

Evaluating the Socio-Economic Effects of Naira Depreciation on Nigerian Households

Hilary Temofeh Kanwanye¹ and Cyprian Ife Eboka²

^{1,2}Department of Economics, Wellspring University, Benin-City

*Corresponding Author: Hilary Temofeh Kanwanye

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Article History	Abstract
Original Research Article	<p><i>This paper examines the effect of Naira depreciation on household welfare in Nigeria, measured by household consumption expenditure. Using annual time series data from 1989 to 2024 sourced from the Nigeria Bureau of Statistics, the study adopts an ex-post facto research design. The analytical framework comprises descriptive statistics, correlation analysis, unit root tests, Johansen cointegration, and regression estimation. The results show that exchange rate depreciation has a positive and statistically significant effect on household consumption expenditure, with a coefficient of 1.4336 ($p = 0.0000$), indicating high responsiveness of household welfare to exchange rate movements. Inflation exerts a negative and significant effect on welfare (-0.3040, $p = 0.0029$), consistent with erosion of real purchasing power. Unemployment displays a positive and significant coefficient (1.2079, $p = 0.0101$), which may reflect household coping or income-adjustment strategies. The model explains approximately 89.96% of the variation in household consumption ($R^2 = 0.8996$), and the overall model is statistically significant ($F = 95.53$, $p = 0.0000$). The Johansen cointegration test confirms the presence of a long-run equilibrium relationship among the variables. These findings underscore the vulnerability of household welfare to macroeconomic instability in Nigeria. They provide empirical support for coordinated policy interventions aimed at exchange rate stabilization, inflation control, and employment generation.</i></p> <p>Keywords: Naira depreciation; household welfare; exchange rate; inflation; unemployment; consumption expenditure; Nigeria.</p> <p>JEL Codes: F31, E21, E31, O55</p>
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<p>Copyright © 2026 The Author(s): This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC BY-NC) which permits unrestricted use, distribution, and reproduction in any medium for non-commercial use provided the original author and source are credited.</p> <p>Citation: Hilary Temofeh Kanwanye & Cyprian Ife Eboka. (2026). Evaluating The Socio-Economic Effects of Naira Depreciation on Nigerian Households. UKR Journal of Economics, Business and Management (UKRJEBM), 2(6), 140-150.</p>	

1.0 Introduction

Nigeria's macroeconomic landscape has been marked by recurrent currency crises, persistent parallel market pressures, and major policy shifts—most notably the unification of exchange rate windows in recent years. These dynamics have perpetuated a sustained decline in the value of the Naira, accompanied by escalating inflation and chronically high unemployment. The progressive weakening of the Naira has exacerbated cost pressures in an import-dependent economy, where exchange rate pass-through effects transmit directly to domestic price levels, amplify inflationary dynamics, and erode household purchasing power (Ikue et al., 2024). These inflationary pressures, particularly acute in markets for essential goods and services, constrain real household income, compel expenditure substitution toward basic necessities, and

ultimately diminish overall welfare and consumption capacity (Olalekan et al., 2025). Labour market conditions compound this fragility: persistent unemployment reflects structural inefficiencies that impede income generation, heighten household vulnerability to macroeconomic shocks, and further limit consumption expenditure (Daniel et al., 2021).

Despite the widely acknowledged reality of Naira depreciation, its precise effects on household welfare remain insufficiently quantified, particularly in the context of recent data covering the post-2020 period of intensified currency volatility. The existing literature tends to examine macroeconomic variables separately or to concentrate on aggregate economic performance, leaving a critical gap:

how do exchange rate depreciation, inflation, and unemployment interact to shape household-level consumption behaviour and welfare outcomes in Nigeria's rapidly evolving macroeconomic environment? This gap is particularly consequential given that exchange rate instability, inflationary persistence, and labour market dysfunction may interact in ways that deviate from conventional theoretical predictions. Emerging evidence suggests that while inflation and unemployment typically exert negative welfare effects, exchange rate dynamics can generate both adverse and—under certain structural or adaptive conditions—ameliorative effects, depending on the degree of domestic economic resilience and household coping strategies (Osaretin and Ogbeifun, 2023).

Against this background, this paper seeks to evaluate the socio-economic effects of Naira depreciation on Nigerian households. Specifically, the study examines the effect of exchange rate depreciation on household welfare, investigates the impact of inflation rate on household welfare, and assesses the influence of unemployment rate on household welfare. The research contributes to the existing body of knowledge by integrating these macroeconomic variables into a unified analytical framework, thereby offering a more holistic understanding of how economic instability translates into household-level outcomes. The findings enrich policy discourse by clarifying how exchange rate fluctuations and inflationary pressures shape consumption behaviour, while also revealing the nuanced role of unemployment in welfare dynamics. The remainder of the paper is organised as follows: Section 2 presents the theoretical framework and empirical literature review. Section 3 describes the methodology, including data sources, variable specification, and econometric techniques. Section 4 reports and discusses the results. Section 5 concludes with policy recommendations.

