INSECURITY AND HOUSEHOLD WELFARE IN NIGERIA

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ABSTRACT

The persistent issue of the insecurity menace has become a scholarly concern that propelled this study to examine the influence of insecurity on household welfare in Nigeria for the period 1986 to 2022 using the autoregressive distributed lagged (ARDL) model. Empirical findings reveal a significant and negative influence of insecurity on household consumption and income in Nigeria in the long run. The study co includes that insecurity detrimentally affects household welfare, prompting several recommendations. The study suggested comprehensive policies that are essential for addressing insecurity, emphasizing the imperative role of law enforcement and security forces. The study further suggested strengthening the national security infrastructure through technological advancements and interagency coordination and fostering resilience at the community level by supporting local security initiatives and collaboration with traditional leaders. The study also suggested the immediate implementation of social safety nets, including conditional cash transfers for vulnerable households, palliatives for affected areas, efficient food aid distribution, and the establishment of local police to eradicate insecurity.

Key words: Insecurity, Household Welfare, Household Consumption, Household Income.

INTRODUCTION

The concept of insecurity delineates a state of vulnerability to danger or threat, representing an individual or community's susceptibility to harm or injury. In contrast, danger encapsulates the condition of being at risk, exposing one to potential harm or danger. This state of insecurity implies a lack of protection or defense against various adversities, as elucidated by Adeola and Oluyemi (2012), who define it as the exposure to terror, threat, risk, molestation, bullying, and harassment. In parallel, the term “welfare” assumes a broader connotation, encompassing the standard of living within a societal context. Household welfare, a pivotal consideration in developing countries, goes beyond mere income, extending to encompass expenditures. As posited by Cuong and Linh (2018), the augmentation of household welfare becomes a focal point, intertwining various facets such as food consumption, education, healthcare, housing, and investments.

Crucially, household welfare becomes contingent upon the economic well-being of a household, a metric determined by its capacity or access to the means of subsistence (Grootaert, 2013). Numerous studies, exemplified by Haughton and Khandker (2009), Santoso et al. (2020), and Dimova & Adebowale (2018), have probed the dynamics of household welfare, assessing the ability of households to secure fundamental necessities and prerequisites for a sustainable and liveable life throughout their lifespan. Governments worldwide have spotlighted welfare as a paramount goal, emphasizing its significance in individual decision-making processes to maximize utility. However, the pursuit of improved welfare faces multifaceted challenges, including poverty, high inequality, and health issues, all of which resonate as formidable obstacles in the global economy.

Turning attention to Africa, the continent has emerged as one of the world's most unequal regions, grappling with persistent poverty and high levels of inequality (World Bank, 2020). Despite being one of the most dynamic regions in the last decade, Africa harbors nearly one-third of the world's impoverished population, highlighting the gravity of its poverty problem (United Nations Development Programme, 2016; Asongu & le Roux, 2018). Within the African context, Nigeria stands out as a poignant case study. Despite the imperative to enhance household welfare for the purpose of fulfilling the United Nations Sustainable Development Goals (SDGs), Nigeria's progress has remained sluggish (Ozoh et al., 2022). Disturbingly, the majority of Nigeria's population grapples with meeting basic living standards, perpetuating a cycle of poverty.

The persistence of poverty in Nigeria is explained by several alarming statistics. Over the decades, the nation has witnessed fluctuating poverty rates, reaching a staggering 69% in 2010 (Adeaga, Adelakun & Oyekunle, 2020). Furthermore, Nigeria's Human Development Index (HDI) of 0.532 positions it poorly in terms of life expectancy, education, and income, ranking 157th out of 187 countries (UNDP, 2018). Bearing the ignominious title of the world's poverty capital, Nigeria harbors 91.6 million people living on less than one dollar per day, surpassing even India (World Poverty Clock, 2021). Income inequality, as measured by the Gini coefficient, is a grim picture, with the poorest 20% earning a mere 5% of the nation's total revenue, while the wealthiest 20% commandeer 49% (World Bank, 2020).

