinders (P2 – P3, P7, P10, P14, P22, & P26).

Hunger - threats to achieving SDGs 1 and 2 (P13 – P24).

Man-hour wastage (P3, P8, P11, & P13 – P28).

Triggered health challenges (P20 & P25).

Participant P23 says “.... *When I hear people say to go to your bank and pay in the old naira note, I laugh because how many of us (construction artisans in the informal sector) operate a bank account? I know many in this park/shop that don't have a functional bank account....*” Many Nigerians with functional bank accounts are finding it difficult to exchange their old naira notes for new ones. (P4, P6, P11, P17 – P20, & P24). Participant P24 says, “.... *the new notes are scarce in banks but an alleged surplus for sales at a high-rate commission or charges. The charges sometimes can be up to 30%. The unanswered question is, how did the new naira notes get to the hands of speculators for business purposes? Must everything in Nigeria be corrupt....*” The CBN-approved rate for every NGN5,000 transaction is NGN100, but many charge as high as NGN2,000 to cash NGN5,000 (P4, P12, P25, & P28). Findings agree with Oparada<sup>[45]</sup> and reported that CBN had threatened Point of Sale (POS) operators over exorbitant charges. Besides revoking the licenses of POS operators who engage in sharp practices and unethical behaviour, the Central Bank promised to hand over the operator to Economic Financial Crimes Commission for further investigation and prosecution if found wanting. A policy system where old currency notes are withheld and new notes not released sufficiently may be likened to the ‘Cobra Effect’ (P4). Participant P4 says, “...*to be honest with you, we do not have sufficient old and new notes. Thus, we give NGN2,000 irrespective of what you have filled to withdraw. Customers need to understand that if we have, we shall release them....*” Participant 4 debunked the allegation that some bank staffers collude with POS operators to cash out from the lax currency redesign process.

“....*Some of us thought the CBN Governor was joking. After all, it was alleged that he almost joined the presidential primaries race of one of the popular parties. Nigeria is a funny country. If not, he ought to have seized to be the CBN governor after that scenario. Well, the news on 26<sup>th</sup> October 2022 announcing the withdrawal of older currency notes (NGN1,000, NGN500, and NGN200) from circulation has brought pains to us more than good. I'm a tiler by profession, and for the past three weeks, no work for me. Moreover, my creditors cannot access cash to pay me for the previous jobs I did....*” said Participant P7. Findings agree with Oxford Analytica<sup>[13]</sup> and assert that the CBN policies may affect the cash-dependent informal sector. Findings show that most artisans feel bad for the low patronage, and few with a functional bank account cannot access their money. Participant P22 says, “.....*as early as 4:10 a.m. on the 1<sup>st</sup> February 2023, I left my house to the nearest bank ATM to queue for cash withdrawal, but I returned home at about 2:12 p.m. after my efforts yielded no positive outcome. This also applies to many of my neighbours, but mine is worst because our customers are no longer engaging us.....*” It is pitiable that people have money and still struggle to access their savings. This is possible in countries where anything goes (P6, P12, P22, & P26). Findings agree with Adegboyega<sup>[46]</sup>, who reported that cash scarcity disrupted economic activities in markets and banks (long queues for hours by frustrated Nigerians) in parts of the Federal Capital Territory. Findings show that Nigerians have resulted in naira buying to survive. Participant P23 says, “.... *a few days ago, I had no option but to transfer NGN7,000 to a POS operator to cash NGN5,000 as against NGN5,100. I was lucky the POS accepted NGN7,000 for NGN5,000 cash because many POS were out of cash. He later charged others who came after me NGN8,000 for NGN5,000 cash. How long can we continue? Sometimes, I asked myself, where are the leaders?*” The new monetary policy (currency redesign) is good, but the mechanism and method of implementation is unacceptable.

### 4.3. Theme three: measures to mitigate future currency redesign challenges

The theme offers the platform to proffer measures to mitigate currency redesign challenges in the future. One key point from the theme is that the informal sector artisans are dominated by people with low levels of education who decided to learn skills to survive and be pervasive in developing countries, Nigeria included. Thus, reform is inevitable in the Nigerian construction informal sector to enhance economic growth via skills upgrading. Findings identify key measures to mitigate future currency redesign challenges for artisans in the informal sector. Among the top-ranked measures are encouraging bank account openings, currency redesign should be in sequence and issuance planned and well prepared, public education and cash handler education purposes, improving capacity to produce new currency notes, and skills training (reskilling and upskilling). Findings agree that besides these measures if embraced mitigating the aftermath of currency redesign in the future, it would improve achieving Goals 1 and 2. Others are:

Policy to enforce basic education as minimum educational qualification.

