

Naira scarcity and the socioeconomic wellbeing of residents in Calabar Metropolis, Cross River State, Nigeria

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Abstract

Scarcity of banknotes is an unfavourable economic reality, which usually leaves serious strains on the socioeconomic development of the nation. The recent nationwide cash scarcity in Nigeria (December 2022–March 2023) motivated this study to examine the relationship between naira scarcity and socioeconomic wellbeing in Calabar metropolis, Cross River State. Key variables included academic activities, commercial activities, and access to healthcare. Talcott Parsons' social equilibrium theory provided the theoretical framework. The study employed a descriptive design with 400 respondents selected via Taro Yamane's sampling method and multistage sampling. Data were collected using a questionnaire and analyzed with Pearson's correlation at a 0.05 significance level. Findings revealed a significant relationship between naira scarcity and disruptions in education, commerce, and healthcare access. The study concluded that access to money is crucial for socioeconomic stability. It recommended expanding student loan and scholarship schemes, improving communication of monetary policies by the Central Bank of Nigeria, and extending the national health insurance scheme to reduce reliance on out-of-pocket healthcare expenses.

Keywords: Naira scarcity, socioeconomic wellbeing, academic activities, commercial activities, healthcare access

Introduction

Money serves as a medium of social exchange worldwide and has been in use for centuries. Its evolution has been central to the functioning of modern societies, with each sovereign nation adopting a distinct currency for domestic transactions and international trade. In Nigeria, the official currency system has evolved through several phases, with each phase reflecting changes in the country's political and economic landscape. Before Nigeria gained independence in 1960, the British Pound Sterling was the official currency, issued by the British colonial administration. This colonial currency was in circulation until 1959, when the Nigerian Pound Sterling was introduced in preparation for statehood (Odunlami, 2021). This shift marked the beginning of Nigeria's movement toward an independent national economy and was a significant step toward economic sovereignty. In 1973, a major milestone in Nigeria's monetary history was achieved with the introduction of the Naira as the country's official currency (Central Bank of Nigeria [CBN], 2023a). This change was a deliberate effort by the Nigerian government to domesticate its monetary policy and free itself from the influence of the British Pound Sterling, which was seen as a symbol and tool of British imperialism. The introduction of the Naira aimed to solidify Nigeria's independence and further assert its national identity in the global economy. Since then, the Central Bank of Nigeria (CBN) has periodically redesigned, issued, and withdrawn various denominations of the Naira to reflect changing economic realities and to address the challenges posed by counterfeiting and inflation. Notable redesigns occurred in 1962, 1968, 1973, 1977, 1979, 1984, 1991, 1999, 2000, 2001, 2005, 2007, 2009, 2014, and most recently in 2022 (CBN, 2023b).

The 2022 redesign exercise, however, became a pivotal event in the country's monetary history due to the significant economic challenges it generated. Unlike previous redesign initiatives, which were typically localized and had limited effects, the 2022 currency redesign led to a nationwide scarcity of banknotes. The CBN announced that by December 31, 2022, the old ₦200, ₦500, and ₦1000 notes would no longer be considered legal tender in Nigeria. The new redesigned notes were issued in mid-December 2022, in an effort to support the country's payment systems and mitigate the negative impact of excessive currency in circulation. However, this change resulted in unforeseen economic turmoil, as Nigerians found

it increasingly difficult to access the new currency despite returning the old notes to the banks. Tensions escalated as the deadline approached, and the scarcity of new notes created severe disruptions in both urban and rural areas. The scarcity was compounded by long queues at banks, where many Nigerians were unable to obtain sufficient funds for daily transactions. The situation worsened after the deadline, as the old notes were no longer accepted for transactions, yet the new notes were still not widely available. Despite intervention efforts by the Nigerian government, including announcements from the President, the CBN, and even the Supreme Court, the economic and social impacts of the naira scarcity were profound.

The naira scarcity of 2022, which coincided with a period of fuel scarcity, severely disrupted the socioeconomic wellbeing of millions of Nigerians. During the scarcity, access to basic goods and services, including food, healthcare, and fuel, was significantly hampered. Many Nigerians faced difficulties in accessing transportation due to a lack of cash for fuel, while others were unable to purchase essential medications due to the cash crunch. Academic and commercial activities were particularly affected, with students unable to pay school fees or purchase educational materials, and businesses unable to operate efficiently due to the lack of liquidity. The period of scarcity, which lasted from December 2022 to March 2023, created long-lasting effects on the social wellbeing of Nigerians, and many continue to feel the repercussions of the crisis. While the availability of banknotes has since improved, the socioeconomic ramifications of the naira scarcity remain a significant issue for the Nigerian population. The current study aims to explore these impacts, focusing on the effects of the 2022 naira scarcity on key areas such as academic activities, commercial activities, and access to healthcare services in Calabar metropolis, Cross River State.