In response to these dire circumstances, successive Nigerian administrations have implemented various programs aimed at addressing household welfare concerns. Initiatives such as the Operation Feed the Nation, the Green Revolution, and the National Social Investment Programme, among others, underscore the gravity of the issue and the government's commitment to ameliorating the situation (Abbas, 2016; Adeaga et al., 2020). The Central Bank of Nigeria's Financial Inclusion Strategy, launched in 2012, reflects a concerted effort to alleviate poverty and enhance welfare by reducing the percentage of adults excluded from financial services. The interplay between insecurity, welfare, and economic well-being is a critical lens through which the challenges faced by developing countries, particularly Nigeria, can be examined.
Most countries in the world are faced with security challenges; however, these differences are dependent on the ability of each country to manage the threat (Saleh, 2020). The forms of insecurity ravaging most of the world economies include job insecurity, food insecurity and physical insecurity. Notwithstanding the enduring nature of warfare, its character is constantly changing, as characterized by the nature of post-Cold War conflicts, which include terrorism, insurgency, and banditry, among others (Barber, 2000; Khalid & Mustapha, 2014). These insecurity acts seem to affect the safety and wellbeing of citizens, commerce, education, employment, and other socioeconomic activities.

We are motivated by the recent deterioration in the state of (in)security, amidst serious welfare concerns in Nigeria, especially in the last decade, as well as by the conflicting submissions about the welfare impact of insecurity in the economy. In Nigeria, the safety of the population is regularly threatened by the reoccurring issue of insecurity, which has led to the need for the country to develop strategies to mitigate the threat of insecurity. To this end, agencies such as the National Security Agency (NSA), the Nigeria Police Force (NPF), the Defense Intelligence Agency (DIA) and the National Security Council were established (Adebakin & Raimi, 2012; Rohde, Tang, Lars and Prasada, 2014). However, the country has been ranked 75th out of 141 countries surveyed on the 2021 Global Safety Perception Index amidst worsening insecurity, which continues to claim lives daily (Global Terrorism Index, 2021). How households respond to persistent insecurity in Nigeria requires further empirical investigation.

Most countries in the world are faced with security challenges; however, these differences are dependent on the ability of each country to manage the threat (Saleh, 2020). In Nigeria, safety and standards of living are regularly threatened by the reoccurring issue of insecurity, which propelled the Nigerian government to develop strategies to mitigate the insecurity menace that seems to be a threat to household wellbeing. To this end, agencies such as the National Security Agency (NSA), the Nigeria Police Force (NPF), the Defense Intelligence Agency (DIA) and the National Security Council were established (Adebakin & Raimi, 2012; Rohde, Tang, Lars and Prasada, 2014). Amidst government efforts toward economic safety, arriving at the conclusion of how insecurity affects standard of living has called for an empirical excision that its investigation is undisputed.

Furthermore, since the world now prioritizes both income and expenditure, improving household welfare has become a major concern for nations such as Nigeria. Household welfare mostly depends on the income of a household, which results in balanced improvements in consumption, education, health care and housing, among other factors. Thus, without uplifting people’s standard of living, welfare enhancement cannot be caged. Now, the question is what slows people’s standard of living or welfare in developing countries such as Nigeria where insecurity has remained a threat to lives? Again, could the welfare of households be minimized even with a persistent level of insecurity? Answering the preceding questions requires an empirical investigation of how ravaging insecurity affects household welfare in Nigeria. This study therefore seeks to investigate the impact of insecurity on household welfare in Nigeria using two basic welfare indices (household consumption and household income). This research therefore seeks to answer the following questions: i. What is the causal relationship between insecurity and household welfare in Nigeria? ii. What is the impact of insecurity on household consumption in Nigeria? iii. What impact does insecurity have on household income in Nigeria?

To the best of our knowledge, studies on insecurity in Nigeria have yet to be directed to the issue of welfare, particularly the examination of the individual welfare indicators of household consumption and income, which constitutes an obvious gap in the literature given that security is a critical component of the human development indicators developed by the United Nations and hence a vital determinant of the level of welfare and hence socioeconomic development of a nation. For instance, (see Angahar and Iorpev 2012; Tahar, Arafet, and Hadhek 2018; Nkwatoh and Hiikyaa 2018; Enejji and Agri 2020; Ebipre and Wilson 2020; Gylych, Kemal and Sotonye 2018).