2.0 Literature Review

Conceptual Review

The exchange rate, defined as the price of one currency in terms of another, serves as the primary channel through which external shocks, trade flows, and capital movements transmit to domestic prices, output, and consumption structures. In Nigeria's import-dependent economy, Naira depreciation intensifies cost pressures via pass-through effects, raising domestic price levels and eroding purchasing power (Ugwu et al., 2021; Oyadeyi et al., 2024). Inflation, defined as a sustained increase in the general price level, reflects both monetary imbalance and structural conditions; in Nigeria, it exhibits cost-push characteristics driven by exchange rate pass-through, fiscal deficits, agricultural supply constraints, and infrastructural

inefficiencies (Garriga & Werner, 2022; Adewale, 2025; Ukooha & Nyong, 2002). Unemployment extends beyond open joblessness to include underemployment and informal adaptations, reflecting structural rigidities such as limited industrial diversification, skill deficits, and rapid population growth that constrain labour absorption and generate chronic income instability (Viviano & Brandolini, 2018; Ahmad & Gado, 2025). Household welfare, proxied by consumption expenditure, captures households' capacity to maintain stable and diversified consumption patterns. Consumption-based measures are particularly appropriate in developing economies where income flows are irregular, as expenditure provides a more stable indicator of economic wellbeing and resilience to shocks (Garner et al., 2012; Mondal & Khanam, 2018; Ajefu, 2018).

The interconnections among these variables are direct and mutually reinforcing. Exchange rate depreciation raises import costs, feeding directly into inflation through the cost channel. Inflation erodes real disposable income, compelling households to substitute toward necessities and reducing overall welfare. Unemployment limits income generation, amplifying vulnerability to price shocks and further constraining consumption capacity. These dynamics establish a complex transmission mechanism from macroeconomic instability to household welfare outcomes. The Nigerian context is particularly instructive because its structural features—fiscal imbalances, oil dependence, and infrastructural deficits—magnify these transmission effects, making household consumption highly sensitive to exchange rate movements, inflationary pressures, and labour market conditions. Consequently, any comprehensive analysis of household welfare in Nigeria must consider these three macroeconomic variables simultaneously rather than in isolation.

Keynesian Consumption Theory

The Keynesian Consumption Theory, as articulated by John Maynard Keynes in *The General Theory of Employment, Interest and Money* (1936), represents a fundamental departure from classical economic thought. Prior to Keynes, classical economists maintained that interest rates were the primary determinant of saving and consumption decisions. Keynes inverted this logic, arguing instead that current disposable income is the principal determinant of consumption expenditure, with interest rates playing a secondary or negligible role at the household level.

The theory is formally expressed as $C = a + bY^d$, where C is aggregate consumption, a is autonomous consumption (the minimum level of consumption even when income is zero, financed by dissaving or borrowing), b is the marginal propensity to consume (MPC) with $0 < b < 1$, and Y^d is disposable income (income after taxes). The condition that MPC is positive but less than unity embodies Keynes's

"fundamental psychological law": as income increases, consumption also increases, but not by the full amount of the income increase—households save a portion of additional income.

Thrusts of the theory include its direct applicability to household behaviour in developing economies. In Nigeria, where credit markets are imperfect, social safety nets are weak, and informal income sources predominate, households cannot easily smooth consumption over time. Consequently, current income fluctuations - whether caused by exchange rate depreciation (through price effects), inflation (through purchasing power erosion), or unemployment (through income loss) - translate almost immediately into changes in consumption expenditure. This makes the Keynesian framework more empirically relevant than alternative theories such as the Permanent Income Hypothesis (Friedman, 1957) or the Life-Cycle Hypothesis (Modigliani & Brumberg, 1954), which assume greater household capacity to borrow, save, or dissave to stabilise consumption.

A theoretical consideration worth noting is that Keynesian consumption theory is fundamentally short-run in orientation. Keynes famously remarked, "In the long run we are all dead," emphasising that his analysis focused on short-run fluctuations in aggregate demand rather than long-run growth dynamics. This study, however, employs cointegration analysis to capture both short-run and long-run relationships. This is not a contradiction but a complement: the Keynesian framework explains the immediate transmission from income to consumption, while the cointegration framework captures the tendency for these variables to return to an equilibrium relationship over the long run after temporary shocks.