Government should regulate the sector by encouraging trade unions for policy implementation.

Governance and public-private collaboration on mutual reforms.

The new and old currency notes should be used simultaneously.

Regarding currency redesign, which should be in sequence and planned issuance dates, findings agree with Coyle et al.<sup>[19]</sup>, who opined that in the US, the current denomination sequence and planned issuance dates have been in development with the Advanced Counterfeit Deterrence Committee since 2011: \$10 (2026), \$50 (2028), \$20 (2030), \$5 (2032) and \$100 (2034). This sequence addresses risk mitigation and counterfeiting concerns. The non-sequence and absence of planned issuance may have compounded Nigeria's currency redesign (Participants P1 - P3, P5, P11, P17, & P25). It has resulted in the Cobra Effect. After one year, the programme should have been in phases, maybe NGN1,000, with sufficient replacement of NGN1,000, withdrawing NGN500, etc. (P2). The artisans in the informal sector may be the worst hit (Participants P1, P7, & P17 - P24). P1 says, "..... CBN unpreparedness triggered many other issues. For example, what is the capacity of our mint production per annum? If the information flying across social media is anything to go by, the mint's total capacity is about NGN1 trillion annually. Thus, it will take about three years to replace all the currency in circulation with new notes. Why would CBN print only 1/9<sup>th</sup> of the currency taken out of circulation and ban the usage of old notes? Why the delay in distribution of the printed NGN300 billion to the various banks..." Findings agree with Akani<sup>[18]</sup>, who reported that the CBN Governor explained that currency redesign is long overdue because about 85% of the currency in circulation is outside the vaults.

Concerning low levels of education and skills training, the findings suggest that the relevant authorities should enforce compulsory basic education policy for all, especially in rural communities. This is pertinent because a formal education would mitigate some of the encumbrances, such as a functional bank saving account. Findings agree with Benjamin et al.<sup>[26]</sup> and Koto<sup>[16]</sup>. Benjamin et al.<sup>[26]</sup> emphasised that education and skills training are important variables that could bring the sector to grow and progressively move towards the formal sector. In Niser's work as cited in Benjamin et al.<sup>[26]</sup>, the opinion is different and believes that formal education plays a marginal role in informal sector skill development. Koto<sup>[16]</sup> affirmed that people with low academic qualifications dominate the informal sector. Participant P9 says, "..... policies and programmes via governance on mutual reforms should be encouraged via public-private collaboration to enhance the informal economy. This would stir skills development and training programmes for the sector. The outcome will improve the capacity of vulnerable members and performance of small firms operating within the informal sector along the continuum to formalise progressively...."

Findings suggest that in collaboration with financial institutions, relevant government agencies should sensitise stakeholders, especially those in the informal sectors, to the need for a functional bank account to mitigate future challenges associated with currency redesign. Participant P2 says, “..... besides the high risk of getting stolen or lost regarding storing cash in the house or the house gets burned down or flooded, one germane reason for everyone earning money should have a bank account is being able to connect to other financial services that make daily expenses easier to handle. E.g., payment of utility bills online.....” Findings agree with Manser Payne et al. [47], and it was found that having a functional bank account can enhance mobile banking service platforms and service delivery via digital self-service technology channels. They affirmed that digital transformation via bank accounts promotes customer and service provider relationships. More bank account holders will enhance mobile banking<sup>[48]</sup>.