This study is generally significant in terms of theory, policy and academics. Theoretically, the study will be significant because it will present an opportunity for theoretical validation of the link between insecurity and household welfare in Nigeria. For policy purposes, the findings of this study will therefore have immense benefit for policy makers and economic planners in terms of formulating and implementing appropriate welfare policies amidst insecurity in the country. Section five features the presentation and discussion of the results, whereas the conclusion and recommendations are presented in section six.

**LITERATURE REVIEW**

**Theoretical Linkage**

This study is anchored in rational choice theory and relative deprivation theory. Rational choice theory, introduced by Smith (1776), reveals that terrorism undermines policy effectiveness and constrains the development process of any nation. According to the theory, individuals are in control of their decisions, and they do not make choices because of unconscious drives, tradition or environmental influences. People use rational considerations to weigh the consequences and potential benefits of any action and, in this case, insecurity. Those involved in illegal acts derive benefits irrespective of the harm their act is posing to the economy, but it is their choice for illegal activities in comparison to the derived benefit. The major setback of rational choice theory is its inability to provide appropriate parameters for measuring how a perceived action could serve as a benefit or cost to terrorists. Another weakness of rational choice theory is that it does not account for intuitive reasoning or instincts. For decisions that must be made in an instant, such as decisions that influence survival, there may not be time to weigh the costs and benefits. Ongoing insecurity activities in Nigeria may be beneficial to commiters but detrimental to the well-being of the household. In Nigeria, the persistent increase in insecurity may affect citizens’ standard of living.

On the other hand, the relative deprivation theory propounded by Gurr (1970) suggests that political violence and terrorism occur mainly because of collective discontent caused by a sense of relative
deprivation. The theory further suggests that people who feel that they are being deprived of something considered essential in their society, such as money, rights, political voice, and status, will organize or join social movements dedicated to obtaining the things of which they feel deprived. Gurr (1970) suggested that political violence and terrorism occur mainly because of collective discontent caused by a sense of relative deprivation. The theory further suggests that people who feel that they are being deprived of something considered essential in their society, such as money, rights, political voice, and status, will organize or join social movements dedicated to obtaining the things of which they feel deprived. The current insecurity activities in Nigeria could be due to the deprived rights of average Nigerians, which are rooted in the theory. Consequently, the alarming rate of this menace may affect economic activities as well as household well-being, as peasants are displaced or chased away from their ancestral homes.

**Empirical Review**

The reviews in this section are arranged in accordance with the study objectives.

**Review of Empirical Studies Related to Insecurity and Household Consumption**

*Using structured questionnaires, interviews and focus group discussions,* Eneji and Agri (2020) investigated and exposed the root causes and socioeconomic impacts of insecurity on the standard of living in Nigeria and found that insecurity worsened poverty, hunger, disease, illiteracy and violence on the land, thus affecting households negatively. The study concluded that insecurity is a threat to the Nigerian economy. However, the impact of insecurity on other household variables was not captured in the study; rather, it was related only to factors that affect households. Phoumin and Kimura (2019) investigated the impact of energy insecurity on household welfare in Cambodia using 2015 Cambodia Socioeconomic Survey data and descriptive statistics. This confirms that energy insecurity has an enormous negative impact on household welfare, with a further negative impact on children’s human capital formation. Using a panel regression, Bowman (2013) examined the relationship between job insecurity and household consumption in Australia using a dataset from 2005 to 2011 and found a significant and negative effect of job insecurity on food consumption. Using microdata, Benito (2006) examined whether job insecurity affects household consumption in British households. Employing ordinary least squares, the results provided support for the central proposition that unemployment risk leads households to defer consumption. The study is not topical and differs from the current study in terms of scope. However, the analysis revealed bias in the choice of job security rather than in the case of general insecurity.