Statement of the problem

Section 20(3) of the Central Bank of Nigeria (CBN) Act (2007) empowers the CBN to print, redesign, destroy, and re-distribute currency. On October 26th, 2022, the CBN Governor announced that the old ₦200, ₦500, and ₦1000 Naira notes would cease to be legal tender by December 31st, 2022. The redesign was aimed at curbing corruption, tackling ransom-driven kidnappings, reducing inflation, combating currency hoarding, encouraging online transactions, and reinforcing the cashless policy (Awi, 2023). However, as the deadline approached, Nigerians struggled to access cash or exchange old notes for new ones. Banks were overwhelmed, with long queues and people spending hours attempting to resolve the issue. Despite depositing old notes, many could not get the new ones as promised. When the deadline expired on December 31st, 2022, the old notes were no longer accepted, but the new notes were still scarce. This led to widespread frustration, protests, and riots in various Nigerian cities, including Calabar metropolis in Cross River State. The inability to access cash disrupted many aspects of daily life, including political activities, business operations, health services, education, and social interactions. Market women, particularly those dealing in perishable goods, suffered significant losses due to low sales. Students who relied on money transfers for education faced high charges from Point of Sale (POS) agents, often reaching up to 30% of the amount. Many families could not afford healthcare services due to the cash scarcity, leading to several deaths in the metropolis. The naira scarcity also impacted the preparations for the 2023 elections, as political activities were hindered by the lack of cash in circulation.

Though the immediate effects of the naira scarcity have been resolved, many Nigerians continue to feel its long-term consequences. Some students have dropped out of school, politicians failed to meet election obligations, and many families mourned the loss of loved ones who could not access timely healthcare. Traders, particularly small business owners, have been heavily indebted due to losses incurred during this period. This study aims to explore how the 2022-2023 naira scarcity affected business activities, educational pursuits, and access to

healthcare services in Calabar metropolis, Cross River State, and the continued impact on the wellbeing of the local population.

Aims and objectives

The aim of this study is to determine the impact of naira scarcity on the socioeconomic wellbeing of residents in Calabar metropolis, Cross River State, Nigeria. The study has the following specific objectives:

- i) To investigate the impact of naira scarcity on academic activities among residents in Calabar metropolis, Cross River State, Nigeria.
- ii) To assess the impact of naira scarcity on commercial activities among residents in Calabar metropolis, Cross River State, Nigeria.
- iii) To examine the impact of naira scarcity on the utilization of healthcare services in Calabar metropolis, Cross River State, Nigeria.

Statements of hypotheses

The following hypotheses, stated in null form, were formulated to guide this study:

- i) Naira scarcity has no significant impact on academic activities among residents in Calabar metropolis, Cross River State, Nigeria.
- ii) Naira scarcity has no significant impact on commercial activities among residents in Calabar metropolis, Cross River State, Nigeria.
- iii) Naira scarcity has no significant impact on the utilization of healthcare services among residents in Calabar metropolis, Cross River State, Nigeria.

Literature review

Naira scarcity and socioeconomic wellbeing

Naira (cash) scarcity refers to the inability of individuals to access money over a prolonged period, often due to deliberate government actions or unfavorable monetary policies. Scholars have debated the implications of cash scarcity. Rogoff (2016), Kocherlakota (2016), and Sands (2016) argue that eliminating high-denomination banknotes can reduce corruption, terrorism, tax evasion, and illegal activities. Rogoff (2016) further contends that the role of cash in transactions is to address the “double coincidence of wants,” primarily benefiting the poor, while the wealthy tend to make bulk payments, making cash shortages less impactful on their economic activities. There are three types of cash scarcity: structurally-induced, supply-induced, and demand-induced. Kennedy (2001) defines demand-induced scarcity as when demand for cash increases while supply remains the same. Supply-induced scarcity occurs when the supply is insufficient compared to demand, while structurally-induced scarcity arises from unequal access to resources due to political conflicts or economic crises. The naira scarcity during the Central Bank of Nigeria’s (CBN) currency redesign policy in 2022 can be categorized as supply-induced due to the withdrawal limits imposed by the CBN (CBN, 2023a).

The CBN's justification for the redesign and note swap was to encourage online transactions and enable the government to track bulk payments, such as ransom payments in kidnapping cases. However, Elechi and Anthony (2016) argue that a cashless economy does not equate to a scarcity of cash; instead, it depends on the willingness of people to engage in cashless transactions despite the availability of cash. They assert that the absence of cash can hinder economic growth. Unlike in rural areas, the place of money among urban dwellers for the wellbeing of the people cannot be overemphasized. For urban dwellers, access to cash is vital for meeting basic needs and sustaining social exchange. This implies that for the

sustenance of social exchange, availability and accessibility to cash is sacrosanct. According to Goodin, Rice, Bittman and Saunders (2005) and Rheault (2011), access to money is associated with greater life satisfaction, while lack of access to cash can lead to financial and social constraints. Jachimowicz, Frey, Matz, Jeronimus and Galinsky (2022) argue that access to money reduces stressors, increases life satisfaction, and improves overall wellbeing. Therefore, the inability to access cash can result in humanitarian issues, as individuals may be unable to afford essentials like education, healthcare, and goods, ultimately affecting their social wellbeing.