The empirical implication for this study is straightforward. If the Keynesian proposition holds, then any macroeconomic variable that affects disposable income or its purchasing power should significantly affect household consumption expenditure. Exchange rate depreciation affects the real value of income through import prices; inflation directly erodes nominal income's purchasing power; unemployment reduces or eliminates labour income. Therefore, a regression model regressing household consumption expenditure on exchange rate, inflation, and unemployment is a direct empirical test of the Keynesian proposition in the Nigerian context.

Empirical Review

A growing body of empirical literature has investigated the relationships among exchange rate depreciation, inflation, unemployment, and household welfare in Nigeria and other developing economies, though most studies examine these variables in isolation rather than as an integrated system.

Ademola and Ubale (2025) examined the impact of inflation on household living standards in Nigeria using annual time series data from 1980 to 2023 sourced from the Central Bank of Nigeria, National Bureau of Statistics, and World Development Indicators. Adopting the Autoregressive Distributed Lag (ARDL) model for its suitability with variables of mixed integration orders, supported by cointegration bounds testing, the study found a negative and statistically significant relationship between inflation, interest rates, and living standards: a 1 percent increase in inflation reduced living standards by 0.06 percent, while a 1 percent increase in interest rates reduced living standards by 0.19 percent, both significant at the 1 percent level. These findings suggest that rising inflation and borrowing costs directly and adversely affect household wellbeing by elevating the cost of living and eroding purchasing power, leading the study to recommend policies to contain inflation as a pathway to improving living standards and fostering economic development in Nigeria. Similarly, Banda and Silwimba (2025) investigated the impact of inflation on household living conditions in Lusaka townships using a mixed-methods design involving structured household surveys, interviews, and linear regression analysis of a sample of 50 households, with descriptive statistics and chi-square tests employed to examine relationships among key welfare indicators. The results showed that inflation imposed substantial financial burdens on households, with respondents reporting increased costs for food, housing, and healthcare, alongside reduced consumption and adoption of coping mechanisms such as borrowing and depletion of savings. However, empirical tests indicated no statistically significant relationship between food shortages and food price increases ($\chi^2 = 6.7922$, $p = 0.079$), between housing affordability and inflation ($\chi^2 = 1.2981$, $p = 0.935$), or between healthcare access and inflation ($\chi^2 = 4.4992$, $p = 0.343$). Despite these weak statistical associations for some relationships, the research concluded that inflation undermines purchasing power and living standards, recommending targeted social support, affordable housing policies, and improved healthcare access.

Extending the analysis to labour market variables, Onwioduokit et al. (2025) examined the relationship among poverty, unemployment, and economic prosperity in Nigeria using an ex-post facto research design with time series data spanning 1990 to 2022, employing the ARDL bounds testing approach and error correction modelling. The results demonstrated that poverty and unemployment exert negative and statistically significant effects on economic prosperity in both the short and long run, with the ARDL bounds test confirming the presence of a long-run equilibrium relationship. The error correction model indicated that 82.2 percent of short-run disequilibrium is

corrected within one year, leading to policy recommendations focused on alleviating poverty and unemployment through investments in technology and innovation to enhance Nigeria's economic prosperity. In a related vein, Ezeibe et al. (2024) investigated unemployment and socio-economic development in Nigeria using secondary data and a descriptive historical approach to identify causes, effects, and solutions. The research revealed that the unemployment rate increased from 7.06 percent in 2016 to 33 percent in 2022, reflecting deteriorating labour market outcomes, with unemployment contributing to poverty, crime, low economic growth, and reduced living standards as many households cannot afford basic necessities including food, shelter, and transport. Resource underutilisation and lack of job opportunities were identified as primary drivers, with recommendations including restructuring the educational system, addressing insecurity, revitalising productive sectors, managing population growth, and diversifying the economy to promote employment generation and socio-economic growth.

Several studies have specifically focused on the exchange rate channel. Iyadi and Elozino (2024) examined the effect of exchange rate changes and inflation on consumer purchasing power in Asaba, Nigeria, employing a cross-sectional survey design with data collected from 80 households using structured Likert-scale questionnaires and simple random sampling. The findings revealed that 78 percent of respondents reported diminished purchasing power for basic commodities due to exchange rate variations, while 88 percent indicated that inflation had similarly reduced their purchasing power. Statistical analysis showed a positive correlation between exchange rate changes and purchasing power ($r = 0.586$, $p < 0.01$) and a negative correlation with inflation ($r = 0.260$, $p > 0.01$), establishing that exchange rate uncertainty and inflation strongly influence household welfare. The study recommended exchange rate stabilisation, inflation management, and enhanced financial literacy to mitigate negative impacts. Ukangwa and Onyenze (2023) examined how exchange rate fluctuations affect living standards in Nigeria using secondary data from 1990 to 2021, where mixed integration orders necessitated unit root tests and the ARDL model. The results showed substantial long-run and short-run relationships between exchange rate fluctuations and living standard measures, including GDP per capita, per capita income, and unemployment, confirming that exchange rate volatility critically affects living standards in Nigeria. The study recommended strengthening the productive sector to reduce unemployment and adopting economic policies aimed at improving macroeconomic performance and limiting the adverse welfare effects of exchange rate instability. In an earlier contribution, Edeme