## 5. The study’s implications

Notably, currency redesign is to achieve certain economic goals. It can play a critical role in developing economies such as Nigeria by protecting its common legacy, preventing counterfeiting, and improving banknote security. From the review, very little literature has been conducted concerning encumbrances facing Nigerian construction artisans in the informal sector during the currency redesign and proffered measures to mitigate currency redesign challenges in the future. But none in Nigeria’s context. Hence, little may be known regarding this matter. The study engaged face-to-face interview data with experts to achieve the three objectives. First, findings show that currency redesign is for economic reasons, and the construction industry is critical for economic advancement and infrastructure development. Improving banknote security, preventing counterfeiting, minimising the influence of money on the country’s electoral process (general election vote-buying), improving the health of the monetary system, and checking security threats such as laundering, terrorism, and kidnapping were identified as the top-ranked relevance of currency redesign to the economy and by extension, the construction industry. This is because of a significant positive correlation between the construction industry and the economy. Second, findings reveal that low-income earners (artisans) are the worst hit regarding policies because they are fully cash-dependent. Scarcity of cash, buying Nigerian currency at high charges, economic uncertainty, absence of a functional bank account, negative impact on the cash-dependent artisans, and low patronage and productivity emerged as the top-ranked challenges faced by Nigerian construction artisans during the currency redesign era. Therefore, from a theoretical perspective, the study highlights the major challenges faced by Nigerian construction artisans during the currency redesign era. Also, it proffers measures to mitigate future currency redesign challenges and, by extension, improve achieving Goals 1 and 2. Theoretically, the research intends to advance academic knowledge on currency redesign and Nigerian construction artisans in the informal sector.

Regarding the research’s practical implication, the study confirms that reform is inevitable in the Nigerian construction informal sector to enhance economic growth via skills upgrading and mitigating future challenges associated with currency redesign, such as basic education. More and better skills and education may enhance migration from the informal to the former sector. Findings would stir policymakers and stakeholders, especially relevant government agencies, to enhance governance and public-private collaboration on mutual reforms, encourage public education and cash handler education purposes, emphasise sequence and issuance planned of new currency notes, and skills training (reskilling and upskilling of artisans). These components form part of the study’s practical implications. Also, other countries, especially developing countries planning to resign their currency, should learn from the setback of Nigeria’s experience. They can modify and adapt the possible measures to mitigate currency design challenges in the future.

## **6. Limitations and areas for further study**

There are limitations in this study. The study conducted 28 face-to-face interviews. Second, the research area was limited to one major city (Lagos) in Nigeria. Third, findings are classified as early findings because it was conducted at the early phase of the policy. The study shows that these limitations do not negatively impact the quality of the findings and could be modified and used in other developing countries planning to redesign their currency. The research design technique adopted limited the sample size. To mitigate the impact, results were analysed using the currently reviewed literature, and the study's saturation was achieved. Therefore, future studies should expand the geographical scope beyond Lagos and diversify the research methods. These could strengthen the study's generalisability and depth of understanding. Future studies should explore other factors that cannot be ignored for the complexity of financial transactions in the construction industry, especially in developing countries. Also, future studies are required to validate the results and test some of the emerging new constructs in the context of the subject matter, such as public education and cash handler education purposes, economic uncertainty, cash-dependent artisans, financial inclusion, etc.

## **7. Conclusion and recommendations**

The study showed perceived challenges facing artisans in the Nigerian construction informal sector. Proffering measures to mitigate these challenges cannot be over-emphasised. Measures to mitigate future challenges have become germane because currency redesign is for economic reasons, and the construction industry is critical for economic advancement and infrastructure development, including its role in achieving SDGs (Goals 1 and 2 in this context). Thus, reforms that will mitigate currency redesign challenges in the construction sector should be encouraged. Previous studies established a positive relationship between economic growth and the construction industry. These challenges need to be tackled because of future currency redesign and the informal sector's significance to the economy. From the research, measures via policies were recommended. The main recommendations are as follows:

- a) The government, via the CBN, should lead by example regarding the proactive sequence and issuance planning and preparation. The need to improve the current approach in subsequent future currency redesign cannot be over-emphasised to mitigate hunger for the informal artisans. This action threatens Goals 1 and 2. It should be done in phases, and sufficient replacement should be made before the next denomination. The current lacuna in the supply-chain process (from CBN to banks to customers) is avoidable if the needful is done and well planned via upskilling and reskilling of the key stakeholders. Moreover, the necessary government ministries and agencies should be coordinated because of the negative impact on the economy if there is any error or oversight from the CBN, as observed in the ongoing currency redesign.
- b) To improve implementation of currency redesign in the future, besides improving capacity for production of the new currency notes, the study suggests that new and old currency notes should be used simultaneously with enough time for gradual self-effacement of the old currency notes.
- c) The study suggests an all-inclusive governance and public-private collaboration on mutual reforms to mitigate currency redesign challenges in the future. Based on the finding that people with low education levels dominate the informal sector artisans, this should be improved via policy to enforce basic education as a minimum educational qualification, especially in Nigeria's rural communities. The outcome will enhance the bank-customer relationship and awareness regarding

the benefits of currency redesign to the economy and, by extension, improve achieving Goals 1 and 2.

