The Effect of Currency Redesign on Inflation in Yenagoa Local Government Area

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Abstract

The study investigated the effect of currency redesign on inflation in Yenagoa Local Government Area. The objectives of the study are to examine the effect of currency redesign on food prices, service cost and savings. Based on the set objectives of the study, three research questions and three hypotheses were formulated for the study. The survey design was used in the study while the sample comprised 357 participants. A structured questionnaire containing 16 items was use as instrument for data collection and descriptive statistical tool and Pearson Product Moment Correlation statistics were used for data analysis and test the hypothesis. The finding revealed that currency redesign has a negative but significant relationship with food prices, currency redesign has a negative but significant relationship with service cost and currency redesign has a negative but significant relationship with savings. The conclusion drawn therefore was that currency redesign has further increased the inflation in Yenagoa metropolis. It is recommended that government should ensure adequate food security before carrying out future redesign of the currency and adequate and long-term planning must be undertaken before embarking on currency redesign in the country to avoid unnecessary hardship for the Nigerian people amongst others.

Key words: Currency; Redesign; Inflation; Yenagoa

1. INTRODUCTION

Economic and finance experts had argued that the Central Bank of Nigeria (CBN) to redesign and print new N200, N500 and N1000 denominations would have no major effect in lowering the rising inflation in the country. According to Bongo cited in Idowu et al. (2023) the drivers of inflation is more of demand and supply, stating that inflation sets in when much money is chasing fewer goods, an indication that there is too much money supply but, in this case, not the physical cash alone in the system. On the other hand, analysts claim that revamping the naira has reduced tension and quelled fears in Nigeria. The naira redesign lowered the quantity of money in circulation. The money in circulation dropped from N3.28 trillion in December 2022 to N1.38 trillion in January and estimated N982.09 billion in February 2023, representing a 235 percent decline due to naira redesign policy of the CBN (KPMG, 2023) and this affected the long-term trend of inflation. The resulting deflationary pressure lead to interest rate cuts, which was expected to boost economic activity in the short to medium term, boost aggregate demand, and enhance output growth. According to analysts, the redesign of the naira, which was put into effect just before the national elections in 2023, made it less attractive to buy votes (Onimisi, 2023) and it reduced the money in circulation and further pushed the inflation trend downward.

In Nigeria, currency redesign has been a significant policy issue due to the country's historical experience of currency counterfeiting, which has led to significant economic losses. The redesign of Nigerian currency is aimed at improving the security features of the currency, enhancing its durability and aesthetics, and combating counterfeiting. Currency redesign is also seen as an opportunity to promote national pride and identity and can have a significant impact on the country's economy and monetary policy. Currency redesign refers to the process of changing the design, security features, and other

characteristics of a country's currency (Akinleye, 2023).

Conversely, experience emanating from other countries signifies that rapid demonetizations might result in large short-term costs, with small enterprises impoverished and vulnerable people likely suffering the most because they are cash constrained and heavily reliant on daily cash transactions. Existing naira notes being phased out over a short period could make things more difficult for households and businesses already facing significant financial pressures from prolonged high inflation, which have recently been exacerbated by external shocks on the price of food and fuel, as well as the severe floods that coincided with the event (Onimisi, 2023).

A financial expert at the Lagos Business School further observed that, in the last 20 years, the money outside the banking system has always hovered between 80 to 85 per cent. So, the claims that there is too much money outside the banking system did not start today, hence, redesigning or printing of currency cannot address that. In addition, the volume of money instruments, such as deposits, bonds, and so on, in the economy far outweighs the physical money supply. Hence, there is no serious correlation between inflation and Naira redesign or printing.

Madu, the chief executive officer of the Centre for the Promotion of Private Enterprise [CPPE] in an interview with the Leadership Newspaper observed that naira redesign or recalling of old naira note will have no impact on inflation. He further stated that physical cash constitutes just about 6.8 per cent of the entire monies in the economy and question how a measure targeted at physical cash can have an overriding impact on the remaining 93.2 per cent of other monies tied to deposits, bonds and so on. The entrepreneur concluded that the move of the apex bank to redesign and print new notes at a time the country needs to cut down excesses was ill timed. The cost of such an action would be outrageous and disproportionate compared to the expected benefits advanced by the CBN.

The accounting firm stated further that although it was expected that the scarcity of redesigned notes, which caused a cash crunch in the economy in January 2023, would stimulate a slowdown in demand-pull inflation, especially given the series of interest rate hikes from the Central Bank (500 basis points since May 2022). This has, however, not happened yet. This indicated a drop in output below effective demand, despite the cash crunch, with some producers of goods and services whose activities were cash based facing challenges purchasing inputs for production or replacing their stock and distributing them across the country.

The persistent increase in general price level in Nigeria in the last two decades has posed a major challenge on monetary management yet a systematic macroeconomic account of the underlying shocks has attracted scant attention in the empirical literature. During the period under review, there has been an increase in the rate of inflation which has led to various economic distortions, a situation whereby the government of a country interferes in the economy using policies such as fiscal and monetary policies, one examples of such policies that led to distortions in the economy is the currency redesign in 2022/2023.

Despite the redesign of the naira which according to Central Bank of Nigeria will curb the rising inflation, Nigeria's annual inflation rate remained high and continued to increase across all categories in 2023. In January 2023 inflation in Nigeria was 21.82%. In March 2023 it moved to 21.91%; 25.80 in August and 27.33% in October 2023. The cash crunch which affected consumer expenditure following the earlier redesign of the naira, doesn't seem to have slowed down inflation yet, despite a 500-basis interest rate hike since May 2022 and a 235 percent decline in cash in circulation. This disturbing trend makes it necessary to undertake a study on currency redesign and inflation in Nigeria: A case study of Yenagoa Local Government Area of Bayelsa State.

