

CURRENCY SUBSTITUTION ON NON-PERFORMING LOANS IN NIGERIA: THE IMPACT ANALYSIS

Paul Obiora James OKINO

Department of Banking and Finance, IMT-Enugu

paulobiorajames@gmail.com, obiorapaul@imt.edu.ng

Abstract

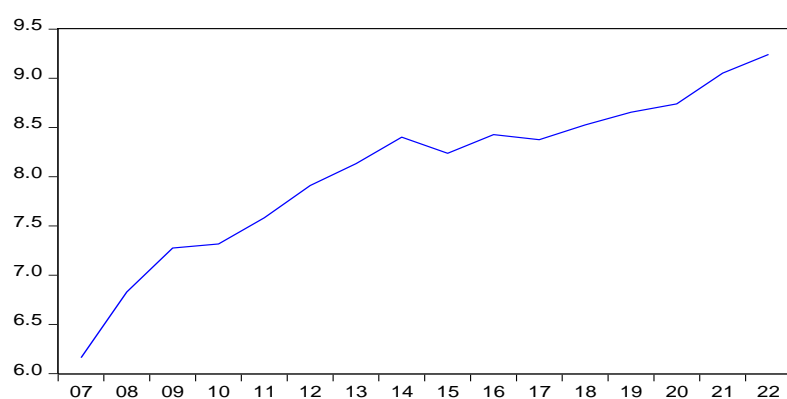
Currency substitution is a phenomenon. It is the preference of local residents to desire foreign currencies above their national currency. This is possible where the national currency fails to perform effectively to a great extent the traditional functions of medium of exchange, units of account and store of value. The increase in the choice by the economic agents is suspected to have impact on non-performing loan profile in Nigeria with the recognition of structural breaks within the study period of 2007 – 2022 (16 years) hence the research interest. The researcher adopted the autoregressive distributed lag (ARDL) model to execute the study interest with the addition of the pre and post estimation techniques to fine tune the distributional properties. The study found that foreign currency deposits (FCD) had a negative and statistically significant influence on the non-performing loan ratio (NPLR), which signified that currency substitution had a weak and non-direct but significant impact on non-performing loan profiles in the country, evidenced from the negative consequences of change of choice by economic agents to switch from local currency holdings to foreign currency holdings. And further point that there exist other economic variables that influence the non-performing loans. The study recommended that government should create policies that would promote the private and SME sectors to function so as to repay their maturing credits as they fall due.

Keywords: *Currency Substitution, Non-Performing Loans, Structural breaks, Autoregressive Distributed Lag Model.*

1. Introduction

In a world where national currencies are expected to be held at highest regards because of their attributes (otherwise perceptions) to happiness, stability, and development on economic agents, instead are held with mixed feelings. National currencies are legal tenders approved by the various monetary authorities to function primarily as (a) medium of exchange (b) store of value and (c) units of account. These currencies are either in fiat or recently crypto/ digital or jointly used in the economy. Therefore, where national currencies of some economies fail to function optimally on the mentioned functions, it would result in change of choice (switching currency preferences) of national currency holdings by economic agents; hence the term “**currency substitution**”. Currency substitution is defined as the use of foreign currency (direct currency substitution-two or more currencies) and foreign currency denominated bonds