- d) Also, it was recommended that artisans in the informal sector open a functional bank account. Besides the speed of financial transactions during currency redesign, the mobile banking system has many other benefits, such as utility payment and cashless transactions for other bills. Also, financial institutions must relax the requirements to open a functional account with customers in the informal sector. This is crucial to improve employment possibility in future and reduce hunger. The outcome will improve the achievement of Goals 1 and 2.

## **Author contributions**

Conceptualisation, A.E., M.A.H., and C.A.; methodology, A.E., M.A.H., C.A., M.S.S., E.A.O., E.O.E., and N.I.M.; software, A.E., E.O.E., and N.I.M.; validation, A.E., M.A.H., C.A., M.S.S., E.A.O., E.O.E., and N.I.M.; formal analysis, A.E., M.A.H., C.A., E.O.E., and N.I.M.; investigation, A.E., M.A.H., C.A., E.O.E., and N.I.M.; resources, A.E., M.A.H., C.A., M.S.S., E.A.O., E.O.E., and N.I.M.; data curation, A.E., C.A., M.S.S., E.A.O., and E.O.E.; writing—original draft preparation, A.E., M.A.H., C.A., M.S.S., E.A.O., E.O.E., and N.I.M.; writing—review and editing, A.E., M.A.H., C.A., M.S.S., E.A.O., E.O.E., and N.I.M.; visualization, A.E., M.A.H., and N.I.M.; supervision, A.E., M.A.H., C.A., and M.S.S.; project administration, A.E., M.A.H., C.A., M.S.S., E.A.O., E.O.E., and N.I.M.; funding acquisition, A.E., M.A.H., C.A., and M.S.S.. All authors have read and agreed to the published version of the manuscript.

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## **Conflict of interest**

The authors declare no conflict of interest.

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## Appendix A

Dear Participant,

Request for Virtual Interview

In developing countries, the population with bank accounts for financial transactions is low. Currency redesign era may complicate financial transactions for construction artisans in the informal sector. This is because the majority still need a bank account. Studies about the challenges facing Nigeria's construction artisans in the informal sector during the currency redesign are scarce. Therefore, this study is titled: *Currency Redesign and the Impact on the Nigerian Construction Artisans in the Informal Sector: Stakeholders' Perspective*. Specifically, the researchers will achieve the paper's aim via the following objectives:

- i. To evaluate the relevance of currency redesign to the construction industry.
- ii. To investigate the hindrances facing Nigerian construction artisans in the informal sector during the currency redesign.
- iii. To suggest measures to mitigate currency redesign challenges in the future and, by extension, improve achieving Goals 1 and 2.



Kindly note that the virtual interview questions will be within the stated objectives. Your responses will be collated and analysed with those of other interviewees. It will make up the value and contribution to achieving the success of this work. Information provided will be treated with the greatest secrecy.

Hence, the researcher will highly cherish your valuable time and other input in answering the questions.

With regards,

Yours faithfully,

(Researchers)

### **BASIC QUESTIONS FOR THE PARTICIPANTS**

1. Please tell us your organisation and position for record purposes.
2. Can you please give us details about your trade/profession?
3. Please tell us your years of work experience.
4. Are you knowledgeable regarding currency redesign, artisans in the informal construction sector, and sustainable development goals?
5. If yes to question 4, in general terms, from your perception, how can you describe the relevance of currency redesign to the construction industry?
6. As a stakeholder, what are the hindrances facing Nigerian construction artisans in the informal sector during the currency redesign?
7. What role can major stakeholders play to mitigate these challenges in future currency redesign?
8. What are the feasible measures to mitigate currency redesign challenges in the future and, by extension, improve achieving Goals 1 and 2?