Naira scarcity and academic activities

The literature on the impact of cash scarcity on academic activities is limited, though studies on the relationship between economic crises, lack of access to income, and student academic performance provide relevant insights. Apart from basic needs such as food, shelter, and clothing, students also require resources for transportation, healthcare, stationery, and access to information and communication technology (ICT), all of which are essential for consistent academic performance (Nnamani, Dokko & Kinta, 2014). The inability to access cash can severely hinder students' academic pursuits, leading to challenges in meeting these basic educational needs.

Nnamani et al. (2014) argue that students' academic performance is strongly linked to their financial stability. Their study highlights how a lack of financial resources, such as funds for food, books, and accommodation, negatively impacts students' educational outcomes. In a similar vein, Norazlan, Yusuf, and Al-Majdhoub (2020) examined the financial problems and academic performance of public university students in Malaysia. They found that the inability to access cash and payment systems led to poor academic performance, especially for underprivileged students from low-income families. In the context of Nigeria, particularly in Calabar metropolis, financial challenges often prevent students from accessing necessary educational funds, such as family support, scholarships, or self-sponsorship. This lack of funds can lead to students dropping out of school or failing to graduate on time. Economic crises, including naira scarcity, exacerbate these challenges, making it difficult for students to meet their educational needs.

Awolere, Aahaab, and Salau (2020) studied the impact of economic crises on secondary school students' academic achievement in Oyo State, Nigeria. Their study revealed that economic crises negatively affect the entire educational system, from the quality of teaching to students' commitment to learning. The naira scarcity between December 2022 and March 2023 in Nigeria further compounded these issues, affecting not only students but also teachers, administrators, and other stakeholders in the education sector. Contrastingly, Ibrahim (2018) found that students' inability to access cash during an economic crisis did not significantly affect their academic performance. His study, involving 5,880 respondents from private universities in North-West Nigeria, suggested that financial challenges may act as a motivational factor, driving students from low-income backgrounds to excel academically.

Naira scarcity and commercial activities

Ajayi and Ojo (2006) emphasize that a secure, flexible, and affordable payment system is essential for the development of a national economy. In developed economies, electronic payment systems like credit cards, online transactions, and cryptocurrencies have become the norm. However, in many developing countries, including Nigeria, challenges such as limited access to the internet and banking services prevent a similar transition. As a result, cash transactions remain a vital instrument for economic activities, especially for Small and Medium-scale Enterprises (SMEs). The relationship between cash transactions and commercial activities is inseparable, much like the bond between Siamese twins. Cash is crucial for

payments in both urban and rural areas, particularly for SMEs. Thus, the scarcity of banknotes can trigger a severe economic crisis, negatively impacting GDP, tax revenues, employment, and business operations. The naira scarcity in early 2023 highlighted these challenges, with significant consequences for businesses. According to a Purchasing Managers' Index (PMI) report from March 2023, Nigeria's economy saw a sharp decline from 23.5% in January to 44.7% in February due to the naira shortage. The report highlighted reduced trade volumes, lower input buying, and mass layoffs as businesses struggled to operate without sufficient cash flow (Baily, 2023).

A major hindrance to adopting electronic payments is the high illiteracy rate in Nigeria, as noted by Akhalumeh and Ohiokha (2011). Many micro and small-scale business owners are not familiar with digital payment systems and rely on a few literate individuals to keep their businesses running. Additionally, the high charges associated with cashless transactions further discourage the use of electronic payment methods. Echekeba and Ezu (2012) point out that these charges—such as a minimum N100 fee for POS transactions and a 1.25% commission for every POS transaction—add up significantly. For example, a business generating N5 million in sales would face an additional N62,500 in charges if all payments are made via POS terminals, further straining businesses already struggling with cash shortages. The naira scarcity has caused a ripple effect in Nigeria's economy, especially among SMEs, where cash remains a fundamental tool for business transactions. The absence of sufficient cash, coupled with barriers to electronic payments, has severely impacted commercial activities, leading to widespread economic difficulties. It is on the basis of these charges that many commercial activities that depended on cash transaction were seriously affected during the period of naira scarcity.