**Empirical Studies Related to Insecurity and Household Income**

In the realm of understanding the dynamics of insecurity and its implications for various facets of the Nigerian economy, several studies have contributed valuable insights. Okoro (2021), employing the ordinary least squares (OLS) method, highlighted the significant threat of economic insecurity to Nigerians during the period spanning from 2016 to 2019. Moreover, Azu, Okobia, and Dibie (2021) employed the autoregressive distributed lag (ARDL) methodology to delve into the intricate relationship between insecurity and productivity in Nigeria, specifically focusing on the years in question. However, their study primarily concentrated on the broader aspect of insecurity in the country, leaving the specific linkage between economic insecurity and unemployment unexplored. In a broader analysis, Ebipre and Wilson (2020) investigated the economic landscape of Nigeria from 2000 to 2019, revealing pervasive negative impacts. Hassan, Akor, Bamiduro, and Rauf (2020) explored the intersection of government policies/programmes and insecurity, uncovering a weak impact on productivity within their study period. Notably, their examination centred on the broader context of insecurity, without a specific emphasis on the relationship between economic insecurity and unemployment.

Tahar, Arafet, and Hadhek (2018) took another approach by studying the effect of insecurity on national income in Nigeria utilizing simultaneous equation models applied to panel data encompassing eleven countries. While their findings unveiled a positive effect of insecurity on national income, the study primarily focused on the general aspect of insecurity and did not thoroughly investigate its connection to household income. Nkwatoh and Hiikyaa (2018) delved into the impact of insecurity on economic growth in Nigeria utilizing a vector autoregressive model with quarterly data spanning from 2009Q1 to 2016Q4. Surprisingly, their results suggested that economic growth and investment activities tend to increase during periods of insecurity, challenging conventional economic theories. Additionally, the study indicated a decrease in the unemployment rate during the study period, implying that, contrary to expectations, insecurity did not have a negative effect on the overall economy.

Tahar, Arafet, and Hadhek (2018), in a separate study, confirmed the positive effect of terrorism on economic growth for both developed and developing countries within the timeframe of 2008-2015. However, similar to their previous work, the analysis predominantly focused on general insecurity, with minimal attention dedicated to the specific interplay between economic insecurity and unemployment. Finally, Ajibola (2016) undertook a comprehensive analysis using time series data from 1981 to 2014, employing the ordinary least squares (OLS) method. Their findings confirmed the negative influence of insecurity on various economic indicators, including real gross domestic product, total labor force, total expenditure, and gross fixed capital formation. This study also illuminated the adverse effects of insecurity on the broader economic landscape without delving deeply into the specific connection between economic insecurity and unemployment.

**Methodology**

This study is a time series study that relies essentially on secondary data generated mainly from the World Bank Statistical Bulletin and the Central Bank of Nigeria (CBN) Annual Publications for the period 1986-2022. The choice of the base year was to isolate the impact of insecurity on the pace of development of the country during the post-SAP period, while the year 2021 was considered due to data availability issues related to some variables used.
**Model Specification**

**Model 1** (household consumption equation) is specified in this study using the aggregate consumption function, which states that consumption is a function of income. According to Keynes, real consumption is a function of real disposable income (Alimi, 2013).

\[
CON_i = f \left( INC_i \right)
\]

where CONS is the real consumption expenditure and INCM is the real national income. Real consumption expenditure was used as a proxy for real consumption expenditure, while real gross national income was used as a proxy for real national income. Moreover, consumption expenditure and income are affected by the level of insecurity. Thus, equation (1) can be rewritten as follows:

\[
CON_i = f \left( INC_i, INS_i \right)
\]

where CONS = real household consumption expenditure, INC is real gross national income, and INS = insecurity, which will be measured as the terrorism index. The model (taking the natural logarithm) is transformed and expressed in stochastic form as

\[
\ln CON_i = \alpha_0 + \alpha_1 \ln INC_i + \alpha_2 INS_i + \mu_i
\]

(3)

where \(\alpha_0\) = constant, \(\alpha_1 - \alpha_2\) are the parameters to be estimated, and \(\mu_i\) is the error term. \(\alpha_2\) is expected to negatively affect household consumption, while \(\alpha_1\) is expected to positively affect household consumption.

