

DISAGGREGATED HOUSEHOLD CONSUMPTION EXPENDITURE AND ECONOMIC GROWTH IN NIGERIA

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ABSTRACT

The study empirically analyzed the disaggregated household consumption expenditure on economic growth in Nigeria for the period of 1981-2023. The dependent variable is gross domestic product growth rate (GDPGR) while the explanatory variables are Final Consumption Expenditure of Household (FCEH) and Final Consumption Expenditure of Non-Profit Institution Serving Household (FCEN). The data were all sourced from Central Bank of Nigeria Statistical Bulletin 2023. The preliminary analysis was carried out using Augmented Dickey Fuller Unit Root test and Johansen Cointegration while the main estimation technique is Vector Error Correction Method and Granger Causality/Block Exogeneity Wald Tests. This study revealed that the Final Consumption Expenditure of Households (FCEH) significantly drives Nigeria's GDP growth, with a short-term impact of 9.35 percentage points and a stronger long-term effect of 17.80 percentage points. The Final Consumption Expenditure of Non-Profits Serving Households (FCEN) shows short-term benefits with a 1.91 percentage point rise but a long-term decline of 2.78 percentage points. The Granger Causality Test indicates that FCEH and FCEN Granger-cause GDP growth. This study concluded with emphasize on the importance of promoting household consumption while optimizing public expenditure to support long-term economic growth. To foster economic growth, Nigeria should implement policies to increase household disposable income and boost consumer spending, while also expanding social welfare programs to reduce regional disparities.

Keywords: Disaggregated Household, Consumption Expenditure, Economic Growth, Nigeria
JEL Classification Codes: D1, E2, P35

1. INTRODUCTION

Keynesian model argues that increase in aggregate demand stimulate economic activities, which is contrary to classical postulations of increase aggregate supply. In literature, government consumption expenditure and household consumption expenses have been extensively used in both emerging and advanced economies (Tapsin & Hepsag, 2014; Koyuncu & Unal, 2020). Consumption spending has been a fundamental driver of economic growth, an increase in consumption expenditure by households and the government boost aggregate demand in the economy which also makes it profitable for firms to increase their production level by employing more workers and this implies more taxable income for the government (Mankiw, 2019).

In Nigeria, consumption expenditure accounts for a significant portion of Nigeria's GDP, with household consumption expenditure being the largest component of aggregate demand (Bakare & Fawehinmi, 2011).

Data reveals that Nigeria's household consumption expenditure as a percentage of GDP has remained high, averaging around 65% between 1981 and 2023 (World Bank, 2023). The Final Consumption Expenditure of Non-Profits Serving Households (FCEN) also exhibited a consistent upward trend. Starting from a modest ₦0.10 billion in 1981, it rose to ₦1.37 billion in 1991. The advent of the Fourth Republic in 1999 and subsequent economic reforms likely contributed to a significant jump, with FCEN reaching ₦18.17 billion in 2000 (CBN, 2012). This growth continued, with FCEN hitting ₦224.48 billion in 2010 and ₦865.75 billion in 2020. By 2022, it had further increased to ₦1,503.76 billion (CBN, 2023). This substantial growth may be attributed to the proliferation of non-profit organizations providing humanitarian aid across Nigeria, as documented by the Corporate Affairs Commission (CAC) reports (CAC, 2023).

However, with the relative increase in Nigeria's consumption expenditure and economic growth, the country continues to face significant economic challenges, including a high inflation rate of 15.63% in 2021, which surpasses the Sub-Saharan average and diminishes the purchasing power of its citizens (World Bank, 2022).

Nigerian government has employed one critical tool at its disposal been fiscal policy, which involves adjusting government spending, taxation, and borrowing to steer the economy toward desired outcomes (Medee & Nembee, 2011). Fiscal policy serves to modify the pattern and magnitude of aggregate demand, output, and employment, thus playing a pivotal role in shaping economic trends and growth. In 2022, the government introduced tax incentives and lower interest rates to encourage investment and boost consumption expenditure (CBN, 2022; CBN, 2020; African Development Bank, 2021).

Despite these efforts, consumption expenditure is not stable as a result of business cycle, government expenditure and fiscal trajectory in most cases (Usman & Idris, 2022). Also, consumption expenditure is not directed towards domestic economic activities, hence might not significantly support job creation processes and enhances standard of living (Olumuyiwa, 2021; Sule, 2019).