The outcome of the study will be of importance to agencies such as the Central bank of Nigeria (CBN), the National Bureau of Statistic (NBS), and the Ministry of Finance because it will help the Central Bank and other agencies to understand the effect of currency redesign policy in Nigeria especially as its concern inflation. This will enable these agencies formulate and conducts its monetary policy to ensure that it supplies the optimum quantity of the redesigned currency for the stabilization of the economy and reduce inflation.

The overall objective of the study is to ascertain the relationship between currency redesign and inflation in Nigeria, using Yenagoa as a case study and to specific examine the relationship between currency redesign and food prices hike in Yenagoa Local Government Area; determine the relationship between currency redesign and persistent increase service cost in Yenagoa Local Government Area of Bayelsa State and to ascertain the relationship between currency redesign and saving in Yenagoa Local Government Area of Bayelsa State.

2. RESEARCH QUESTIONS

The following research questions will guide the study.

• What is the relationship between currency redesign and food price hike in Yenagoa Local Government Area of Bayelsa State?

• What is the relationship of currency redesign and persistent increases in service cost in Yenagoa Local Government Area of Bayelsa State?

• What is the relationship between currency redesign and savings in Yenagoa Local Government Area of Bayelsa State?

3. HYPOTHESES

Ho$_1$: There is no significant relationship between currency redesign and food price hike in Yenagoa Local Government Area of Bayelsa State.

Ho$_2$: There is no significant relationship between currency redesign and persistent increases in service cost in Yenagoa Local Government Area of Bayelsa State.

Ho$_3$: There is no significant relationship between currency redesign and savings in Yenagoa Local Government Area of Bayelsa State.

4. LITERATURE REVIEW

4.1 Currency Redesign Policy in Nigeria

There are adequate indications in the literature on currency redesign policy implementations and restructuring across countries of the world. Currency redesign policy is usually informed by disequilibrium in the macroeconomic fundamentals of countries basically on the basis of poor macroeconomic performance especially hyper-inflation (Nwafor, 2018; Olujobi & Chuba, 2023). Nations redesign and recirculate their currencies due to various reasons. Some countries for instance redesign their legal tenders to prevent currencies' counterfeits. Such redesign develops security of the currencies by keeping counterfeiting low. Another reason for currency restructuring and redenomination is to provide a platform for broad package of economic and political reforms and restoration of credibility of the currency with a view to combating hyperinflationary pressures (Somoye & Onakoya, 2013). Some countries had adopted currency redesign and this policy in the countries had been implemented as far back as 19th century. The Indian government in 2016, redesigned her currencies by reducing the amount of money in circulation through withdrawing and reintroducing the 500 and 1000 denominations of the Indian rupee. Nwachukwu and Nwogu (2023) posited that the effect of the policy may lead to low level of inflation in the future. Currency management may not impact negatively on inflation but the multiplier effect of the policy could have negative consequences in the overall economy (Ochei, 2022). For instance, in some Latin American countries and Africa, the policy might precipitate other negative economic consequences that might defeat the objective of the policy whenever implemented (Ochei, 2022).

Redesigning bank denominations as a measure of currency management has been a long-standing tradition in Nigeria's financial history since independence, and the 2022 Naira redesign effort was a continuation of that practice. After the union of the Southern and Northern Protectorates in 1914, the country was founded as a British colony, and the achievement of independence in 1960 marked a turning point in its history. The leaders of the Nigerian nationalist movement engaged in a fierce struggle that contributed to the achievement of independence, among other things (Crowder, 1978). As part of the nation's independence preparations, the conflict sparked the creation of numerous institutions. The CBN was one of these organizations and was founded in 1959 (Abubakar & Wuam, 2021). The CBN's main responsibility was to create the nation's legal cash. In addition to its other duties, the CBN was charged with preserving Nigeria's foreign exchange reserves, fostering monetary stability, and maintaining sound financial structure. The Central Bank, which issues and controls Nigerian currency, has undergone a transformation that can be largely explained by this. For instance, the CBN Establishment Ordinance/Act, which was initially passed in 1958, had multiple revisions in 1962, 1969, 1991, and 2007 (CBN, 2007).

The CBN Act's Sections 18 and 19 grant the apex bank the authority to, among other things, issue, reissue, and exchange money; remove money from circulation and ensure its safekeeping and destruction; and choose the shapes and designs of banknotes with the President's approval and in accordance with the CBN Board's recommendations (CBN, 2007: 9). For a variety of causes, the CBN had revised, manufactured, and reissued money in Nigeria at various points in the nation's history in accordance with these regulations. When the Central Bank of Nigeria (CBN) was founded in 1959, the Pounds and Shillings (also known as Pounds and Shillings) issued by the West African Currency Board (WACB) were the only legal tender in use. When the CBN started doing business, it redesigned the Pounds and Shillings and used the new notes in place of the old colonial money. However, the revised currency did not much differ from the colonial money. In July 1962, when banknotes and coins were redesigned in accordance with the concept of monetary sovereignty, Nigeria made its first declaration of independence and national identity through its currency (Nduwugwe, 2007).