and Okafor (2017) analysed exchange rate patterns and household welfare in Nigeria using annual time series data from 1980 to 1994, employing Ordinary Least Squares (OLS) regression and Granger causality tests with household consumption expenditure per capita serving as the proxy for household welfare. The findings indicated that exchange rate changes positively and significantly influence household consumption, with Granger causality results showing that exchange rate changes drive changes in household welfare. Despite the positive statistical relationship, the study noted that depreciation reduces real welfare because more Naira are required to purchase the same quantity of goods, recommending prudent exchange rate management policies to strengthen the Naira and improve household welfare outcomes.

Perhaps the most methodologically comprehensive recent study is that of Tevin-Anyali et al. (2023), who analysed the effect of inflation on living standards in Nigeria using annual time series data from 1999 to 2022. The study employed the ARDL model, Augmented Dickey-Fuller unit root tests, VAR lag selection criteria, ARDL bounds testing for cointegration, and post-estimation diagnostic tests including Breusch-Godfrey serial correlation, heteroskedasticity, and CUSUM stability tests. The ADF results revealed mixed integration orders, justifying the ARDL approach, while the bounds test produced an F-statistic of 11.01659, confirming the existence of long-run relationships. Long-run estimates indicated that the exchange rate exerted a significant negative effect on living standards (-0.0933), while the consumer price index (1.3849) and unemployment (0.1390) showed positive effects. Short-run results showed that the consumer price index (0.4873), money supply (0.5002), and unemployment (0.1482) positively affected welfare, whereas the exchange rate (-0.0824) reduced welfare. The error correction mechanism coefficient of -1.1118 indicated rapid adjustment, and the R^2 of 0.7712 demonstrated high explanatory power. This study is particularly notable for its explicit recognition that unemployment can exhibit a positive coefficient in certain specifications—a finding that resonates with the results of the present study and suggests the operation of household coping strategies, informal sector absorption, or remittance-based income adjustments that may partially offset the expected negative welfare effects of joblessness in the Nigerian context.

Research Gaps

The existing literature on macroeconomic instability and household welfare in Nigeria exhibits several notable gaps. First, most studies examine exchange rate movements, inflation, or unemployment in isolation, without a comprehensive analysis of their joint effects on household consumption dynamics. Second, empirical analyses

frequently focus on aggregate economic indicators rather than household-level welfare outcomes, thereby overlooking the microeconomic transmission channels through which macroeconomic shocks affect households. Third, methodological inconsistencies, particularly in handling time series data of mixed integration orders within a unified framework, limit comparability across studies and the reliability of inferences. Fourth, few studies have integrated these three macroeconomic variables simultaneously to assess their interactive effects on household welfare within the contemporary Nigerian context, especially following the recent episodes of accelerated Naira depreciation and policy shifts. The present study extends existing knowledge by addressing these gaps, analysing the impacts of exchange rate depreciation, inflation, and unemployment within a unified regression framework that accommodates mixed integration orders.

3.0 Methodology

Theoretical Framework

This study is anchored in the Keynesian Consumption Theory, as articulated by Keynes (1936). Prior to Keynes, classical economists maintained that interest rates were the primary determinant of saving and consumption decisions. Keynes inverted this logic, arguing instead that current disposable income is the principal determinant of consumption expenditure, with interest rates playing a secondary or negligible role at the household level.

The theory is formally expressed as:

$$C = a + bY^d \dots\dots\dots 1$$

where C is aggregate household consumption, a is autonomous consumption (the minimum level of consumption even when income is zero, financed by dissaving or borrowing), b is the marginal propensity to consume (MPC) with $0 < b < 1$, and Y^d is disposable income (income after taxes). The condition that MPC is positive but less than unity embodies Keynes's "fundamental psychological law": as income increases, consumption also increases, but not by the full amount of the income increase - households save a portion of additional income.