**Model 2** (the household income equation) captures the influence of insecurity on household income. The inclusion of domestic investment, foreign direct investment, consumption and government expenditure in the model is in accordance with Keynes aggregate demand theory (Keynes, 1936). Moreover, overall economic conditions, such as inflation, can impact household income (Barro, 1996). Furthermore, it is argued that the interest rate determines income (Awakamma, 2014). Thus, the model is written as follows:

\[
\ln INC_i = f \left( INF_i, PINT_i, \ln GFCF_i, \ln FDI_i, INS_i \right)
\]

(4)

INC = real gross national income, INF = inflation rate, GFCF = gross fixed capital formation used as a proxy for domestic investment, FDI = foreign direct investment, and INS = insecurity. Stochastically, the model is written as follows:

\[
\ln INC_i = \beta_0 + \beta_1 INF_i + \beta_2 PINT_i + \beta_3 \ln GFCF_i + \beta_4 \ln FDI_i + \beta_5 INS_i + \mu_i
\]

(5)

where \(\beta_0\) = constant, \(\beta_1 - \beta_5\) are the parameters to be estimated, and \(\mu_i\) is the error term. The a priori expectation is that \(\beta_1\), \(\beta_2\) and \(\beta_3\) are expected to negatively affect national income, while \(\beta_4\) and \(\beta_5\) are expected to positively affect national income.

The ARDL model of equations can be specified as follows:

\[
\ln CON_i = \alpha_0 + \alpha_1 \ln INC_i + \alpha_2 INS_i + \sum_{j=1}^{p} \gamma_j \Delta \ln CON_{i-j+1} + \sum_{j=1}^{q} \gamma_j \Delta \ln INC_{i-j+1} + \sum_{j=1}^{r} \gamma_j \Delta \ln INS_{i-j+1} + \epsilon_i
\]

(14)

\[
\ln INC_i = \beta_0 + \beta_1 INF_i + \beta_2 PINT_i + \beta_3 \ln GFCF_i + \beta_4 \ln FDI_i + \beta_5 INS_i + \sum_{j=1}^{p} \gamma_j \Delta \ln INC_{i-j+1} + \sum_{j=1}^{q} \gamma_j \Delta \ln FDI_{i-j+1} + \sum_{j=1}^{r} \gamma_j \Delta \ln INS_{i-j+1} + \epsilon_i
\]

(15)

**Variable Description and Measurement**

Table 1 provides a detailed description, measurement and source of data for this study.

<table>
<thead>
<tr>
<th>S/N</th>
<th>Variable</th>
<th>Description</th>
<th>Measurement</th>
<th>Source of Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>CONS</td>
<td>Household consumption expenditure</td>
<td>Final consumption expenditure of households in Billions of Naira</td>
<td>CBN</td>
</tr>
<tr>
<td>2.</td>
<td>INC</td>
<td>Household income</td>
<td>GDP per capita (Naira)</td>
<td>WDI</td>
</tr>
<tr>
<td>3.</td>
<td>INS</td>
<td>Insecurity</td>
<td>Fragility state index</td>
<td>Fund for Peace</td>
</tr>
<tr>
<td>4.</td>
<td>INF</td>
<td>Inflation</td>
<td>Annual figures (Percent)</td>
<td>WDI</td>
</tr>
<tr>
<td>5.</td>
<td>GFCF</td>
<td>Gross fixed capital formation</td>
<td>In Billions of Naira</td>
<td>WDI</td>
</tr>
<tr>
<td>6.</td>
<td>FDI</td>
<td>Foreign direct investment inflow</td>
<td>In Billions of Naira</td>
<td>WDI</td>
</tr>
<tr>
<td>7.</td>
<td>PINT</td>
<td>Interest rate (Prime lending rate)</td>
<td></td>
<td>CBN</td>
</tr>
</tbody>
</table>