(indirect currency substitution) by domestic residents (McKinnon, 1982 in Viseth, 2001). Currency substitution is also a situation in which foreign money substitutes for domestic money in its three traditional roles, as medium of exchange, store of value, or unit of account (Calvo & Vegh, 1992). In addition, currency substitution is the ability of domestic residents to switch between domestic and foreign fiat currency (Khan & Ramirez-Rojas, 1986). Currency substitution can be thought of as *symmetrical and asymmetrical*. Symmetrical currency substitution is where domestic and foreign residents hold both domestic and foreign currencies (evident from developed economies), while asymmetrical currency substitution is where domestic residents hold domestic and foreign currencies but foreigners do not have a demand for domestic currency (evident amongst developing and transitional economies) (McKinnon 1985 in Viseth, 2001). In Nigeria, asymmetrical currency substitution is the case. The existence of currency substitution (CS) and preference by the citizens of a country, is an indication that the national (local) currency has failed to effectively perform its functions to a greater extent, due to some underlying macroeconomic imbalances caused by inflation, continued expectations of depreciation or volatility of values of local currency, weak policy-making institutions, political uncertainties (bad government), etc. (Ajibola, Udoette, Muhammad, & Anigwe, 2020; Doguwa, 2014; Mendoza, 2002; Viseth, 2001; El-Khafif, 2002). And these have been on the increase in the country despite strategic plans from the Central Bank to stabilize the local currency, Naira, and the financial system. Some of these economic measures are the Structural Adjustment Plan (SAP) of 1986, the bank recapitalization policy of 2004/2005, the banking system bailout of 2009/2010, the microfinance policy of 2006, the millennium development goals (MDGs) programme of 2000, the national economic empowerment and development strategies (NEEDS) of 2004, the sustainable development goals (SDGs) of 2015, the re-classification of bank licensing of 2015, the adoption of various exchange rate regimes, anchor-borrowers programme of 2015, finance bill of 2019, the introduction of e-naira-central bank digital currency (CBDC) of 2021, etc.,. Despite those programmes, the growth of interest in foreign currency holdings/ deposits have intensified amongst economic agents and has continued (see graph 1).

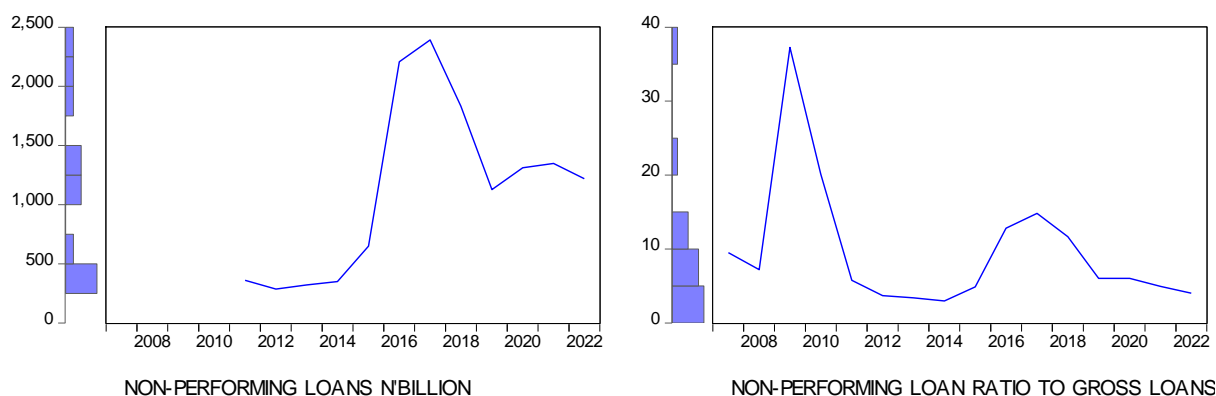


GRAPH I: FOREIGN CURRENCY DEPOSIT

Source: CBN Statistical Bulletin, 2022

In March 2021, the CBN introduced the Naira 4 Dollar Scheme as an incentive for senders and recipients of international money transfers in order to promote price stability through currency conversion and reduce foreign currency holdings in the country (Otitoju, Sunday, Abiola, & Abugu 2023; www.cbn.gov.ng/documents/circulars.....).

These macroeconomic imbalances have created gross effects on the economic agents who are actually the target recipients of the burdens of currency substitution, most especially, the non-performing loan profile (NPL). The non-performing loans are irregular loans from which interest and principal amount becomes due for a specific period. A loan is non-performing when repayments of interest and principal are past due by 90 days or more, or interest payments equal to 90 days or more have been capitalized, refinanced, or delayed by agreement, or payments equal less than 90 days overdue, but there are other good reasons to doubt that payments will be made in full (IMF Guide, 2004). Overtime, loan facilities by banks have faced chronic repayment challenges from delinquent debtors, and so banks have suffered the risk of losses, due to some of these loans becoming non-performing (NPLs). The Central Bank of Nigeria (CBN) again, issued a circular to all banks on August 26, 2019, with ref: BSD/DIR/GEN/LAB/12/054 ***New Offer Letter Clause For Credit Facilities***, requiring banks to include a clause in credit facility agreements which would create a standing instruction to offset the customer's debt to a creditor bank from the financial assets of the customer in other banks. And, on July 13, 2020, the regulatory body introduced the ***Guidelines on Global Standing Instruction (GSI) Policy*** applicable to individuals ("the Guidelines"). The guidelines, which came into operation on August 1, 2020, had the objective of promoting sound financial system in Nigeria by, among other things, reducing the incidences of non-performing loans, and improving their recoverability. The delinquent debtors are existent as a result of unimpressive or shattering initial cash flow projections upon which their business models were premised, and as a result, few banks tally up heavy loan loss provisions and compress their operating earnings. NPLs has been a problematic cocktail which banks found difficult to handle, and had to face bad patches of lending cycles, even as liquidity shrinks.(see graph 2)