Six years later, the Federal Military Government (FMG), led by Lieutenant Colonel Yakubu Gowon, recreated Nigerian currency amidst the chaos of the Nigerian Civil War. The Nigerian military engaged in a bloody military conflict with the soldiers of the former Eastern Region of Nigeria, which Lieutenant Colonel Chukwumeka Odumegwu Ojukwu unilaterally proclaimed the Republic of Biafra. The war, which lasted for more than 30 months (1967–1970), caused enormous loss of life and property throughout the nation (Adejo, 2008). In order to undercut the economic foundation of the newly declared Biafran state, the FMG proposed a currency redesign in January 1968 as a war strategy and a way to limit the crisis. The main goal of the currency redesign at the time was to make all of the banknotes that the Biafrans had accumulated to pay for the war and run their

government unusable. As a result, the CBN only altered the colors of current denominations. For example, the color of the £5 coin was altered from blue/purple to mid-brown, the color of the £1 coin from red to dark brown, the color of the 10s coin from green to dark blue, and the color of the 5s coin from purple to green (Nduwugwe, 2007).

As was already said, Nigeria started moving toward monetary sovereignty in 1962. The Decimal Currency Committee was established in that year, and in 1964, the Committee turned in its final report. The Committee advocated decimalizing the Nigerian money in addition to rebranding and redesigning it to make it more revolutionary. This wasn't put into practice until 1973, nine years later. When the Head of State, Yakubu Gowon, then a Major General, stated that decimal money would be implemented in 1973, Nigerians could see the shift coming. The Naira and Kobo, which the FMG introduced in 1973, could be considered the real currency of Nigeria as a nation state. In terms of name and design, this was Nigeria's first kind of currency. Additionally, it used decimal money. By using two units that differ by a ratio of 100, the decimalization of currency denomination was a method of changing from a traditional currency denomination to a "decimal" system. Nwoba (2010).

The major unit of currency was the naira (N), which was equal to the previous ten shillings. The minor unit was the kobo, where one kobo was equal to one hundred (100). The word "Naira" was drawn from the name of the nation, and the minor unit, "Kobo," was how Nigerians commonly referred to the British coin known as the "one penny" (Fayemiwo, 1991). The Central Bank of Nigeria (CBN) issued banknotes in four denominations when the Naira and Kobo were first introduced in 1973. They were N1 (one Naira), N5 (five Naira), and N10 (ten Naira), respectively. Additionally, the CBN introduced coins with the values of 1/2 kobo, 1 kobo, 10 kobo, and 25 kobo (Chuckwu, 2010).

The infamous canjin Buhari, introduced in 1984 as a result of the military administration of General Muhammadu Buhari, was the next alteration to the Nigerian currency. The dictatorship started a fast and quick currency reform effort against the backdrop of inflation, a budget deficit, and corruption that had their roots in the 1970s and early 1980s oil boom and glut. They were, respectively, N1 (one Naira), N5 (five Naira), and N10 (ten Naira). The CBN also released coins with the values of 1/2 kobo, 1 kobo, 10 kobo, and 25 kobo (Chuckwu, 2010). The next change to the Nigerian currency was the notorious canjin Buhari, which debuted in 1984 as a result of General Muhammadu Buhari's military rule. Inflation, a budget deficit, and corruption that had their roots in the oil boom and glut of the 1970s and early 1980s were the backdrop against which the dictatorship launched a swift and aggressive currency reform drive. However, on the flip side, the 1984 currency redesign rendered a large number of business owners bankrupt, particularly in the North where the majority of people's funds were outside the banking system (Abubakar, 2016).

While many Nigerians were still struggling to recover from the bad effects of the 1984 currency redesign, the CBN hired Thomas De La Rue Limited in 1989 to conduct a thorough evaluation of the Nigerian currency. This was done as part of the apex bank's efforts to maintain ongoing control over the monetary system in Nigeria. The company suggested revamping all N5, N10, and N20 banknotes as well as introducing new N50, N100, and N500 notes as well as new 10k, 5k, N1, N5, and N10 coins (Abubakar, 2016). However, these suggestions were not fully carried out; the CBN could only adopt N50 in 1991. The new denomination, which was light blue in color and featured images of men from the three main ethnic groups in the nation—Yoruba, Hausa, and Igbo—became the currency with the highest value. In terms of coinage, the 1991 redesign saw the transformation of the 50k and N1 into coins and the change in the appearance of the 10k. The outdated five kobo (5k) was discarded. Although the government argued that the introduction of the N50 would strengthen the currency system's effectiveness because of an increase in both public and private spending, many Nigerians disliked the 1991 currency adjustments. Many people believed that the introduction of a higher denomination and the demonetization of a smaller one was intended to lower the value of the Naira, which was one of the main goals of the structural adjustment program that the then-FMG led by General Ibrahim Badamasi Babangida started in 1986 (Abubakar, 2016).

The CBN took yet another step toward modifying the Nigerian currency towards the middle of the 1990s. This, the socalled "Millennium Package," was put together in response to the nation's growing population and economic activity. The N100 note was introduced in December 1999, the N200 note in November 2000, the N500 note in April 2001, and the N1000 note in October 2005 as a result of this program (Bello, 2007). The three largest banknote denominations in the nation continue to be N200, N500, and N1000. The CBN started another revision in May 2007 to redesign the N5, N10, N20, and N50. The process started in 2007 with the printing and distribution of N20 polymer notes, and it wasn't finished until 2009 with the equal printing of N5, N10, and N50 in polymer. The objective was to increase the durability and anticounterfeiting resistance of the currency. Between 2007 and 2009, the redesign of currency included changes to size, color, details, and security measures in addition to the change from paper to polymer. However, their colors stayed the same (Nwaoba, 2010). At the same time, a new N2 coin was introduced, while N1 and 50k coins were redesigned and reintroduced. 1/2k and 25k coins were also withdrawn from circulation.