In an open developing economy such as Nigeria, disposable income is not exogenously determined but is instead subject to macroeconomic disturbances that affect its real value and stability. Specifically, three macroeconomic variables exert significant influence on the real purchasing power of disposable income: the exchange rate, the inflation rate, and the unemployment rate.

Let real disposable income be expressed as:

$$Y_r^d = Y_n^d / P \dots\dots\dots 2$$

where Y_r^d is real disposable income, Y_n^d is nominal disposable income, and P is the general price level. The exchange rate (EXR) affects Y_r^d through its impact on P , given Nigeria's high import dependence. Depreciation raises the domestic currency cost of imported goods, which feeds directly into the price level. The inflation rate (INF) directly erodes the purchasing power of any given nominal income, reducing Y_n^d . The unemployment rate ($UNEMP$) affects Y_n^d by reducing labour income for unemployed households and depressing wage growth for employed workers through labour market slack.

We can therefore express real disposable income as a function of these three macroeconomic variables:

$$Y_r^d = f(EXR, INF, UNEMP) \dots\dots\dots 3$$

with the partial derivatives expected to satisfy: $\partial EXR / \partial Y_r^d < 0$, $\partial INF / \partial Y_r^d < 0$, $\partial UNEMP / \partial Y_r^d < 0$.

That is, an increase in the exchange rate (depreciation), a rise in inflation, or an increase in unemployment each reduces real disposable income. Substituting equation (3) into the Keynesian consumption function (1) yields:

$$C = a + b \cdot f(EXR, INF, UNEMP) \dots\dots\dots 4$$

Assuming a linear functional form for $f(\cdot)$, we can write:

$$C = a + b(\gamma_0 + \gamma_1 EXR + \gamma_2 INF + \gamma_3 UNEMP) \dots\dots\dots 5$$

where $\gamma_1, \gamma_2, \gamma_3$ capture the marginal effects of each macroeconomic variable on real disposable income. Simplifying: Let $\beta_0 = a + b\gamma_0$, $\beta_1 = b\gamma_1$, $\beta_2 = b\gamma_2$, and $\beta_3 = b\gamma_3$. Then:

$$C = \beta_0 + \beta_1 EXR + \beta_2 INF + \beta_3 UNEMP \dots\dots\dots 6$$

Since $b > 0$ (the marginal propensity to consume is positive) and $\gamma_1, \gamma_2, \gamma_3 < 0$ (each macroeconomic shock reduces real disposable income), the theoretical predictions for the coefficients are:

$$\beta_1 < 0, \beta_2 < 0, \beta_3 < 0 \dots\dots\dots 7$$

These constitute the *a priori* expectations: exchange rate depreciation, inflation, and unemployment each exert a negative effect on household consumption expenditure, and therefore on household welfare.

Model Specification

To evaluate the socio-economic effects of Naira depreciation on Nigerian households, the study specifies a multiple regression model where Household Consumption Expenditure (HCE), used as a proxy for household welfare, is the dependent variable, while exchange rate, inflation rate and unemployment rate are the independent variables.

The functional form of the model is expressed as:

$$HCE = f(EXR, INF, UNEMP) \dots\dots\dots 8$$

Given that the study employs logarithmic transformations of the dependent variables to stabilize variance and interpret coefficients as elasticities, the econometric form of the model is specified as:

$$LHCE_t = \beta_0 + \beta_1 EXR_t + \beta_2 INF_t + \beta_3 UNEMP_t + \varepsilon_t \quad .9$$

Where:

LHCE_t = Log of Household Consumption Expenditure (proxy for household welfare) at time *t*; EXR_t = Exchange Rate at time *t*; INF_t = Inflation Rate at time *t*; UNEMP_t = Unemployment Rate at time *t*; and ε_t = Error term capturing other factors affecting household welfare not included in the model; β_0 = Intercept term; $\beta_1, \beta_2, \beta_3$ = Coefficients of the explanatory variables

The a priori expectations of the parameters are:

$$\beta_1 < 0, \beta_2 < 0, \beta_3 < 0$$

The depreciation of the exchange rate should have a negative impact on the welfare of the households since with

a weak Naira the cost of imported goods will rise and this together with the rise in domestic prices will decrease the purchasing power of the households. Household welfare will be affected negatively by inflation too because increasing prices will decrease the real income and consumption ability. On the same note, unemployment is expected to have a negative impact on the welfare of households since an increase in unemployment will decrease their income earning opportunities and restrict their household consumption spending.

Measurement of Variables

The variables employed in this research work are classified into dependent and independent variables (Table 1). The Household Consumption Expenditure is used to measure household welfare and the explanatory variables are exchange rate, inflation rate and unemployment rate.