Naira scarcity and access to healthcare services

Access to healthcare is defined as the ability to utilize healthcare services in a timely manner to achieve the best possible health outcomes. It involves entry into healthcare facilities, access to care sites, and finding providers who meet patients' needs and can build relationships based on trust (Levesque, Harris & Russell, 2013). Timely access to healthcare helps prevent illness, manage chronic conditions, and avoid complications (Thomas-Henkel & Schulman, 2017). The Sustainable Development Goals (SDGs) aim to achieve Universal Health Coverage (UHC) by 2030, ensuring that people worldwide can access quality healthcare without facing financial hardship (World Health Organization, 2018). However, many individuals, particularly in rural areas of sub-Saharan Africa and the developing world, face barriers to healthcare access due to financial limitations. During the naira scarcity period in Nigeria, many individuals experienced worsened health conditions due to their inability to afford transportation, medical bills, or medications.

Mosadeghrad (2014) studied the factors affecting healthcare quality in Iran and found that access to cash is crucial for receiving quality healthcare services. The study revealed that even those covered by health insurance schemes face challenges, particularly with transportation costs and other associated expenses (Mosadeghrad, 2014). Similarly, Oleribe, Momoh, Uzochukwu, et al. (2019) examined healthcare challenges in sub-Saharan Africa and concluded that access to cash is vital for obtaining necessary medical care. In many cases, out-of-pocket expenditures are required, even in emergencies, and health insurance programs often fail to cover all costs, leaving many individuals, especially the poor, without adequate care. Fenny and Yates (2018) also observed that health insurance packages often exclude certain expenses required for comprehensive treatment, further emphasizing the importance of cash access for quality healthcare. During the naira scarcity period, individuals from low-income backgrounds, particularly those in rural areas, faced severe health consequences due to their

inability to access cash or other means of emergency healthcare services. The naira scarcity therefore exposed significant vulnerabilities in healthcare access, especially for individuals with limited financial resources. For effective healthcare delivery, especially in emergency situations, access to cash remains an essential factor for ensuring timely and appropriate treatment.

Theoretical framework

Social equilibrium theory by Talcott Parsons (1951)

The Social Equilibrium Theory, developed by Talcott Parsons in his 1951 work *The Social System*, provides an important lens through which to analyze the functioning of society and its ability to maintain stability amid disruptions. Parsons posited that society is composed of interconnected and interdependent subsystems, each playing a critical role in ensuring the stability and functionality of the broader system. According to the theory, the social system is inherently dynamic, and while no system achieves perfect equilibrium, it has the internal mechanisms necessary to correct imbalances and restore stability. Parsons argued that these internal mechanisms—comprising both formal institutions and informal practices—work to adjust and balance the parts of society when disruptions occur. When one part of the system is disrupted, such as the financial system, the rest of society experiences a ripple effect, leading to instability. However, the dynamic nature of the system enables it to adapt and re-establish equilibrium, even in times of social friction. This process of continuous adjustment and adaptation is a key feature of Parsons' theory, which asserts that a society's ability to maintain balance is vital for its survival and progress.

The theory's relevance to the naira scarcity in Nigeria can be clearly seen through the impact of the Central Bank of Nigeria's (CBN) 2022 currency redesign policy, which caused widespread disruption in the financial system. The scarcity of banknotes led to severe consequences across various sectors, affecting businesses, individuals, and even healthcare access, particularly in rural and semi-urban areas. During this period, the country experienced a form of social and economic instability. Yet, in line with Parsons' concept of dynamic equilibrium, Nigerians, including those in Calabar metropolis, found alternative methods to continue with their daily activities despite the scarcity of physical cash. This included utilizing Point of Sale (POS) systems and online money transfer methods, albeit at significant extra costs, such as transaction fees for obtaining new notes. The transition from the pre-scarcity stability, through the crisis period, and eventually to a new form of stability demonstrates the theory's notion of *moving equilibrium*. Even in the face of cash scarcity, Nigerians adapted to the changes and developed new systems of operation, thus allowing society to continue functioning at a different level of equilibrium. This adjustment process underscores the resilience of the societal system, which, despite experiencing significant disruptions, remained functional through alternative mechanisms and practices. Therefore, the Social Equilibrium Theory provides an insightful framework to understand how societies can adapt to challenges and maintain stability, even in the face of profound systemic shocks.

Methodology

Research design

This study adopted a descriptive research design, which is aimed at systematically gathering, analyzing, and interpreting data on existing conditions, practices, trends, and relationships within a population. Calderon (2006), as cited in Robertson (2018), defines descriptive research as the purposive process of collecting and classifying data with the intent of making accurate interpretations about a given phenomenon, often with minimal use of statistical methods. In this study, the descriptive research design was chosen to provide a

detailed account of the impact of naira scarcity on business and educational activities as well as healthcare service utilization among residents of Calabar metropolis. This approach allows for an in-depth understanding of the situation and the effects of cash scarcity on various sectors of society.