As Nigeria was about to celebrate its 50th Independence Anniversary in 2010, the N50 commemorative note was launched by President Goodluck Jonathan on 29th September, 2010 (CBN, 2010). A similar initiative was replicated in 2014 when a redesigned N100 note was introduced to commemorate one hundred years of Nigeria's existence as a nation, from 1914 to 2014. The note was created with improved security features in order to deter counterfeiting. It was introduced on November 12 and went into circulation on December 19. The introduction of these commemorative notes did not result in the removal of the N50 and N100 notes that were already in circulation. They moved at the same time (Abubakar, 2016)

In 2023, new banknotes were introduced to limit counterfeit currencies, stimulate a cashless economy, reduce the large quantity of dirty banknotes that was circulating in the economy as well as reducing illegal financial transactions. The new currencies policy can also address the high amount of currency outside the deposit money banks. The CBN Act of 2007 stipulates that CBN shall oversee and administer all monetary and financial sector policies in Nigeria (Somoye & Onanuga, 2013). This is to ensure monetary and price stability; to issue legal tender currency in Nigeria; maintain external reserves to safeguard the international value of the legal tender currency; promote a sound financial system in Nigeria; and act as a banker and provide economic and financial advice to the federal government. The Section 18 (a) & (b) and Section 20 (3) of the Act empower the CBN to print, redesign, destroy, and re-distribute currencies.

The redesigning of the currency will help curb the hoarding of currency against corrupt practices in Nigeria where some people keep large sums of money in soak-aways, overhead tanks and unoccupied buildings. The CBN also instituted a withdrawal policy that restricted withdrawals from ATMs, point-of-sale devices, and over-the-counter locations to just N100,000 per week for individuals and N500,000 for corporate organizations, but it was increased to N500,000 for individuals and N5,000,000 (CBN, 2022; Fate Foundation, 2023). This was later reduced to N10,000 and N5000 in some instances.

The CBN directed deposit money banks to stop handing out new, redesigned notes over the counter and to reload ATM machines instead to circulate at the beginning of this year (Fasua, 2023). However, because there is an insufficient supply of new notes, banks are left with old notes that they must load into ATM machines. This is despite the announcement that all Nigerians should deposit old notes as they will no longer be accepted as legal tender as of January 31. The deadline was later postponed to December 31, 2023 by the Supreme Court of Nigeria.

The National Bureau of Statistics reports that in January 2023, Nigeria's inflation spiked to 21.82 percent.

The Central Bank of Nigeria is redesigning the naira at the same time as this. The inflation rate for January was 0.48 percentage points higher than the 21.34 percentage point reading for December 2022 (Punch, 2023). Lack of the newly designed notes led to an artificial inflation that increased prices for goods and services, including the purchase of naira notes, rather than reducing inflation (Otitoju et al, 2023).

4.2 Inflation

Inflation is a rise in prices, which can be translated as the decline of purchasing power over time. The rate at which purchasing power drops can be reflected in the average price increase of a basket of selected goods and services over some period of time. The rise in prices, which is often expressed as a percentage, means that a unit of currency effectively buys less than it did in prior periods. Inflation can be contrasted with deflation, which occurs when prices decline and purchasing power increases.1 Inflation in economics is a rate or an indicator showing that the value of money depreciates with time. In simple words, expensive products and services today might become more expensive tomorrow. For example, the price of 10gram gold in 1990 was $40. However, the same quantity of gold today is available at $576.

Inflation, according to Wily Julitawaty (2015), is the increase in general prices of commodities. The increase in the price is of one or two items cannot be called inflation unless the increase is widespread and the result of the increase affected the price of other commodities. Inflation is persistent, which means that it cannot be eliminated, and it will exist as long as there is economic growth. Once inflation reaches or exceeds 50% per month, or more than 1% per day, it is no longer called inflation, but hyperinflation. Hyperinflation in this case means that the price level will massively increase. There will be inflation if there is an increase in price of commodities as a whole because inflation can influence the price of commodities. Should there be an increase in some commodities for a short term, then it cannot be called inflation because inflation is calculated for at least a month.

Low and stable inflation has often been associated with more stable output and employment and more rapid output growth and investment. Low and stable inflation increases the transparency of relative price changes, provides confidence for long-term savers and investors, protects the purchasing power of household income and wealth, and enhances financial stability (Annexes 1 and 2). By contrast, economies that have experienced high inflation have suffered significantly lower growth (Kremer et al., 2013). Extended periods of chronically high inflation, often in Latin America, have frequently ended in large output losses during stabilization programs, or even balance of payments crises. Extremely low inflation, however, such as has prevailed in many advanced economies over the past decade, may make it difficult

for central banks to lower real short-term interest rates sufficiently to provide the requisite stimulus to demand, given that the lower bound on nominal rates is close to zero. Extremely low inflation may therefore limit the room for maneuver of conventional monetary policy and lead central banks to use unconventional measures, including large-scale purchases of longer-term financial assets, to reduce longer-term rates. Such difficulties in implementing expansionary monetary policy, in turn, increase the risk of sliding into a self-reinforcing period of deflation that raises debt burdens and further depresses activity. Extremely low inflation may also hinder the adjustment of absolute and relative real wages, because of the general downward rigidity of nominal wages.