The motivation for this study stems from the instability in Nigeria's economic growth trajectory and consumption patterns, which is evidenced in high inflation rates, unemployment and widespread poverty rate. Hence, this current study seeks to totally examine the nexus among the components of household consumption expenditure- final household consumption expenditure and final consumption expenditure of non-profit institution serving household on economic growth in Nigeria from 1981 to 2023.

This study has two major objectives: To analyze the impact of final household consumption of expenditure on economic growth in Nigeria and to access the impact of non-profit institution serving households on the Nigerian economic growth. The paper is structured into six parts; introduction, literature review, methodology, results and discussion of findings, conclusion and recommendations and references.

2. LITERATURE REVIEW

Brief conceptual clarifications

Household final consumption expenditure (also known as private consumption) is the market value of all goods and services, including durable products (such as cars, washing machines and home computers), purchased by households, and payments and fees to governments to obtain permits and licenses (World Bank, 2015). According to Takashi, (2021) Institutions that are recognized as NPISH are defined as private organizations with tax-exempt status that primarily provide services to households in one of the following six categories: health care, recreation, including libraries and museums, education and research (including day care and nursery schools), social services, religious organizations, foundations, social advocacy, civic

and social organizations, and professional advocacy including nonprofit legal services. The AFDB (2021) described NPISH final consumption expenditure as the spending on goods and services provided by non-profit institutions serving households at no cost or at prices that are not economically significant.

Theoretical literature

Harrod-Domar Growth Theory

This was propounded by Harrod in 1939 and Domar in 1946. The model was designed to explain economic growth within an economy by utilizing savings levels and capital productivity. The assumptions of the model are: Long-run equilibrium economic development is not natural in an economy and is nearly impossible to accomplish; The concept of 'fixed proportions' in which labour cannot be substituted by capital in production is a major assumption in the Harrod-Domar model. Using the savings ratio, the capital-output ratio, and the rate of increase in the labour force, this model suggests that if any of the variables were to deviate from equilibrium, the economy would suffer from rising unemployment or prolonged inflation.

Absolute Income Hypothesis

The Absolute Income Hypothesis (AIH), proposed by John Maynard Keynes in his 1936 work 'The General Theory of Employment, Interest and Money,' is a fundamental theory in macroeconomics that explains the relationship between income and consumption. According to this hypothesis, current consumption is primarily determined by current disposable income, with individuals typically spending a decreasing proportion of their income as their income rises (Keynes, 1936). The AIH posits that there is a stable relationship between consumption and income, represented by the consumption function: $C = a + bY$, where C is consumption, Y is disposable income, 'a' is autonomous consumption (consumption when income is zero), and 'b' is the marginal propensity to consume (MPC). The MPC, which represents the fraction of an additional dollar of income that is spent on consumption, is assumed to be positive but less than one, implying that as income increases, consumption also increases but at a decreasing rate (Friedman, 1957).

The Keynesian Cross

The theoretical foundation of this study is rooted in the Keynesian Cross articulated by Keynes in his general theory of interest rate, employment and money (1936). According to Keynes, stimulating economic growth hinges primarily on aggregate demand. The aggregate supply function, on the other hand, is considered given in the short-run, as it is determined by technical production conditions and the availability of raw materials and machinery, which remain relatively constant. Consequently, the level of employment within the economy is largely determined by the aggregate demand function, which, in turn, relies on consumption. Unemployment is attributed to declines in consumption expenditure. Boosting consumption, is posited to elevate employment levels. This premise operates on the notion that not only does the private sector contribute to the overall efficiency of the economy, but so does the government. The application of the Keynesian model occupies a middle ground between a market-based economy and a state-controlled one. Within this framework, fiscal policy, particularly government spending, is analyzed. According to Keynesian Cross, government intervention through increased spending during economic slowdowns can spur job creation. The underlying principle is that increased government spending leads to more disposable income for employed individuals, thereby stimulating overall demand (Keynes, 1936).