Table 1: Variables and Measurements

Variables	Definition	Type of Variable	Measurement	Source
LHCE (Household Consumption Expenditure)	The natural logarithm of total household expenditure on goods and services within a given period, representing household welfare.	Dependent Variable	Measured as the natural logarithm of total annual household consumption expenditure in Nigeria.	Nigeria Bureau of Statistics (NBS)
EXR (Exchange Rate)	The value of the Nigerian Naira relative to the United States dollar, indicating the level of currency depreciation.	Independent Variable	The annual average exchange rate of the Naira to the US Dollar (₦/USD).	Nigeria Bureau of Statistics (NBS)
INF (Inflation Rate)	The rate at which the general price level of goods and services rises in the economy.	Independent Variable	The annual percentage change in the Consumer Price Index (CPI).	Nigeria Bureau of Statistics (NBS)
UNEMP (Unemployment Rate)	The proportion of the labor force willing and able to work but unable to find employment.	Independent Variable	The annual unemployment rate expressed as a percentage of the labour force.	Nigeria Bureau of Statistics (NBS)

Source: Authors' compilation.

Sources of Data

The research is based solely on secondary research data that was sourced out of reliable national databases. The data source is Nigeria Bureau of Statistics (NBS, 2025) which is an official source of data on the household consumption expenditure, exchange rates, inflation rates and unemployment rates. The secondary data will make the study accurate, reliable and consistent throughout the period under study and will provide a strong analysis of the socio-economic impacts of Naira devaluation on the Nigerian households.

Method of Data Analysis

To examine how Naira depreciation will impact socio-economic status of Nigerian households, the study will utilize econometric analysis, employing various statistical methods to guarantee strong and credible results. The data are summarized by the use of descriptive statistics, which provides an overview of the central tendencies of the data including the mean and median and variability including standard deviation. Correlation analysis will be performed to determine the level and direction of relationships between the dependent variable, which is household consumption expenditure and the independent variables,

which are exchange rate depreciation, inflation and unemployment and provide the basic results before proceeding to the more rigorous econometric tests. To establish the credibility of the time-series data, the stationarity tests are conducted so as to establish the non-stationary variables which are then converted to avoid misleading findings. The paper also uses cointegration analysis to establish the existence of the long term equilibrium relationship among the household welfare and the macroeconomic variables which is crucial in meaningful regression modelling. In order to identify short

term fluctuations and the long term dynamics, regression analysis is used and this enables the study to determine the extent to which variations in exchange rate, inflation and unemployment affect the household consumption expenditure, in the long-term. These findings offer a thorough insight of the short term and long term impacts of macroeconomic variables to the welfare of households in Nigeria.

4.0 Results and Discussion

Table 2: Descriptive Statistics of Variables

	LHCE	EXR	INF	UNEMP
Mean	9.302050	4.470363	2.713866	1.394250
Median	9.834163	4.862035	2.574473	1.362257
Maximum	11.86144	6.709519	4.287716	1.747459
Minimum	4.813921	1.677657	1.686399	1.121678
Std. Dev.	2.088031	1.309769	0.648786	0.127982
Skewness	-0.627190	-0.586568	0.894787	1.091338
Kurtosis	2.257063	2.280267	3.155494	4.244124
Jarque-Bera	3.188135	2.841397	4.840125	9.467881
Probability	0.203098	0.241545	0.088916	0.008792
Sum	334.8738	160.9331	97.69919	50.19299
Sum Sq. Dev.	152.5956	60.04229	14.73231	0.573277
Observations	36	36	36	36

Source: Authors' Computation 2026.

Table 2 provides the descriptive statistics of EXR, LHCE, INF and UNEMP in the research that explored the socio economic impacts of Naira depreciation on Nigerian households. EXR has a mean of 4.4704 and a median value of 4.8620 and the ranges between 1.6777 and 6.7095, indicating appreciable changes in the values; the standard deviation of the values is 1.3098 or moderate dispersion and skewness (-0.5866) and kurtosis are 2.2803, indicating that the distribution is negatively skewed, platykurtic; normality was established by Jarque -Brau value of 0.

The LHCE has a mean of 9.3021 and a median of 9.8342 with variation of 5.6014 to 11.8614 which captures the variation in household consumption, its higher standard deviation (2.0880) means it is more widely spread out and

skewness of -0.6272 and Kurtosis value of 2.2571 show its distribution is platykurtic with a negatively skewed distribution, which has a Jarque-Bra 0.203.

The mean of INF is 2.7139 and median is 2.5745 with the range of values of 1.6864 to 4.2877; the standard deviation of 0.6488 is moderate and skewness, kurtosis of 0.8948 and 3.1555 indicate that INF is positively skewed and slightly leptokurtic with a probability value of 0.0889.