4.2.1 Inflation Indicators

Inflation has always been followed by increase in price, even if the price level fluctuates; it still shows that there is a tendency of increase in prices in not only 1 product, but all commodities. There are several macroeconomic indicators that can be used to measure inflation, for example Consumer Price Index (CPI), Producer Price Index (PPI), and GDP Deflator.

i. Consumer Price Index

CPI represents the changes in price level of commodities that are specifically used to track the progress of inflation in economy purchased by consumers. The formula to calculate CPI is as followed:

Price of the current year includes the average of all commodities in the period that needs to be calculated, while the base year, consists of the average of all commodities in the base period. In order to calculate inflation, the formula below will explain it:

In order to get inflation rate, there needs to be CPI of the current year and CPI'(CPI from the previous year). The result from the difference in the CPI, divided by the CPI', and the result would be the inflation rate of the current year.

Not only CPI can be used to calculate inflation, but it can also be used to calculate economic growth through GDP in the form of GDP Growth. According to Mahmoud, Limam Ould Mohamed (2015), that researched the connection between CPI and GDP Growth and found out that there is a positive and significant relationship between the two. It also referred that moderate inflation will increase productivity and output level.

ii. Producer Price Index

Unlike consumer price index that is looking at the price in the perspective of the consumer, producer price index is observed in the perspective of the producer. In order to calculate it, the formula used is as follow:

To calculate PPI, the aggregate quantity of commodities of the year, aggregate price of the base year, and aggregate price of commodities of the year will be needed. In order to calculate inflation, the same formula from calculating inflation using CPI can be applied to PPI.

iii. GDP Deflator

By using Nominal GDP and Real GDP, multiplied by 100, GDP deflator can be calculated. In order to calculate inflation using GDP Deflator, the same formula of calculating inflation using CPI can be applied into GDP Deflator.

To calculate inflation, the GDP Deflator is the GDP Deflator of the current year, and GDP Deflator-1 is the GDP Deflator of the previous year or base year.

By looking at the explanation from above, it can be assumed that there is a deep relationship between economic growth and GDP, and inflation with GDP. An increase in inflation rate will affect the price of commodities, and the effect on price would influence the demand and supply of the goods because of the economy cycle between consumer and producer that involves the purchasing of commodities and production of commodities. Inflation rate would reduce the demand for commodities.

4.3 Theoretical Framework

Quantity Theory is the oldest theory of inflation, but this theory (which has recently been perfected by the University of Chicago economists' group) is still very useful in explaining the inflation process in modern era, especially in developing countries that, this theory highlights the role of the inflation process of (a) the amount of money in circulation, and (b) the psychology (hope) of the public regarding the rise in prices (expectations). The essence of this theory is as follows:

a) Inflation can only occur if there is an increase in the volume of money in circulation (whether in the form of an increase in currency or an increase in demand deposits, it does not matter). Without an increase in the money supply, events such as crop failure will only raise price temporarily. Increasing the amount of money is like "fuel" for inflationary fire, if the amount of money is not added, inflation will stop by itself, whatever the initial causes of the price increase;

b) The rate of inflation is determined by the increase of the amount of money circulation and by the psychology (expectation) of the public regarding future price increases. There are 3 possible conditions. The first situation is if people do not (or have not) expected prices to rise in further months. In this case, most of the increase in the amount of money circulation will be received by the public to increase its liquidity (namely enlarge the Cash post in the balance sheet of the society members). This means that a large portion of the increase in the amount of money is not spent on purchasing goods. Furthermore, this means that there will be no significant increase in demand for goods, so there will be no increase in the price of goods (or prices may rise very little). Under those circumstances, the increase of the amount of money circulated is 10% followed by increases of prices such as 1%. This situation is usually encountered when inflation

is just the beginning and society is still not aware that inflation is ongoing. The second situation is that society (based on experience in previous months) begins to realize that there is inflation.

People are starting to expect that the increase of the price of increasing the amount of money in circulation will no longer be accepted by the public to increase their cash post, but will be used to buy goods (enlarge the assets of the items in the list). This is done because society tries to avoid losses arising if they hold cash. The increase in price (inflation) is nothing but a "tax" on cash balances held by the public, because money is increasingly worthless. And people try to avoid this "tax" by turning their cash balances into goods. Individual people can adjust in their balance sheets like this, by spending their cash to buy goods. In terms of society as a whole, this means that there is an increase of goods demand. The next consequence is the increase of those goods price. If society expect prices to rise in the future at the rate of inflation in the past months, then the increase in the amount of money in circulation will fully translate into an increase of goods demand. In this case an increase in the amount of money will be followed by an increase of good, for example there will be an increase amounted 10% followed by an increase of goods price amounted 10% too . This situation is usually found when inflation has been running for a long time, and people have enough time to adjust their attitudes to the new situation. The third situation occurs at a more severe stage of inflation, namely the hyperinflation stage. In this situation, people have lost confidence in currency value. The reluctance to hold cash and the desire to spend it to buy goods as soon as the cash is received at hand becomes increasingly widespread among the public. People tend to expect things to get worse: The inflation rate for further months is expected to be even greater than the rate of inflation in previous months . This situation is marked by the increasingly rapid circulation of money (increasing velocity of circulation). For example, in this situation an increase in the amount of money in circulation amounted 20% will result in an increase in prices greater than 20%. This kind of inflation had occurred in Indonesia during 1961 - 1966 period. Hyperinflation destroyed not only the monetary economic joints but also the socio-political joints of society. The new structure of society will emerge to replace the old structure.