Empirical Review

Kulsom, Cui, Naeem, Madiha and Hira (2024) examined the relationship of government expenditure, household consumption and economic growth of Pakistan using data from 1971 to 2020. Vector Error Correction Model was used to check the long run association between study variables. Finally, Granger Causality Test is used to check Causation at different Lag Levels. The findings of study showed support to literature. The results showed that government expenditure, and Household consumption has significant impact on economic growth of Pakistan. Strong causation between the variables was found. This implies that Welfare policies related to enhances trade subsidies and sustainable resource allocation boosts economic growth in the economy in the long run as well as short.

Krasniqi and Markaj (2024) analyzed the impact of final consumption expenditure and gross capital formation on GDP growth in the Western Balkans using a pooled Ordinary Least Squares (OLS) regression analysis. The findings revealed that the growth rates of final consumption expenditure and gross capital formation have significant positive impacts on GDP growth, while their static levels do not show significant effects. Policymakers are encouraged to focus on enhancing consumer spending, promoting private and public investments, and fostering innovation to drive long-term economic performance.

Gajabo (2023) analyzed household consumption expenditure behavior in case of Areka town, Wolaita zone. Data were collected from 375 households of the town using simple random sampling technique. The findings showed that an increase in income, more availability of occupation, more educated household heads, and access to credit have significant positive effect on the consumption of normal goods, while female headed household, access to credit, more educated household, and an increased income, has a significant lower to the consumption for Geffen goods. Therefore, the findings call zonal and woreda's level education office, financial Program, municipalities and local economic sectors to provide valuable information to households on factors that influence their consumption behavior, such as changes in prices perceived, income, and availability of credit access.

Akermi, Ben-Yedder & Bakari (2023) investigated the impact of final consumption, domestic investment, exports, and imports on economic growth in Albania during the period 1996 – 2021. By using cointegration analysis, VECM model and WALD test, empirical analysis indicated that there is no causality relationship between final consumption, exports, domestic investment, imports and economic growth in the long run and in the short run. These findings present the critical economic situation of Albania, which stands in need of an entry of urgent economic reforms and strong strategies to boost economic growth.

Kingu (2023) investigated the contribution of the household consumption expenditure and government expenditure on economic growth in Tanzania employing unrestricted vector autoregressive (UNVAR) model. The findings of UNVAR model analysis in system of equation indicated that some variables have significant influence on economic growth that is household consumptions expenditure and government expenditure whereas other variables have no significant influence. Generally, in the first system of equation shows that jointly gross domestic product and household consumptions of the previous year's influence the gross domestic product in current year while jointly government expenditures in previous years have on influence on economic growth in current year in Tanzania. In the second system of equation of UNVAR finds only jointly gross domestic product of the previous year's influences the household consumption while other variables jointly are not influencing house hold consumptions in Tanzania. In the third system of equation of UNVAR analysis all the variables jointly influence the government expenditures in current year in Tanzania. Therefore, the

empirical results suggest the deliberately government efforts to support these variables in order to boost the economic growth in Tanzania.

Muda, Nasution, Omar, Abdullah, Christy and Peranginanin (2023) analyzed the influence of households and non-profit institution serving households (NPISHs) final consumption expenditure, population growth, exports of goods and services, net trade in goods and services, and merchandise exports to low- and middle-income economies within the region on GDP. The data was analyzed using panel data regression analysis with the E-views application. The results of the study are found to be statistically significant and provide valuable insights into the factors that impact GDP. The findings of this study have important implications for policymakers and stakeholders in decision-making and policy development related to economic growth. By understanding the influence of population growth, household consumption, exports, trade, and merchandise exports on GDP, policymakers can develop targeted policies and strategies to promote economic growth and development in the region.

Abdikani (2020) the examined the causal and dynamic relationship between the consumption expenditure and economic growth in Somalia. The study covers the sample period of 1970-201. Vector error correction model has been employed. The findings of the study revealed that, consumption expenditure and economic growth have both long run and short run relationship. The error correction model performs well, as it has been negative and statically significant, signifying that each year adjustments towards the convergence is ascertained. However, the VECM based Granger causality test indicated that there is a unidirectional short run relationship running from consumption expenditure to economic growth. The study recommended the policy makers to embolden policies that lead to productivity increase.