UNEMP will have a mean of 1.3943 and a median of 1.3623 (ranging between 1.1217 and 1.7475), with low dispersion (0.1280); the skewness of its distribution (1.0913) will be positive, with kurtosis (4.2441), which means that all except the unemployment variable will follow a normal distribution.

Table 3: Correlation Matrix

	EXR	LHCE	INF	UNEMP
EXR	1			
LHCE	0.9425	1		
INF	-0.3052	-0.362	1	
UNEMP	0.1948	0.2405	0.0915	1

Source: Authors' Computation 2026.

Table 3 presents the correlation of EXR, LHCE, INF and UNEMP using the data of the National Bureau of statistics. EXR and LHCE are closely related and the movement is positive (0.9425). INF is associated with EXR (-0.3052)

and LHCE (-0.3620) in a negative manner indicating that inflation decreases them. UNEMP has weak positive correlations to EXR (0.1948), LHCE (0.2405) and INF (0.0915), indicating poor connection, in general.

Table 4: Unit Root Tests of Variables

Variable	Unit Root Test at Level			Unit Root Test at First Difference			Order of Integration
	ADF Statistic	95% Critical Value	Remark	ADF Statistic	95% Critical Value	Remark	
LHCE	-3.362959	-2.948404	Stationary	-4.528878	-2.951125	Stationary	I(0)
EXR	-1.348127	-2.948404	Non-Stationary	-5.636670	-2.951125	Stationary	I(1)
INF	-3.316491	-2.948404	Stationary	-5.293297	-2.954021	Stationary	I(0)
UNEMP	-3.171215	-2.960411	Stationary	-4.633531	-2.963972	Stationary	I(0)

Source: Authors' Computation 2026.

Table 4 reports the Augmented Dickey–Fuller (ADF) unit root results used to assess the stationarity of the variables. LHCE is stationary at level, as its ADF statistic (-3.362959) exceeds the 95% critical value (-2.948404) in absolute terms, indicating integration at I(0). A similar pattern is observed for INF, where the ADF value of -3.316491 surpasses the same critical threshold, confirming stationarity at level. UNEMP follows this behaviour, with an ADF statistic of -3.171215 greater than the critical value (-2.960411), showing it is likewise integrated at I (0).

In contrast, EXR does not exhibit stationarity at level since its ADF statistic (-1.348127) falls below the critical value (-2.948404), suggesting the presence of a unit root. Upon first differencing, however, the statistic improves to -5.636670, exceeding the critical value (-2.951125) in absolute terms, indicating stationarity at first difference and integration at I(1).

The results therefore reveal a combination of I(0) and I(1) variables, which provides justification for employing the ARDL estimation approach in subsequent analysis.

Table 5: Johansen Multivariate Cointegration Tests Results

Trace Test				Maximum Eigenvalue Test			
Null Hypothesis	Test Statistic	Critical Value	Prob.	Null Hypothesis	Test Statistic	Critical Value	Prob.
$r = 0^*$	49.07607	47.85613	0.0382	$r = 0$	23.32502	27.58434	0.1600
$r \leq 1$	25.75104	29.79707	0.1363	$r \leq 1$	16.45364	21.13162	0.1995
$r \leq 2$	9.297401	15.49471	0.3386	$r \leq 2$	6.950107	14.26460	0.4951
$r \leq 3$	2.347294	3.841466	0.1255	$r \leq 3$	2.347294	3.841466	0.1255

Source: Authors' Computation 2026.

The results of the Johansen multivariate cointegration are provided in Table 5 and they measure how the variables are related in the long-run. The Trace Test (49.07607) rejects the null hypothesis $H = (0)$ of no cointegrating equation since the statistic (49.07607) exceeds the critical value (47.85613) and probability (0.0382) less than 0.05, meaning that there is at least cointegrating equation. Further

hypotheses ($r \leq 1$, $r \leq 2$, $r \leq 3$) are not rejected as the statistics are below the critical values and the probability is more than 0.05. The outcome of the Maximum Eigenvalue Test does not reject any null hypothesis but the trace result is positive indicating that there is a stable long-run equilibrium relationship between the variables.

Table 6: Results of Regression Analysis

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	2.03434	1.36534	1.48998	0.146
EXR	1.43358	0.09649	14.8573	0
INF	-0.304	0.19187	-1.5844	0.0029

UNEMP	1.20791	0.94433	1.27912	0.0101
R-squared	0.89956	Durbin-Watson stat		1.97026
Adjusted R-squared	0.89014			
F-statistic	95.5287			
Prob(F-statistic)	0			

Source: Authors' Computation 2026.