4.4 Empirical Literature

Dada (2023) investigates the effect of currency redesign policy implementation on industrial performance in Nigeria. The study adopted survey research design using Google Form and Computer Aided Personal Interviewing (CAPI) tool for data collection, which were carried out in the months of February and March 2023. A total of 514 micro, small, medium and large-scale enterprises (MSMLEs) were randomly selected across some selected industrial sectors in five states within the six geo-political zones and Federal Capital Territory, Abuja, Nigeria. A response rate of 59.53% at a reliability level of 95% was recorded. The study revealed that the currency redesign policy implementation has negative short-term effect on industrial performance. The effect includes weak access to cash flow, vulnerable economic hardship, inadequate marketing/loss of customers; and low returns on business investment. In the long run, the study revealed the positive effect of the policy as leading to reduced currency counterfeiting, encouraged a cashless economy, addressing cash hoarding that has led to reduction in the incidences of kidnapping and terrorism as well as strengthen the Naira against the US dollar in the long run term. The result also revealed that the policy has a significant difference ($X_2 = 15.3$, $p \leq 0.05$) on enterprise performances by scale from small to large. The paper concludes that the currency redesign policy implementation has both negative and positive implications for industrial performance. The paper recommends the need to make Nigerian monetary policy implementations more industrially effective and friendly in the future. Moreso, monetary policy should be set in such a way that the objective it wants to achieve is clearly and transparently defined in response to the dynamics of the domestic and global economic developments for industrial growth in Nigeria.

Akinleye (2023) examines the policy implications of currency redesign on the Nigerian economy. Using both qualitative and quantitative analysis, the study shows that currency redesign can have a significant impact on inflation, exchange rate, and monetary policy. The paper also explores the challenges associated with currency redesign, including the cost of production, logistics, and public perception. The findings of the study suggest that policymakers should carefully consider the potential benefits and drawbacks of currency redesign before implementing it. In conclusion, the paper provides insights and recommendations that can guide policymakers in making informed decisions on currency redesign in Nigeria and other developing countries.

Olujobi and Chuba (2023) investigate the economic implications and justification for the adoption of the policy of currency redesign by the monetary authority in Nigeria. In order to fulfil this objective, based on the available data over the period spanning 1973 to 2022. A panel data analysis was employed for the estimation in which preference was shown for the fixed effect over the random effects as suggested by the Hausman test, with the panel unit root test, which enables us to test for the stationary of the variables involves. This is followed by the panel co-integration test, which makes it possible to determine the long run relationship between money supply and the CBN policy of currency redesign. Thirdly, we then proceed to present the result of the scientific enquiry using Pedroni residual cointegration test estimation techniques to test the

macroeconomics implications. The findings of the study show that currency redesigning by the CBN is another means to reduce excess of money supply in circulation and reinforced more monetary policy effectiveness in curbing inflationary pressure and enhanced the exchange rate policy of the CBN. The study recommends more stabilization focus of pegging the exchange rate of dollar to naira, Harmonization of both monetary and fiscal policies effectiveness of the government.

Olujobi (2022) investigate the economic implications and justification for the adoption of the policy of currency redesign by the monetary authority in Nigeria. In order to fulfil this objective, this paper reviewed the impacts of similar policy on the Nigerian economy over years by employing a descriptive approach of analysis using percentages, graphs and tables. The results from this study show that such policy is inflationary induced and it causes deviation of actual inflation and money supply from target level as well as results to excessive supply of money, the study also examine the influence of monetary policy on the new currency redesigned with the key objectivity of its effect on small and medium scale enterprises (SMEs) and the proposed benefits it might forged, it effects on the generality of the Nigeria economy in terms of capital accumulation, wealth creation, it has been well observed that government in most developing countries of the world have redesigned their currencies to suit their prevailing economies situations, The findings of the study shows that currency redesigning by the CBN is another means to reduce excess of money supply in circulation and reinforced more monetary policy effectiveness in curbing inflationary pressure and enhanced the exchange rate policy of the CBN and more liquidity. The study recommends more stabilization focus on pegging the exchange rate of dollar to naira, Harmonization of both monetary and fiscal policies effectiveness of government, it will go a long way in ensuring that a lot of naira notes circulating outside the banks are crowded in, by increasing the deposits in the commercial banks, it means the banks will have more money to lend which may reduce interest rates, capital flight and crowd in more investments prospects.

Furthermore, Hamori (2008) empirically analyzed the money demand function in the Sub-Saharan African region using a non-stationary panel data analysis for 35 countries based on annual data from 1980 to 2005. His findings revealed that there exists a cointegrating relationship of the money demand function in the Sub-Saharan African region over the period under study regardless of whether M_1 or M_2 is used as a measure of money supply. Similarly, Narayan and Seema (2009) studied the demand for money function from a panel of 5 South Asian countries using data spanning 1980 to 2000. They found that there exists an equilibrium relationship between money demand and its determinants both for individual countries and for the

panel. Using diagnostics testing tools, they found that the money demand functions of all these economies are stable except for Nepal.

5. METHODOLOGY

The study employed the survey research design. It is both evaluative and causal-comparative in nature. It examines opinion and attitudes of a sample population over certain variables. In other words, it involves collecting data with the use of questionnaires from a wide range of persons. A survey helps reveal the present situation or condition of a problem, so that solution can be advanced.

The population of the study comprised all adult citizen in Yenagoa Local Government Area of Bayelsa State. The study adopted the INEC (2023) registered voter population of 218,394. The population also includes proprietors of small and medium enterprise in the study area. This study applied the accidental sampling technique with the aid of well-structured closed-ended questionnaires. The accidental sampling, also known as convenience sampling or grab sampling is a type of non-probability sampling, which doesn't include random selection of participants. It is used mostly when you cannot get the list of all members of the population.