Area of study

Calabar metropolis, located in Cross River State, Nigeria, was selected as the study area. The metropolis is a combined administrative region consisting of two local government areas: Calabar South and Calabar Municipality. It is home to key institutions such as the Cross River State office of the Central Bank of Nigeria, multiple banking branches, hospitals, educational institutions, and major commercial markets. The residents of Calabar metropolis are primarily engaged in various activities, including business, education, and healthcare, all of which rely heavily on the banking system for financial transactions. This makes the metropolis an ideal setting for studying the impact of the naira scarcity on the community's overall functioning.

Population of the study

The population of the study consists of all residents of Calabar metropolis who are aged 18 years and above, including both males and females. This demographic was chosen because they are directly involved in various sectors such as commerce, education, and healthcare services. According to estimates from Macrotrends (2023) and the World Population Review (2023), the population of Calabar metropolis is approximately 657,000. This population is diverse and includes individuals who experience and participate in the economic and social systems impacted by the naira scarcity, making it an appropriate representation of the larger community.

Sample size

The sample size for the study was determined using the Taro Yamane formula for sample size determination. Based on the population of 657,000 residents of Calabar metropolis and a 95% confidence level with a margin of error of 0.05, the calculated sample size was 400 respondents. The respondents were equally distributed, with 200 respondents selected from Calabar Municipality and 200 from Calabar South Local Government Areas.

Sampling technique

The study employed a multistage sampling technique to select respondents. Initially, the metropolis was divided into two clusters: Calabar South and Calabar Municipality. This was done to ensure an equal representation from both areas. In each of these clusters, the study used stratified sampling to break down the local government areas into electoral wards, with Calabar Municipality having 10 wards and Calabar South having 11 wards. From each local government area, 5 wards were selected using simple random sampling. Next, streets within the selected wards were chosen using the simple random sampling technique, ensuring a diverse range of areas within each ward. In total, 50 streets were selected across the metropolis. To select households for data collection, the systematic random sampling technique was employed. Four houses were selected from each street, with every 1st house (where houses numbered 1, 11, 21, and 31) was chosen for survey administration. Only the most senior adult in each compound was selected to complete the questionnaire, ensuring the respondent had sufficient knowledge and insight into the impact of the naira scarcity on their daily life.

Instruments of data collection

Data for this study were collected using a structured questionnaire, which was divided into two sections. Section A collected demographic data, including the age, gender, and occupation of the respondents. Section B was further divided into three segments to gather data

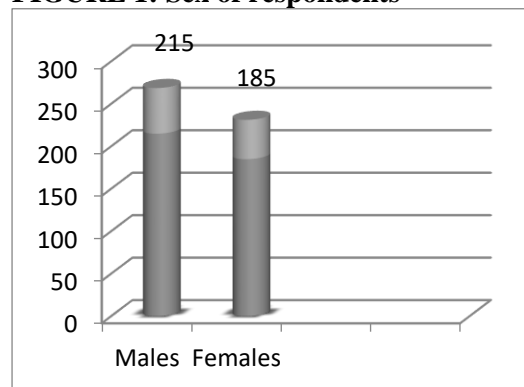
on the impact of naira scarcity on academic activities, business activities, and access to healthcare services. Additionally, Section B included questions on the socioeconomic wellbeing of the respondents, which served as the dependent variable for this study. The questionnaire was designed to provide comprehensive insights into how the naira scarcity affected various aspects of life in Calabar metropolis.

Data presentation and analysis

Data presentation

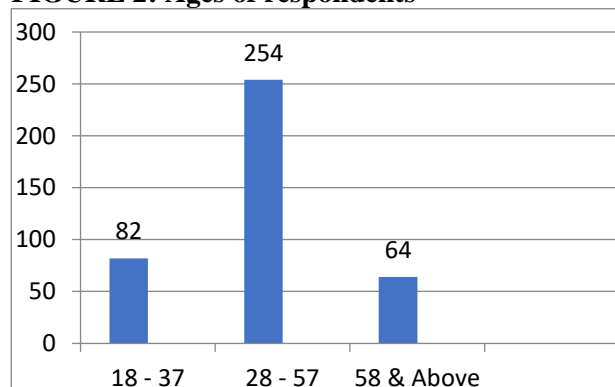
Figure 1 shows the demographic data of respondents by sex. The results indicate that 215 respondents were male, while 185 were female, representing 53.75% and 46.25%, respectively. This indicates that more males participated in the study than females. In terms of age, Figure 2 reveals that 82 respondents (20.5%) were between 18 and 37 years old, 254 respondents (63.5%) were between 38 and 57 years old, and 64 respondents (16%) were aged 58 years and above. The data show that respondents aged 38 to 57 years had the highest frequency, accounting for 63.5% of the sample, while those aged 58 and above represented the smallest group of participants. Figure 3 illustrates the level of education of the respondents, showing that 40 respondents (10%) had completed primary education, 101 respondents (25.25%) had completed secondary education, 209 respondents (52.25%) were university graduates, and 50 respondents (12.5%) had acquired vocational education. This indicates that the majority of respondents were university graduates, signifying that they had either completed a first degree or received education at a tertiary institution. Figure 4 examines the occupation of the respondents, revealing that 49 respondents (12.25%) were engaged in trading, 110 respondents (27.5%) were civil servants or public servants, 59 respondents (14.75%) were students, 108 respondents (27%) were self-employed, and 74 respondents (18.5%) were unemployed. The results indicate that civil/public servants and the self-employed made up the largest groups of respondents, reflecting the metropolis's status as an administrative center. Additionally, the data show that there were more unemployed respondents (18.5%) in the metropolis compared to students (14.75%) or traders (12.25%).