Source: NDIC Annual Reports (several years) and World Development Indicators, 2022.

The graphs of the two variables show differing trajectory, signifying that there is an existent of proof of influence by one (currency substitution proxied by foreign currency deposits-FCD) on the other (non-performing loans proxied by the non-performing loan ratio to gross loans-NPLR), could it be true? The statement which would be tested to ascertain a position from the outcome.

The aim of this study is to analyze the impact of currency substitution on non-performing loans in Nigeria. The null hypothesis is that currency substitution does not significantly influence non-performing loans within the study period. The study is motivated by the inquisition to know the extent to which currency substitution influence non-performing loan profile in Nigeria using the autoregressive distributed lag model (ARDL), accommodating the existence of structural breaks from 2007 to 2022, hence the gap for knowledge addition. This study's significance is therefore not only justified by the literature gap that it aims to fill but also by the projection that its findings would be useful to policy-makers in Nigeria.

The paper is further structured into sections apart from the introduction, the second section has the literature review; section three has methodology and model specification. The results of data analysis is found in section four, with section five containing the conclusions and recommendations from the study.

2. Literature Review

Several scholarly studies have been conducted on currency substitution and other economic variables, as well as on non-performing loans and other economic variables too. But the uniqueness of this study is that it would investigate the impact of currency substitution (proxy by foreign currency deposits (FCD)) on non-performing loans (proxy by non-performing loan ratio to gross loan (NPLR)). Theoretically, the following were considered:

On Currency Substitution: Transaction Costs/ Cash-in-Advance Theory: The theory was first developed by Schwartz (1974) and later developed empirically by Williamson in 1991 when he was

recognized with a Nobel Prize for his work on transaction costs. Williamson, theorized that whether activities would be internalized within a firm (here, in a country) depends on their transaction costs. The researcher saw transactions broadly as transfers of goods or services across interfaces, and argued that when transaction costs were high, internalizing the transaction within a hierarchy was the appropriate decision. Conversely, when transaction costs were low, buying the good or service on the market was the preferred option, characterized in three dimensions of uncertainty, frequency, and asset specificity, or the degree to which transaction-specific expenses were incurred. Transaction cost theory is built on assumptions of bounded rationality and opportunism, defined as self-interest with guile as it concerns currency substitution interest amongst economic agents. **Real Business Cycle Theory (RBC):** A crucial step in the new classical macroeconomic analysis by Lucas (1973) was denoted by the introduction of the concept of rational expectations, replacing the former adaptive expectations. Based on such rational expectations, and on the classical conception regarding the equilibration of markets. Mendoza (2002) conducted a research on why should emerging economies give up national currencies: a case for institutional substitution. The study focused on the effects of financial contagion and sudden stops of capital inflows experienced in emerging markets with major stress on policy credibility and world capital market imperfections. The study exposed the understanding that for countries to give up completely their national currencies could not fix many fundamental economic and institutional problems plaguing emerging economies or eliminate forever all forms of financial crises. The act rather tied as tightly as possible the government's hands, preventing them from exercising their confiscatory powers via monetary policy, and simplified greatly the task of assessing domestic financial policies so critical for driving global capital inflows into emerging economies. By synthesizing, three (3) important elements are at the basis of the new classical model: the negligible significance of money in influencing the business cycles, the rationality of the economic agents who react in an optimum way to the real shocks, mainly related to the swings occurred at the level of productivity, governmental acquisitions or preferences, and the orientation towards the dynamic analysis of the economy, based on rational expectations, starting from the Walrasian general equilibrium theory which implies that economy has a unique equilibrium at full employment, as result of price, wage and interest rate adjustments.