The sample size for the study was determined using Taro Yamene formula for selecting sample size for a known population was used to determine the study sample size. The formula is stated as follow.

Where   n = sample size
              N = population size
              e = Margin of error
              1 = constant

The formula gave a sample size of 399 participant. The questionnaire titled "Effect of Currency redesign on Inflation Questionnaire (ECRIQ)" was used in data gathering. The researcher administered copies of the questionnaire to the selected respondents with the help of research assistants. The assistants were drawn from among members of the study areas in Yenagoa Local Government Area. The use of assistants who are members of the study area helped immensely in reaching all the respondents and fast-tracking the administration and collection of the questionnaire. However, only 357 questionnaires were correctly filled and returned and was used for data analysis. Descriptive statistical technique was used to analyze the various items of the questionnaire. These include frequencies and means. On a four-point scale, the median used was 2.5. Any response that is greater than the median score of 2.5 was accepted while all response less than the median score of 2.5 were rejected. Pearson Product Correlated Coefficient (PPMC) was used to test the hypotheses.

6. RESULTS AND DISCUSSION

In order to conduct the study, a total of three hundred and sixty-five (365) questionnaires were constructed and administered to members of the public in Yenagoa Local Government Area, Bayelsa State. A total 357 questionnaire were successfully completed and returned, yielding a response rate of approximately 98%. The analysis was thus based on a total of three hundred and fifty-seven (357) valid questionnaire copies obtained from the respondents of the sampled population for the study.

6.1 Data Presentation

Socio-Demographic Analysis of Respondents' Responses

Table 1
Distribution of Respondent by Gender

Gender	Frequency	Percent
Male	181	50.7
Female	176	49.3
Total	357	100.0

Source: Author's Fieldwork, 2024

Table 1 showed the distribution of respondents with respect to gender. The result indicated that majority of the respondents were male. Out of the 357 respondents, 181 were male and this represents 50.7 percent of the total respondents while 176 or 49.3 percent were female.

6.2 Research Questions

Research Question One

What are the effects of currency redesign on food prices in Yenagoa Local Government Area of Bayelsa State?

Table 2
Mean response score of respondents on currency redesign and food prices

Items	Mean	Std. Deviation	Decision
The recent currency redesign of the nation's currency brought down food prices	2.2	1.092	Disagree
The redesign of the increased the purchasing power of Yenagoa residence	2.0	.862	Disagree
Currency redesign enhanced food surplus in the market	2.2	.998	Disagree
The redesign of the currency makes food affordable for everyone	2.1	.947	Disagree
Currency redesign policy minimized the cost of food production.	2.1	.929	Disagree
Grand Mean	2.1	0.9656	Disagree

Source: Author' computation using SPSS 22
N = 357
Cut-off mean = 2.50

The data represented in Table 4 represent the effects of currency redesign on food prices in Yenagoa Metropolis. The result indicates that \the recent currency redesign did not bring down food price inflation. The result in Table 2 revealed that items 1, 2, 3, 4 and 5 had mean score of 2.2, 2.0, 2.2, 2.1 and 2.1 respectively which are all less than the cut-off mean of 2.5. On the whole, the Grand mean of 2.1 was also less than the cut-off mean of 2.5. This implies that the respondents agreed that currency resign has not caused a reduction in food price. Pearson Product Moment Correlation coefficient (PPMC) analysis of significance is further conducted to authenticate if the relationship is significant or not (see Table 3).

Research Question Two

What are the effects of currency redesign on service cost in Yenagoa Local Government Area of Bayelsa State?

Table 3
Mean response score on currency redesign on service cost

Items	Mean	Std. Deviation	Decision
The cost of transport service dropped as a result of the currency redesign	2.4	1.069	Disagree
Point of Sale operator reduced charges of their service due to the currency redesign	1.9	1.051	Disagree
Utility cost dropped due to government redesign of the nation's currency	2.4	1.188	Agree
There is a remarkable drop in the cost of hospitality service owning to the currency redesign.	2.3	1.032	Agree
Bank service charge reduced owing to the currency redesign	2.4	1.087	Agree
Grand Mean	2.3	1.0854	Disagree

Source: Author' computation using SPSS 22
N = 357
Cut-off mean = 2.50

The data presented in Table 3 display the mean score response of respondents on the effects of currency redesign on service cost in Yenagoa, Bayelsa State. The results revealed that the respondents rejected items 6 – 10. Items 6 – 100 had mean score of 2.4, 1.9, 2.4, 2.3 and 2.4 respectively and were all less than the criterion mean of 2.5 implying the currency redesign has not reduced service cost inflation. The grand mean of 2.3 which is less than the criterion mean of 2.5 shows that it was the general opinion of the respondents that currency redesign has not help fight inflation in the service sector. The Pearson Product Moment Correlation coefficient (PPMC) analysis is further carried out to confirm if the relationship is significant or not (see Table 4).

Research Question Three

What are the effects of currency redesign on savings in Yenagoa Local Government Area of Bayelsa State?