FIGURE 1: Sex of respondents



Source: Fieldwork, 2023

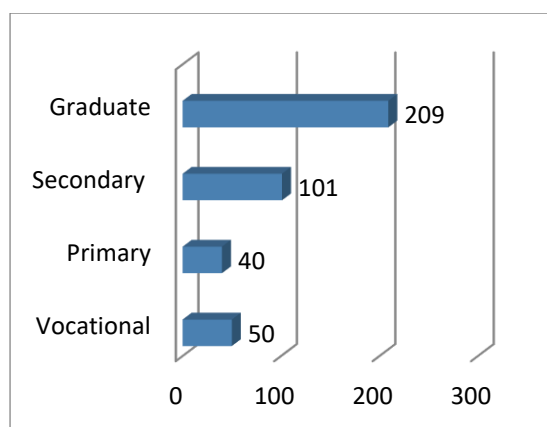
FIGURE 2: Ages of respondents



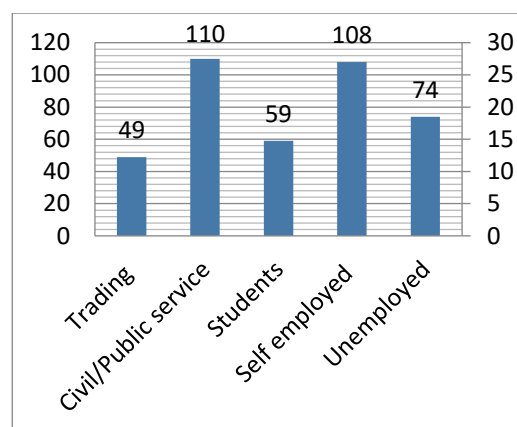
Source: Fieldwork, 2023

FIGURE 3: Levels of education of respondents

FIGURE 4: Occupation of respondents



Source: Fieldwork, 2023



Source: Fieldwork, 2023

Data analysis

Pearson Product Moment Correlation (PPMC) was used to test the relationship between naira scarcity and socioeconomic wellbeing in Calabar metropolis, specifically in relation to academic activities, business activities, and access to healthcare services, at a 0.05 level of significance.

Decision rule: The alternate hypothesis is accepted if the calculated Pearson coefficient (p -n) is ≥ 0.542001 ; otherwise, the null hypothesis is accepted.

Hypothesis One

Alternate Hypothesis: There is a significant relationship between naira scarcity and academic activities in Calabar metropolis.

Null Hypothesis: There is no significant relationship between naira scarcity and academic activities in Calabar metropolis.

TABLE 1: Pearson Product Moment Correlation analysis measuring naira scarcity and academic activities in Calabar metropolis

Variables	$\sum x$	$\sum x^2$	$\sum xy$	Pearson (r)
	$\sum y$	$\sum y^2$		
Naira scarcity (x)	4920	4310.36		
Academic activities (y)	4898	4011.33	5517.64	0.17

Significance level = 0.05; $DF = 398$; Critical value = 0.097824; $N = 400$

Decision: At 398 degrees of freedom and a 0.05 significance level, the calculated coefficient value of 0.17 reveals a positive correlation between naira scarcity and academic activities in Calabar metropolis. Since the calculated Pearson value (0.17) is greater than the critical value (0.097824), the alternate hypothesis is accepted, and the null hypothesis is rejected. This suggests that there is a significant relationship between naira scarcity and academic activities in Calabar metropolis.

Hypothesis two

Alternate Hypothesis: There is a significant relationship between naira scarcity and commercial activities in Calabar metropolis.

Null Hypothesis: There is no significant relationship between naira scarcity and commercial activities in Calabar metropolis.