On Non-Performing Loans: The Theory of Information Asymmetry, by Akerlof (1970). The theory stated that it may be complex to differentiate between good and bad borrowers, and thus, may lead to adverse selection and moral hazard problems. The theory explained that in the market, the party that possesses more information on a specific item to be transacted is in a position to negotiate optimally, terms for the transaction than the other party (Auronen, 2003). **The Theory of Adverse Selection by Akerlof (1970).** The theory described the situation where the probability of loan default increases with

rising interest rate, and the quality of borrowers worsen as the cost of borrowing rises. The theory was founded on the assumption that banks are not certain in selecting credit worthy borrowers from a collection of loan applicants with different credit risk exposures forecasted.

The Theory of Moral Hazard by Arrow (1963). It stated that the phenomenon of using private information to benefit from an incomplete contract in the presence of information asymmetry. Moral hazard is a situation in which the behaviour of one party may change to the detriment of another after the transaction has taken place. Therefore, a bank that makes and sells loans is subject to a moral hazard problem with respect to screening borrowers, resulting in the likelihood of non-repayment of bank credit extended to them.

The relationship between these theories is that availability of information possessed by economic agents are applied based on bounded rationality and opportunism. Delinquent debtors may decide to postpone repayments of their maturing liabilities in order to capture perceived opportunities in the returns from investing in foreign currency or basket of convertible currencies.

Empirically, Viseth in 2001 conducted a research on currency substitution and financial sector developments in Cambodia. The study focused on measuring the extent and the process of currency substitution and the examination of its impact on macroeconomic policies in Cambodia. The researcher used monthly data to analyze the phenomenon of currency substitution in Cambodia during the recent economic and financial reform process between 1993 – 2001. The study found that there was a significant long run relationship between the expected rate of depreciation in market exchange rates and holdings of US dollars. Hence, the strong presence of hysteresis of currency substitution in Cambodia.

Uribe (1995) conducted research on hysteresis in a simple model of currency substitution. The study focused on examining a simple model of currency substitution in which the private cost of performing transactions in the foreign currency depends upon the aggregate degree of dollarization. A unique feature that generated multiple steady states and hysteresis in a small open economy. He developed a standard cash-in-advance model to execute his research, and found that a temporary increase in the rate of inflation can drive an economy to a dollarized equilibrium in which the velocity of circulation of domestic currency is permanently higher.

Doguwa (2014) conducted a research on currency substitution with focus on evidence from Nigeria. The researcher examined the existence, causes and effects of currency substitution in Nigeria. The study estimated conventional money demand equations based on a partial adjustment and adopted the autoregressive distributed lag (ARDL) model to execute the research using three definitions of monetary aggregates. The study found that the behavior of the foreign currency/ naira deposit rates had been

influenced by devaluation expectations, exchange rate risks, and political uncertainties. Also he found that short-term foreign interest rates has significantly affect on the demand for the naira. In the end, the study revealed a strong evidence of the existence of currency substitution and the possibilities of importing considerable instability in the economy.

Ikram, Su, and Fiaz (2016), conducted a research on determinants of non-performing loans: an empirical investigation of bank-specific microeconomic factor. The scope of the study was the district of Lahore (Pakistan), on 42 branches of 9 commercial banks from 2014 to 2015. Primary sources were adopted using structured questionnaire, while, pearson chi-square technique was used for analysis. The study found that branch age, duration of the loan, and credit policy are significant determinants of NPLs. Also, bank-specific and SME-specific microeconomic variables directly influence NPLs, while, macroeconomic factors act as intermediary variables.

Atoi (2018), conducted a research on Non-performing loan and its effects on banking stability: evidence from national and international licensed banks in Nigeria. The scope of study was on national and licensed international banks in Nigeria from 2014:Q2 to 2017:Q2. Generalized Method of Moments (GMM) estimation technique was employed. Z-Score, Panel Vector Autoregressive Model specification, and correlation coefficients of variables were adopted for analysis. The study found that drivers of NPLs vary across the two categories of banks, but, weighted average lending rate was a vital macroeconomic driver of NPLs for both banks.