Note: WDI= World Development Indicators; CBN = Central Bank of Nigeria

**Estimation Techniques**

This research employed a combination of descriptive statistics and econometric tools to provide a comprehensive analysis of the study's subject matter. Descriptive tools were leveraged to offer insights into the historical background and behavioral patterns of the participants. On the econometric front, unit root tests, specifically the augmented Dickey Fuller (ADF) and Philip Perron (PP) tests, were utilized to examine the stationarity of the series under consideration. This study adopted the autoregressive distributed lag (ARDL) method, a powerful tool for analysing linear time series models. Notably, the ARDL method was applied without distinction for series stationarity, whether at the level or the first difference (i.e., l(0) or l(1)). In estimating the models, the trend and intercept at the trend specifications were incorporated, contributing to a comprehensive understanding of the dynamics. The effectiveness of the trend specification was validated through rigorous residual diagnostic tests, including the Jarque Bera normality test, Breusch–Godfrey serial correlation LM test, heteroskedasticity Breusch–Pagan–Godfrey test, and Ramsey test. These postestimation tests were crucial for evaluating the validity of the model assumptions, examining the
distribution pattern, assessing normality, ensuring serial independence, and verifying the constancy of residuals. The satisfactory results of these diagnostic tests enhance the robustness and reliability of the study's findings, affirming the soundness of the analytical framework employed.

**RESULTS AND DISCUSSION**

**Descriptive Statistics**

Table 2 provides a detailed description of the descriptive characteristics of the variables.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient Variance</th>
<th>Uncentered VIF</th>
<th>Centered VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Household Consumption</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>lnINC</td>
<td>0.000352</td>
<td>104.8008</td>
<td>2.668215</td>
</tr>
<tr>
<td>INS</td>
<td>0.000136</td>
<td>2885.483</td>
<td>2.668215</td>
</tr>
<tr>
<td>C</td>
<td>0.937717</td>
<td>2127.851</td>
<td>NA</td>
</tr>
<tr>
<td>Household Income Equation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>INF</td>
<td>3.79E-06</td>
<td>2.959934</td>
<td>1.310392</td>
</tr>
<tr>
<td>PINT</td>
<td>8.60E-05</td>
<td>34.76750</td>
<td>1.488341</td>
</tr>
<tr>
<td>lnGFCF</td>
<td>0.002390</td>
<td>186.0872</td>
<td>8.180204</td>
</tr>
<tr>
<td>lnFDI</td>
<td>0.001103</td>
<td>34.88441</td>
<td>6.759145</td>
</tr>
<tr>
<td>INS</td>
<td>0.000232</td>
<td>2491.646</td>
<td>2.304032</td>
</tr>
<tr>
<td>C</td>
<td>1.952851</td>
<td>2249.006</td>
<td>NA</td>
</tr>
</tbody>
</table>

Source: Extractions from E-Views Output

From the results in Table 4, there is no incidence of multicollinearity between the two equations since the centred variance inflation factors of the explanatory variables are less than 10.

**Results of the ARDL Bounds Test**

The bounds resulting from the ARDL for all the equations are presented in Table 5.

<table>
<thead>
<tr>
<th>Equation</th>
<th>F-statistic</th>
<th>I(0)</th>
<th>I(1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Household Consumption Equation</td>
<td>12.28368***</td>
<td>4.87</td>
<td>5.85</td>
</tr>
<tr>
<td>Household Income Equation</td>
<td>8.92578***</td>
<td>3.12</td>
<td>4.25</td>
</tr>
</tbody>
</table>

Note: *** probabilities <0.01, ** probabilities <0.05, * probabilities <0.1.

Source: Extracts from E-Views Output

Table 3 shows the stationarity properties of the variables incorporated in the two equations: household consumption and household income. The data suggest that, when observed at levels, all the variables under consideration exhibit nonstationarity, with the exception of lnINC and RIR, which demonstrate stationarity at levels. However, after first differencing, these variables became integrated of order one, indicating that first-order integration was achieved at the 5% level of significance.

This conclusion is drawn from their respective p values being below the 0.05 critical threshold after first differencing, except for lnINC and PINT, which remain stationary at these levels. In light of these results, the analysis proceeded using the autoregressive distributed lag model.
Note: *** probabilities<0.01, ** probabilities <0.05, * probabilities <0.1.

Source: Extracts from E-views Output.

The results show that all the F-statistics for the household consumption and household income equations are statistically significant at the 1% level. This implies that there is evidence of a long-run relationship among the variables in all the equations.

**Impact of Insecurity on Household Welfare in Nigeria**

The results of the long-term impact of insecurity on household consumption and household income in Nigeria are presented in Table 6.