Table 4
Mean Score Response on the effect of currency redesign on savings

Items	Mean	Std. Deviation	Decision
Resign of the nation's currency has reduced excessive spending by residents	2.5	1.060	Disagree
Currency redesign has prompt the residents of Yenagoa to to always plan for the future	2.4	.931	Disagree
The currency redesign policy has brought surplus income for the people	2.3	.994	Disagree
Currency redesign has eliminated linkages in personal spending	2.4	1.181	Agree
Individuals now restrict themselves to purchase of vital items	2.4	.998	Disagree
Grand Mean	2.4	1.0328	Disagree

Source: Author' computation using SPSS 22
N = 357
Cut-off mean = 2.50

The data presented in Table 4 reveals the mean score of respondents on the effect of currency resign on savings among Yenagoa residents in Bayelsa State. The result shows that for items 12 – 15 the mean score was, 2.4, 2.3, 2.4and 2.4, which were less than the cut-off mean score of 2.5. However, item 11 indicated that currency redesign influence savings. On the whole, the grand mean of 2.4 indicated that the respondents agreed that currency redesign does not encourage savings in Yenagoa Local Government Area of Bayelsa State. The Pearson Product Moment Correlation coefficient (PPMC) analysis is further conducted to ascertain if the relationship is significant or not (see Table 5).

Hypotheses Testing

Hypothesis One
There is no significant relationship between Currency redesign and food cost in Yenagoa Local Government Area of Bayelsa State.

Table 5
PPMC Test of Significance on the relationship between currency redesign and food prices

		Currency edesign	Food prices
Currency redesign	Pearson Correlation	1	-.175**
	Sig. (2-tailed)		.001
	N	357	357
Food prices	Pearson Correlation	-.175**	1
	Sig. (2-tailed)	.001	
	N	357	357

**. Correlation is significant at the 0.01 level (2-tailed).

The result presented in Table 5 shows that, the p-value of the Pearson Product Moment Correlation Coefficient (PPMC) analysis is .001. This is less than the standard alpha value is .05. Since p<0.05 the null hypothesis cannot be accepted. This implies that, the alternative hypothesis which states that, there is a significant relationship between currency redesign and food prices in Yenagoa LGA, Bayelsa State is upheld. Meanwhile, the result indicated that the relationship is negative. The effect includes weak access to cash flow, vulnerable economic hardship, inadequate marketing/loss of customers; and low returns on business investment. reports that currency redesign policy implementation has negative short-term effect on industrial performance.

4.3.2 Hypothesis Two
There is no significant relationship between Currency redesign and service cost in Yenagoa Local Government Area of Bayelsa State.

Table 6
PPMC analysis of significance of the relationship between currency redesign and service cost

		Currency redesign	Service cost
Currency redesign	Pearson Correlation	1	-.254**
	Sig. (2-tailed)		.000
	N	357	357
Service cost	Pearson Correlation	-.254**	1
	Sig. (2-tailed)	.000	
	N	357	357

**. Correlation is significant at the 0.01 level (2-tailed).

The result in Table 6 revealed that the p-value (.000) is less that the standard alpha value of 0.05, which means that the correlation between currency redesign not only negative, it is statistically significant. Therefore, the null hypothesis that state that there is no significant relationship between currency redesign and service cost is rejected at 0.05 level of significance. The alternate hypothesis is that a significant relationship exists between currency redesign and service cost. Dada (2023) further report that the effects of currency redesign includes weak access to cash flow, vulnerable economic hardship, inadequate marketing/loss of customers; and low returns on business investment.

Hypothesis Three
There is no significant relationship between Currency redesign and savings in Yenagoa Local Government Area of Bayelsa State.

Table 7
PPMC analysis of significance on the relationship between currency redesign and savings

		Currency design	Savings
currency redesign	Pearson Correlation	1	-.107*
	Sig. (2-tailed)		.044
	N	357	357
Savings	Pearson Correlation	.107*	1
	Sig. (2-tailed)	-.044	
	N	357	357

**. Correlation is significant at the 0.05 level (2-tailed).

The data presented in Table 7 reveals that, the Pearson Product Moment Correlation Coefficient (PPMC) analysis is significant at 0.05 alpha level. Hence the null hypothesis which states that, there is no significant relationship between currency redesign and savings in Bayelsa State cannot be sustained. This means that the alternative hypothesis which states that, there is a significant relationship between currency redesign and savings Yenagoa, Bayelsa State is accepted. The relationship is however negative.

The study investigated the effect of currency redesign on inflation in Yenagoa Local Government Area of Bayelsa State. The objectives of the study are to examine the effect of currency redesign on food prices, service cost and savings. Based on the set objectives of the study, three research questions and three hypotheses were formulated for the study. The survey design was used in the study while the sample comprised 357 respondents. A structured questionnaire containing 16 items was use as instrument for data collection and descriptive statistical tool and Pearson Product Moment Correlation statistics were used for data analysis and test the hypothesis. Summary of the findings is presented beloow:

• Currency redesign has a negative but significant relationship with food prices.

• Currency redesign has a negative but significant relationship with service cost.

• Currency redesign has a negative but significant relationship with savings.

7. CONCLUSIONS

Over the years, the objectives of monetary policy have remained the attainment of internal and external balance of payments. However, emphasis is on techniques and instruments to achieve those objectives have changed over the years. The study on the effect of currency redesign on inflation in Yenagoa has been carried out and the conclusion drawn is that currency redesign has negative effects on inflation in Yenagoa Local Government Area, Bayelsa State.

8. RECOMMENDATIONS

The following recommendation steam from the findings of the study.

• Government should adequate food security before carrying out future redesign of the currency.

• Adequate and long-term planning must be undertaken before embarking on currency redesign in the country to avoid unnecessary hardship for the Nigerian people.

• There is need for the old and new currency to be in circulation to ensure that the new currency is very available before total withdrawal of the old currency. This will forestall the cost of currency purchase that Nigerian experienced in the last currency swap policy.

• Government should ensure proper monitoring of banks to avoid black market sale of the country's currency.

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