From the reviewed literatures, there exist a clear path for knowledge addition. The study focused on Nigeria, which is one of the largest economies in Africa, which essentially makes findings arising from the study representative enough for not just African countries but also other developing economies

3. Methodology and Model Specification

The study is concerned on establishing the impact relationship between the rising non-performing loan profile and the rising interest of economic agents on foreign currency deposits in the country. In this study, the dependent variable is the non-performing loan ratio to gross loans (NPLR), while the independent variable is the foreign currency deposit (FCD) on annualized time series. This variable representations are consistent with studies of Doguwa 2015, Patwary and Tasneem 2019, and Ajibola et. al 2020. A moderator variable was introduced in the model to the independent variable which is the inflation rate (INFR). The set of data from 2007 to 2022, representing a 16 year period, ex-post facto approach, were obtained from the central bank of Nigeria (CBN) statistical bulletin, NDIC annual reports and the World Bank Development Indicator sources which were the most dependable data sources for studies involving Nigeria. The model estimation are as follows:

$$y = f(x) \dots \dots \dots \text{eqn 1}$$

$$y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \varepsilon_t \dots \dots \dots \text{eqn 2}$$

$$NPLR = \beta_0 + \beta_1 LFCD_1 + \beta_2 INFR_2 + \varepsilon_t \dots \dots \dots \text{eqn 3}$$

$$\Delta NPLR_t = \beta_0 + \sum_{i=1}^p \beta_{1i} \Delta NPLR_{t-i} + \sum_{i=0}^q \beta_{2i} \Delta LNFC D_{t-i} + \sum_{i=0}^r \beta_{3i} \Delta INFR_{t-i} + \delta_1 NPLR_{t-1} + \delta_2 LNFC D_{t-1} + \delta_3 INFR_{t-1} \dots \dots \dots \text{eqn 4}$$

$$\Delta NPLR_t = \beta_0 + \sum_{i=1}^p \beta_{1i} \Delta NPLR_{t-i} + \sum_{i=0}^q \beta_{2i} \Delta LNFC D_{t-i} + \sum_{i=0}^r \beta_{3i} \Delta INFR_{t-i} + \lambda ec_t + e_t \dots \dots \dots \text{eqn 5}$$

NPLR is the non-performing loan ratio to gross loans (dependent variable), LFCD is the log of foreign currency deposits (independent variable), INFR is the inflation rate (moderating variable). $\beta_0, \beta_1, \beta_2$ are the co-efficients of the independent variables. ε_t is the error term. The ARDL model and the error correction model (ECM) are specified in equations 4 and 5 respectively. The pre and post estimation tests to ascertain the degrees of dispersion, correlation, stationarities, and heteroskedasticity were conducted to buttress their distributional properties for proper inferences. To expose the unit root properties of the variables under study, structural break consistent unit root test was used and captured the nature of the change (outlier) that induced the structural breaks, that is, whether it is gradual (innovational Outlier) or rapid (additive outlier). The expectation is that currency substitution does not significantly influence non-performing loans in Nigeria within the study period.

4. Results and Analysis

a. Summary of Descriptive Statistics

	Mean	Median	Maximum	Minimum	Std. Dev.	Skewness	Kurtosis	Co-eff. Variation	Obs
NPLR	9.693378	6.029619	37.25329	2.963134	8.779515	2.126319	7.148809	0.905723	16
LFCD	8.054582	8.307695	9.242803	6.162051	0.830381	-0.73965	2.876424	0.103094	16
INFR	12.28665	12.15967	18.84719	5.388008	3.572579	0.006265	2.487411	0.290769	16

From the descriptive table, all the variables are stable at less than 1 co-efficient of variation signifying that they are less dispersed from the mean. The degree of symmetry and peakness for the variables are inverse as NPLR is positively skewed and leptokurtic, while the LFCD is negatively skewed and platykurtic. This is a slight fall outside normal distribution, but the outlook is consistent with the behaviours of economic and financial time series.

b. Summary of Correlation and Causality Test

	NPLR	LFCD	INFR
NPLR	1	r = -36% t = 1.44 p = 0.17	r = 15% t = 0.58 p = 0.57
LFCD	-	1	r = 59% t = 2.71 p = 0.02
INFR	-	-	1
Granger Causality	*LFCD = 0.2931	*NPLR = 0.0346	