Table 6: Long-term results

<table>
<thead>
<tr>
<th>Variables</th>
<th>Household Consumption Equation</th>
<th>Variables</th>
<th>Household Income Equation</th>
</tr>
</thead>
<tbody>
<tr>
<td>lnINC</td>
<td>1.157***</td>
<td>INF</td>
<td>0.016</td>
</tr>
<tr>
<td></td>
<td>(0.0656)</td>
<td></td>
<td>(0.0126)</td>
</tr>
<tr>
<td>INS</td>
<td>-0.0268*</td>
<td>PINT</td>
<td>0.0389</td>
</tr>
<tr>
<td></td>
<td>(0.0132)</td>
<td></td>
<td>(0.0356)</td>
</tr>
<tr>
<td>lnGFCF</td>
<td>1.588***</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.402)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>lnFDI</td>
<td>0.255**</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.103)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>INS</td>
<td>-0.1097*</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.0579)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: *** probabilities<0.01, ** probabilities <0.05, * probabilities <0.1. Standard errors are in parentheses ().

Source: Extracts from E-Views Output

The results in Table 6 show that insecurity has a negative and significant influence on household consumption and household income in Nigeria in the long run at the 10% level of significance. This finding suggests that there is a statistically significant negative relationship between insecurity and both household consumption and household income in Nigeria. This implies that at the level of insecurity increases, there is a corresponding decrease in both household consumption and household income. The negative influence on household consumption and income suggests that insecurity in Nigeria is not only a social or political issue but also has economic consequences. Thus, businesses may be affected, leading to reduced income for households. The study also indicates a positive and significant relationship between household income and consumption in Nigeria in the long run at the 10% level of significance. This positive relationship suggests that as household incomes increase, so does household consumption. This finding suggests the enduring impact of sustained income growth on consumption patterns, indicating the potential for lasting improvements in living standards for the Nigerian population.

The study findings also reveal a strong and statistically significant positive impact of domestic investment (GFCF) and foreign direct investment (FDI) on household income in Nigeria in the long run at the 5% level of significance. This finding suggests that increases in both domestic and foreign investments contribute positively to the growth of household income. This finding indicates the potential role of investments in enhancing the overall economic well-being of households and that sustained efforts to attract and promote investments may lead to enduring positive effects on household incomes, fostering economic development and improving living standards.

Having found the existence of a long-term relationship among the study variables, the short-term effect was also captured. This was done through the estimation of an ARDL error correction model. The results are presented in Table 7.

Table 7: Results from the ARDL Error Correction Model

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>- 6.401***</td>
<td>(1.091)</td>
<td>C</td>
<td>1.595**</td>
<td>(0.236)</td>
</tr>
<tr>
<td>@TREND</td>
<td>0.0121**</td>
<td>(0.0038)</td>
<td>@TREND</td>
<td>0.0273*</td>
<td>(0.0027)</td>
</tr>
<tr>
<td>D(LNCONS(-1))</td>
<td>0.140</td>
<td>(0.121)</td>
<td>D(INF)</td>
<td>0.0054</td>
<td>(0.0066)</td>
</tr>
<tr>
<td>Coeffic(-1)*</td>
<td>0.040***</td>
<td>(0.144)</td>
<td>D(LNFDI)</td>
<td>0.00843</td>
<td>(0.0114)</td>
</tr>
<tr>
<td>D(INS)</td>
<td>-0.0005</td>
<td></td>
<td></td>
<td>-0.0198</td>
<td>(0.0193)</td>
</tr>
<tr>
<td>R-Square</td>
<td>0.0298</td>
<td></td>
<td></td>
<td>0.8240</td>
<td></td>
</tr>
<tr>
<td>R-Squared Adjusted</td>
<td>0.5934</td>
<td></td>
<td></td>
<td>0.7937</td>
<td></td>
</tr>
<tr>
<td>F-statistic</td>
<td>17.817</td>
<td>F-statistic</td>
<td>27.556</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Breusch-Godfrey Serial Correlation LM Test- F-statistic (Probability)</td>
<td>1.00278 (0.3802)</td>
<td>Breusch-Godfrey Serial Correlation LM Test- F-statistic (Probability)</td>
<td>1.11301 (0.3464)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heteroskedasticity Test- F-statistic (Probability)</td>
<td>1.775439 (0.495)</td>
<td>Heteroskedasticity Test- F-statistic (Probability)</td>
<td>1.18755 (0.3404)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Extracts from E-Views Output