TABLE 2: Pearson Product Moment Correlation analysis measuring naira scarcity and commercial activities in Calabar metropolis

Variables	$\sum x$	$\sum x^2$	$\sum xy$	Pearson (r)
	$\sum y$	$\sum y^2$		
Naira scarcity (x)	4920	469.67	5117.06	0.15
Commercial activities (y)	4389	443.94		

Significance level = 0.05; DF = 398; Critical value = 0.097824; N = 400

Decision: At 398 degrees of freedom and a 0.05 significance level, the calculated coefficient value of 0.15 reveals a positive correlation between naira scarcity and commercial activities in Calabar metropolis. Since the calculated Pearson value (0.15) exceeds the critical value (0.097824), the alternate hypothesis is accepted, and the null hypothesis is rejected. This indicates that there is a significant relationship between naira scarcity and commercial activities in Calabar metropolis.

Hypothesis three

Alternate Hypothesis: There is a significant relationship between naira scarcity and access to healthcare services in Calabar metropolis.

Null Hypothesis: There is no significant relationship between naira scarcity and access to healthcare services in Calabar metropolis.

TABLE 3: Pearson Product Moment Correlation analysis measuring naira scarcity and access to healthcare services in Calabar metropolis

Variables	$\sum x$	$\sum x^2$	$\sum xy$	Pearson (r)
	$\sum y$	$\sum y^2$		
Naira scarcity (x)	5011	529.62	4177.55	0.13
Access to healthcare services (y)	4999	2541.01		

Significance level = 0.05; DF = 398; Critical value = 0.097824; N = 400

Decision: At 398 degrees of freedom and a 0.05 significance level, the calculated coefficient value of 0.13 reveals a positive correlation between naira scarcity and access to healthcare services in Calabar metropolis. Since the calculated Pearson value (0.13) is greater than the critical value (0.097824), the alternate hypothesis is accepted, and the null hypothesis is rejected. This suggests that there is a significant relationship between naira scarcity and access to healthcare services in Calabar metropolis.

Findings and discussions

The present study set out to examine the relationship between naira scarcity and the socioeconomic well-being of people in Calabar metropolis, Cross River State. The analysis was structured around three key hypotheses, which focused on academic activities, commercial activities, and access to healthcare services in the context of the cash scarcity that gripped Nigeria between December 2022 and March 2023. Using Pearson Product Moment Correlation, the study found significant relationships between naira scarcity and these three

aspects of socioeconomic well-being, providing insights into the broader consequences of currency shortages on individuals and communities.

Naira scarcity and academic activities

The first hypothesis of the study tested the relationship between naira scarcity and academic activities in Calabar metropolis. The findings revealed a significant positive relationship, suggesting that the cash shortage adversely affected academic pursuits. Respondents indicated that the scarcity of naira notes significantly disrupted their ability to continue or access educational activities. A large proportion (62.42%) of the participants reported that they could not proceed with their academic activities due to financial constraints caused by the naira scarcity. This aligns with previous research conducted by Nnamani, Dikko, and Kinta (2014), as well as Shafiq (2010), which found that access to cash and funds is closely linked to students' academic performance. In the context of this study, the financial constraints imposed by the naira scarcity appear to have compounded the existing challenges faced by students and educational institutions in Nigeria. For students, the lack of available funds for tuition, textbooks, transportation, and other academic-related expenses made it difficult for them to continue their studies effectively. This underscores the broader socioeconomic implications of cash shortages on education, emphasizing that financial resources are integral to the successful functioning of academic systems, particularly in developing nations like Nigeria. This finding also corroborates studies by Bruyckere and Simons (2016) and Long and Adukia (2009), which highlighted the critical role of financial accessibility in educational attainment.

Naira scarcity and commercial activities

The second hypothesis examined the relationship between naira scarcity and commercial activities in the metropolis. The study found a significant positive correlation between cash scarcity and disruptions in commercial activities, particularly among small and medium-sized enterprises (SMEs). Many business owners reported severe difficulties in conducting transactions due to the lack of physical cash. This outcome resonates with the findings of Chibueze (2023) and Elechi and Anthony (2016), who found that a shortage of cash in circulation negatively impacted business operations, particularly for SMEs, which often rely on cash transactions for their day-to-day operations. Interestingly, this finding contrasts with the assertions made by Osazevbaru and Yomere (2015), who argued that the cashless policy and the promotion of e-transactions could have beneficial effects on the banking sector and broader economic growth. While the policy may have its merits in encouraging digital transactions, the findings of this study emphasize the critical role of cash in supporting SMEs, which form the backbone of the Nigerian economy. The absence of cash transactions likely led to business slowdowns, especially in sectors where customers prefer cash payments or lack access to mobile banking facilities. This disruption in commercial activities not only affected business owners but also had ripple effects on employment, income generation, and overall economic stability in the region. Thus, the findings suggest that naira scarcity hindered the economic vitality of the metropolis, particularly for the informal sector, which is heavily reliant on cash.