Note: * signified does not granger cause

The correlation and causality table contains the bi-variate and directionless correlation metrics of the studied variables. Foreign currency deposits share a low negative and non-significant correlation with non-performing loans at 36%. This is evident from the harmful contributions of persistent increase in the change of choice of economic agents from national currency to foreign currencies and deposits. The correlation co-efficients are found to be moderate, as there exists no suspicion of multicollinearity. In addition, there exists a uni-directional causality between the studied variables. The LFCD granger cause NPLR at 0.0346 less than 0.05 p-value. This signified that the null hypothesis is considered rejected, hence alternate hypothesis is accepted. Meanwhile, NPLR does not granger cause LFCD at 0.2931 greater than 0.05 p-value. This further supported the outcome of the correlation test.

Summary of Stationarity/ Autocorrelation Test**ci. Correlogram Q-Statistics**

Autocorrelation	Partial Correlation	AC	PAC	Q-Stat	Prob
. . |	. . |	1	-0.049	-0.049	0.0457 0.831
.*** . |	.*** . |	2	-0.347	-0.350	2.5160 0.284
. * . |	. ** . |	3	-0.192	-0.265	3.3339 0.343
. . . |	. * . |	4	0.056	-0.140	3.4099 0.492
. . . |	. * . |	5	0.051	-0.156	3.4789 0.627
. . . |	. ** . |	6	-0.064	-0.207	3.5959 0.731
. . . |	. * . |	7	-0.053	-0.201	3.6842 0.815
. . . |	. * . |	8	0.028	-0.188	3.7119 0.882
. * . |	. . . |	9	0.175	-0.006	4.9680 0.837
. . . |	. . . |	10	0.047	-0.013	5.0762 0.886
. . . |	. . . |	11	-0.033	0.065	5.1394 0.924
. * . |	. . . |	12	-0.143	-0.045	6.6199 0.882

The above is the table of correlogram of a stationary time series or correlogram of white noise error term. The table play two roles of stationarity test and autocorrelation test. The solid vertical line represents the zero axis, and the projections of the * signs (left and right) from the vertical line did not cross the dots, which signifies stationarity and no autocorrelation. This also means that the data set are normally distributed as no sign of heteroskedasticity existed, so they are homoskedastic. This was also confirmed by the Breusch-Godfrey serial correlation LM test and the Durbin-Watson (see summary of regression below).

cii. Structural Break Consistence Unit Root

Innovative Outlier (trend and intercept)					Additive Outlier (trend and intercept)				
Var.	ADF	Coeff. Var.	Break Date	Infr.	Var.	ADF	Coeff. Var.	Break Date	Infr.
NPLR	-9.63	0.91	2015	I(0)	NPLR	-7.43	0.91	2012	I(1)
LFCD	-7.11	0.10	2018	I(1)	LFCD	-17.46	0.10	2015	I(1)
INFR	-6.10	0.29	2013	I(0)	INFR	-6.17	0.29	2012	I(0)

Critical value @ 5% for Breakpoint Unit Root Test with Additive and Innovative Outliers = 5.18

The series were stationary at no-time (I(0)) and first difference (I(1)). This justified the usage of autoregressive distributed lag model. The table shows the break dates that were predominantly in the 2010s. A look at the Nigerian economy within the period shows that these were periods of fiscal risks and fiscal indiscipline marked by elections and change of government regime, insecurities which resulted in rising IDP camps and re-settlements, natural disasters, business cycles marked by periods of economic recessions and expansions, expectations of finance bill, budgetary inadequacies, poor records of growth and development, rooted public sector embezzlements and corruption. These outliers (events) exerted high leverage on the economy, as they distorted the slope or normal flow of economic activities with immense influential pointers.

c. Summary of Regression

ARDL Estimated result				
Variable	Coefficient	Std. Error	t-Statistic	P-Value
LNFC	-33.18411	12.03467	-2.757377	0.0330
INFR	0.243630	0.518078	0.470257	0.6548
C	422.5220	82.39504	5.128004	0.0022
@TREND	5.973871	1.587697	3.762601	0.0094
R ²	0.918354			
Adjusted R ²	0.823101			
F-Stats	9.641176		Prob	0.006713
DW-Stats	1.972354			