The short-term results in Table 7 reveal that there are negative and significant error correction terms for the household consumption and household income models. This implies that the model tends to converge toward long-term equilibrium in the event of any initial distortion. In other words, the identification of a negative and significant error correction term in both models suggests the presence of a corrective mechanism, emphasizing the tendency of the system to converge toward a long-run equilibrium following any initial disturbance.

The error correction term acts as an adjustment mechanism, capturing the speed at which the system corrects discrepancies between short-term and long-term relationships. The negative sign indicates that, in the short run, any deviation from the long-run equilibrium prompts a corrective response, pulling the system back toward stability. This finding is particularly relevant for understanding the dynamics of household consumption and income in response to short-term shocks or changes.

Residual tests were also conducted to examine whether the estimates were reliable, whether the residuals exhibited a distribution that could be considered normal, and whether the estimates could yield reliable statistical inferences. The residual heteroskedasticity results reveal that...
there is an absence of heteroskedasticity in the models, implying that the variables are homoscedastic. The serial correlation test results revealed the absence of serial correlation among the study variables given that the probability values were greater than the 0.05 critical level. This means that the residuals of the model were serially independent.

**CONCLUSION AND RECOMMENDATIONS**

The results of the study showed a negative and significant influence of insecurity on household consumption and income in Nigeria in the long run. Furthermore, the long-term findings validate that insecurity adversely affects household consumption and income in the long run. Therefore, the study concludes that insecurity adversely affects household consumption and household income indices of household welfare. Based on these study findings, the following recommendations were made:

i. The findings of the study show the critical need for comprehensive policy interventions to address the pervasive issue of insecurity in Nigeria and its profound impact on household consumption and income. The negative and significant influence of insecurity on these key economic indicators necessitates targeted strategies aimed at mitigating the adverse effects on household welfare.

ii. The primary responsibility for tackling insecurity lies with the government, particularly law enforcement agencies and security forces. Strengthening the national security infrastructure is imperative and involves investments in modern technology, intelligence capabilities, and the enhancement of coordination among federal, state, and local security agencies. The immediate focus should be on fortifying the security apparatus to address existing threats, with a sustained commitment to ongoing improvements.

iii. At the community level, fostering resilience is crucial in the face of insecurity. Community-based security initiatives should be encouraged and supported by the formation of local security groups and training provided by the government. Collaboration between these groups and traditional leaders can enhance local security, and the establishment of neighborhood watch programs can contribute to community safety. This approach necessitates immediate implementation to address current threats, coupled with long-term community engagement strategies.

iv. Recognizing the immediate challenges faced by vulnerable households, the establishment of social safety nets is paramount. Government-led initiatives supported by nongovernmental organizations should implement targeted programs such as conditional cash transfers to provide immediate relief to those affected by insecurity. The urgency of implementing such safety nets cannot be overstated, particularly in addressing the immediate impact of insecurity on household welfare.

v. The study suggested that the government should provide more palliatives for most affected areas to cushion the effect since it reduces the level of household consumption. This can be achieved through effective and efficient distribution of food aid through associations as well as religious bodies operating in the most affected areas.

vi. The government should improve its strategies to attain national security so that the negative effect that insecurity has on household income can be eradicated. This could be achieved by initiating local police by the government, which would assist in fighting insecurity in rural communities.

vii. Education emerges as a key component of a long-term strategy to address insecurity. Increased investment in education is essential for improving literacy rates and skill development, empowering individuals to access better economic opportunities. Immediate action should be taken to enhance access to education, with a sustained commitment to realizing the long-term benefits that education brings to societal resilience.

viii. Finally, recognizing the transnational nature of insecurity and diplomatic and regional cooperation is paramount. In collaboration with international organizations and neighboring countries, the government should strengthen diplomatic ties and regional alliances to address the root causes of insecurity.

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