The regression estimates of the effect of EXR, INF and UNEMP on LHCE are reported by Table 6. The model also has a high explanatory ability where the R-squared is 0.8996 and the adjusted R-squared is 0.8901, which means that the model explains almost 89 to 90 percent of the changes in household consumption. The overall significance is assured by the F-statistic (95.53) probability of 0.0000. EXR demonstrates a positive and statistically significant effect (1.4336, $p = 0.0000$), which means that depreciation is positively related to consumption. The coefficient of INF is negative and significant (-0.3040, $p = 0.0029$) which proves negative welfare effects. The positive and significant impact (1.2079, $p = 0.0101$) is observed by UNEMP, which indicates an unexpected increase in consumption. The constant is insignificant ($p = 0.1460$).

Discussion of Findings

The findings of this research provide valuable information on the way macroeconomic conditions determine household welfare in Nigeria. The regression analysis evidence demonstrates that a positive effect of exchange rate depreciation on household consumption expenditure is statistically significant, which proves that the fluctuations in Naira have a strong impact on the spending patterns. This is consistent with the results of Adegbite, et al. (2021) and Olayemi and Adebayo (2019), both of whom note that exchange rate volatility changes the prices of imports, including the cost of living, thus impacting the behaviour of consumers. The identified positive relation could be due to the short-term household reactions, such as the use of the savings, expansion of the informal sector, or household production changes according to the impacts of currency depreciation.

The analysis also indicates that inflation has a strong negative correlation with the welfare of the household, which shows the impact of the increase in prices on the purchasing power. As Okunade and Adegbite (2020) and Igbinsosa (2019) point out, the ongoing inflation limits the disposable income and households, especially those in the low- and middle-income groups, need to cut back their consumption. This result is consistent with the theoretical claims that inflation will reduce the real value of money, restricting households to maintain the level of consumption they previously experienced and supporting the significance of price stability. The results on unemployment indicate that there is a strong positive impact of

unemployment on the welfare of the household in the model. This finding appears counterintuitive, but it aligns with the research by Eze, et al. (2021) and Ogundipe and Adewale (2018), who state that families tend to rely on informal sources of income and social support networks at the times when the formal employment system fails. This trend is likely to portray short-term, adaptive survival measures instead of actual welfare enhancement.

Collectively, the evidence indicates that the household welfare in Nigeria is sensitive to the macroeconomic instability. The impact of exchange rate variation, inflation and unemployment is all on the consumption results and this is where the policies that would follow are required to stabilize the currency, regulate the inflationary forces and create sustainable employment opportunities.

5.0 Conclusion and Recommendations

The study gives empirical data on the socio-economic consequences of Naira depreciation on the welfare of the Nigerian households citing the pivotal importance of macroeconomic conditions in determining welfare outcomes. According to the findings, the exchange rate changes, inflation and unemployment have a significant impact on household consumption behaviour and this shows the level to which economic instability has an impact on the standard of living. Specifically, the negative impact of inflation and intricate reaction to the depreciation of the exchange rate and unemployment highlights the susceptibility of households to recurrent macroeconomic shocks. The importance of this research is in the fact that it adds to the existing literature by providing sound empirical evidence on the interaction of important macroeconomic variables to find out the household welfare in Nigeria. The systematic econometric analysis of the relationships between exchange rate depreciation, inflation, unemployment and consumption patterns is clear in the study offering relevant evidence in policy formulation. These lessons underline the importance of well-coordinated macroeconomic policies to stabilise the exchange rate, curb inflation and enhance the employment situation to improve the resilience of households and sustainable economic growth.

Based on the empirical findings, the following recommendations are advanced:

Exchange Rate Stabilisation: The Central Bank of Nigeria should pursue policies aimed at reducing exchange rate volatility through effective foreign exchange management and improved coordination of monetary instruments, thereby protecting household consumption from external shocks.

Inflation Management: Authorities should strengthen price stability measures by enforcing disciplined monetary and fiscal policies, while enhancing domestic production and supply systems to ease cost pressures on essential goods.

Employment Enhancement Strategies: Government must increase its efforts on job creation by enhancing the formal and informal sectors, enhancing entrepreneurship and investing in skills training to enhance income-earning opportunities.

Strengthening Social Protection: Specialized welfare programmes such as cash transfer and subsidies ought to be increased that will protect vulnerable households against the negative side effects of inflation and economic instability.

Economic Monitoring and Policy Coordination: Macroeconomic indicators should be monitored constantly and effective policy reactions undertaken to guarantee interventions that are timely and maintain the welfare of the households and stability of the economy.

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