Long-Run, Short-Run Estimated and Bounds Test Results				
Variable	Coefficient	Std.Error	t-Statistic	P-Value
LNFCDD	-28.75915	4.741346	-6.065609	0.0009
INFR	0.410823	0.319604	1.285412	0.2460
F-Statistic	22.89463	Signif. 5%	I (0):4.87	I (1):5.85
CointEq(-1)	-1.964016	0.205234	-9.569666	0.0001
BG (F)	0.98 > 0.05			
BPG (F)	0.41 > 0.05			

The table shows goodness of fit at 92% shown by R^2 and adjusted R^2 at 82%, signifying that the percentage of change is accounted for by the independent variable moderated by inflation. The outcome is healthy. This also shows that there are other variables not accounted for that could influence the non-performing loan profiles in the country. The overall significance of the regression looking at the F-stats at 9.64 is greater than 2.5 ($9.64 > 2.5$) rule of thumb, p-value of 0.007 less than 0.05 rule of thumb, and DW stats at approximately 2 is statistically significant. The autocorrelation (BG test) and heteroskedastic (BPG Test) results are significantly above 0.05 f-stats, indicating that the variable are free from multicollinearity and are homoscedastic. This allow for discussion of obtained result of estimation.

The obtained result is thus $NPLR = -28.7592LNFCDD + 0.4108INFR$ (long run estimate). The relation between change in non-performing loan ratio (proxy for non-performing loans) and the log of foreign currency deposits (proxy for currency substitution) is negative and statistically significant. Non-performing loanratio is a negative and significant function of foreign currency deposits which means that foreign currency deposits negatively and statistically significantly influence non-performing loans in Nigeria. A 1% increase in the ratio of non-performing loans in the country within the study period lead to a 28.76% decrease in foreign currency deposits. There also existed, long-run cointegration relationship between the estimated variables using the bounds test as the f-stats is higher than the lower and upper bounds of the estimate at 5% level of significance. The short run outlook exposed the speed of adjustment of variables in the event of possible shock to attain significant equilibrium at 196%.

This is evident from the negative influence usually experienced when economic agents decide to change their choice of currency holdings from local to foreign currencies due to existing bad policies or expectations of government policy that would worsen the living standards and business cycles of the economic agents, irrespective of the inflation targeting policy by the monetary authority to stabilize prices and the economy. The absence of positive co-efficient could be expressed as rising foreign currency deposits having weak and non-direct impact on the outlooks of non-performing loan profiles in the country, on suspicion that there are other economic variables with direct and positive impacts such as monetary policy rate (MPR), exchange rate fluctuations, fiscal exposures, credit policy, bank size,

etc. Therefore, the null hypothesis (H_0) of currency substitution does not statistically and significantly influence non-performing loans in Nigeria is considered rejected, and the alternate hypothesis is accepted due to the significant nature of the estimated outcome.

5. Conclusion and Recommendations

This study set out to investigate the impact analysis of currency substitution on non-performing loans in Nigeria. Foreign currency deposits (FCD) and non-performing loan ratio (NPLR) were used to conduct the study with a moderating variable of inflation rate. The results recorded varies from the apriori expectation as having significantly statistical outcomes but with a slight drift to negative influence in the economy aggravated by inflation rates. This is on suspicion that rising foreign currency deposits by economic agents had weak and non-direct impact on the non-performing loan profile in the country; instead, there existed other economic variables that contribute to rising profile of non-performing loans.

This study is a new frontier of knowledge in the web of researches as it analyzed the impact of currency substitution on non-performing loans. Nigeria, within the period of study 2007 - 2022, had witnessed many structural changes that has disturbed, distorted and had huge influence on the behaviours of both economic indices and economic agents. Therefore, by way of policy implication, the work made a call on the monetary authorities to channel more resources to determining other economic variables that positively and significantly influence non-performing loan profiles like interest rate, exchange rate fluctuation, fiscal risks, etc and control them. In addition, government should create policies that would promote private and SME sectors to function, so as to repay their maturing liabilities as they fall due. NPLs still remains a problematic cocktail banks found difficult to handle, and still face bad patches of lending cycles, even as their liquidities shrink.

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