Naira scarcity and access to healthcare services

The third hypothesis focused on the relationship between naira scarcity and access to healthcare services in Calabar metropolis. The results showed a significant positive correlation, indicating that the inability to access healthcare was strongly linked to the ongoing cash shortage. Many respondents expressed difficulty in affording healthcare services due to the lack of cash, which in turn affected their health-seeking behaviors. This finding corroborates the work of Scheffler, Visagie, and Schneider (2015), as well as Lagarde and Palmer (2018),

who emphasized that income and financial access are essential components in facilitating healthcare access, especially in low- and middle-income countries like Nigeria. The study found that for many residents of Calabar metropolis, the inability to access cash effectively limited their ability to afford medical services, including consultations, medications, and other healthcare-related costs. This is consistent with the findings of Dawkins and Renwick (2021), who noted that a lack of cash availability has direct consequences on patients' access to healthcare, particularly in developing countries. The naira scarcity, therefore, exacerbated the existing barriers to healthcare access, contributing to the poor health outcomes observed in the region. In many instances, individuals were forced to forgo or delay medical treatment, leading to worsened health conditions and increased vulnerability to preventable diseases.

The findings of this study can be aligned with Talcott Parsons' Social Equilibrium Theory (1951), which emphasizes the interdependence of different social systems and the need for balance to ensure the stability of society. According to Parsons, when one part of the social system is disrupted, it causes a ripple effect that impacts other components, leading to a disequilibrium. The significant relationship between naira scarcity and disruptions in academic activities, commercial operations, and access to healthcare services in Calabar Metropolis reflects this imbalance. The cash shortage, as a disruptive force, interfered with the functioning of essential sectors such as education, business, and healthcare, leading to an overall disturbance in the social equilibrium of the metropolis. This imbalance, as proposed by Parsons, can undermine social stability and hinder the well-being of individuals, especially those in vulnerable socio-economic positions. Thus, the study's findings highlight the crucial role of financial systems in maintaining societal stability and ensuring the smooth functioning of various sectors, as articulated by Social Equilibrium Theory.

Implications for socioeconomic well-being

The findings of this study highlight the profound impact that naira scarcity had on various aspects of socioeconomic well-being in Calabar metropolis. In addition to hindering academic activities, business operations, and access to healthcare, the cash shortage also likely had negative effects on the overall quality of life for residents. The disruptions in education and business activities may have long-term consequences on human capital development, economic productivity, and societal stability. Similarly, the inability to access healthcare services could exacerbate health disparities, particularly among low-income groups. These findings underscore the critical need for effective monetary policies that ensure adequate cash circulation and financial access for individuals and businesses. Furthermore, the study highlights the importance of digital financial inclusion and the need for alternative payment systems that can reduce dependency on cash, particularly in emergencies. However, while promoting cashless transactions, policymakers must also be mindful of the challenges faced by informal sector workers and those without access to digital banking services.

Conclusion

This study investigated the relationship between naira scarcity and the socioeconomic wellbeing of people in Calabar metropolis, revealing significant impacts across academic activities, commercial operations, and access to healthcare services. The findings indicate that the cash scarcity experienced between December 2022 and March 2023 disrupted academic activities, as many students were unable to access necessary funds for their studies. Similarly, the study found that cash shortages were a key factor in the low level of business and commercial activities in the metropolis, particularly affecting small and medium-sized enterprises (SMEs). Furthermore, difficulties in accessing healthcare services were also significantly linked to the cash crisis, as many residents struggled to pay for healthcare or access medical services during the period of banknote swap. These disruptions underscore the

broader socio-economic challenges that arose from the scarcity of naira during this period and highlight the interconnectedness of financial access to various aspects of societal functioning.

Recommendations

In light of the findings of this study, the following recommendations are made:

1. To mitigate the impact of future financial crises on academic performance, it is recommended that students, particularly those in tertiary institutions, be provided with access to student loans, scholarship schemes, and other flexible financial facilities. These mechanisms would ensure that students can maintain seamless access to the funds necessary for their academic pursuits, thus reducing the negative impact of cash scarcity on their educational outcomes.
2. The Central Bank of Nigeria (CBN), in collaboration with other relevant agencies, should ensure that future currency redesigns, withdrawals, and releases of new banknotes are communicated well in advance. This would allow citizens, especially low and middle-income earners, to adequately prepare for such transitions. Advance notice would help these individuals and business owners remain financially stable, particularly those running small and medium-scale enterprises that are crucial to the economy, thus mitigating the disruptive effects of sudden financial changes.
3. In light of the significant barriers to healthcare access highlighted by this study, it is recommended that the National Health Insurance Scheme (NHIS) and other healthcare development initiatives be extended to cover all categories of citizens. This would help eliminate the burden of out-of-pocket payments for healthcare services, which, as observed, significantly hindered access to essential medical services during the period of naira scarcity. Expanding access to healthcare through affordable financial mechanisms would help ensure that the most vulnerable populations can receive necessary care, even in times of economic hardship.

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