Adelowokan (2021) examined the impact of fiscal policy, private consumption and economic growth among the Economic Community of West African States (ECOWAS) spanning from 1988 to 2017 using the Panel Pool Mean Group. The results depicted that the government's recurrent expenditure for growth was inversely but significant to economic growth, while capital expenditure was positively and statistically significant to explain economic growth in Nigeria. Capital expenditure is vital for economic growth. Besides, private consumption's negative effect on economic growth was a disconnection between economic output and private consumption. The results further showed that tax revenues in ECOWAS countries had a positive and significant influence on economic growth. Therefore, the study recommends revisit government policy(ies) channeling government spending to increase ECOWAS output rates and spur regional economic growth.

Takashi (2021) examined nonprofit institutions serving households (NPISH) in the United States for 1992-2019 to assess its contribution to the United State economic growth parameters following the System of National Accounts (SNA) guidelines and analyzed the sector's characteristics in the U.S. economy. In nominal terms, the NPISH sector accounts for about 5.5 percent of Gross Domestic Products (GDP) in 2019, an increase from 4.7 percent in 1992. This growth contrasts with the stagnant growth viewed in real terms because the inflation rate of the NPISH sector has been much higher than the economy-wide inflation. The NPISH sector contributed most to GDP during the early years of the Great Depression and its share within the national economy has shrunk since then, from the post-World War II high of 6.4% in 1993 to 5.1% in 2019. This makes sense because the largest subsectors of the NPISH sector are health and education. The sector is growing steadily in nominal terms but has been stagnant in real terms in recent years, principally because of higher inflation rates on their cost of production.

Blaževski (2018) empirically investigated the dynamic relationships between the government final consumption expenditure, the final consumption expenditure of households and NPISH

and the gross domestic product in Republic of Croatia. Quarterly data for the government final consumption expenditure, the final consumption expenditure of households and NPISH and the gross domestic product from 2000 to 2017 are analyzed using unrestricted vector autoregressive (VAR) model. Results of empirical analysis implies that final consumption expenditure of households and NPISH had positive influence on economic growth, while influence of government final consumption expenditure on economic growth is not significant. On the other hand, economic growth has impact only on government final consumption expenditure.

Gaps in Literature

Even though there are sizable studies across the globe on the nexus between consumption expenditure and economic growth but are mostly limited to household consumption expenditure and government consumption expenditure (Olumuyiwa, 2021 and Usman & Idris, 2022). This current study seeks to differ by analyzing the impact of the identifiable components of household consumption expenditure on economic growth in Nigeria.

3. METHODOLOGY

Theoretical framework

The theoretical foundation of this study is rooted in the Keynesian Cross articulated by Keynes in his general theory of interest rate, employment and money (1936). According to Keynes, stimulating economic growth hinges primarily on aggregate demand. The aggregate supply function, on the other hand, is considered given in the short-run, as it is determined by technical production conditions and the availability of raw materials and machinery, which remain relatively constant. Consequently, the level of employment within the economy is largely determined by the aggregate demand function, which, in turn, relies on consumption. Unemployment is attributed to declines in consumption expenditure. Boosting consumption, is posited to elevate employment levels. This premise operates on the notion that not only does the private sector contribute to the overall efficiency of the economy, but so does the government. The application of the Keynesian model occupies a middle ground between a market-based economy and a state-controlled one. Within this framework, fiscal policy, particularly government spending, is analyzed. According to Keynesian Cross, government intervention through increased spending during economic slowdowns can spur job creation. The underlying principle is that increased government spending leads to more disposable income for employed individuals, thereby stimulating overall demand (Keynes, 1936).

Model for the study

This study adopted the Vector Error Correction Model (VECM). The Vector Error Correction Model (VECM) is an econometric model used to analyze the long-term equilibrium relationship and short-term dynamics between multiple time series variables. VECM has various applications in economics, finance, and time series analysis. It is widely used to analyze relationships among economic variables, such as exchange rates, interest rates, GDP components, and asset prices. VECM is employed when the time series variables under consideration are cointegrated. VECM typically operates on differenced variables to ensure stationarity. By differencing the variables, non-stationary components are removed, allowing for the analysis of the stationary residual series

Model Specification

In other to empirically analyze the disaggregated household consumption expenditure on economic growth in Nigeria, this study adapted the work of Abdikani (2020) on the causal and dynamic relationship between the consumption expenditure and economic growth in Somalia using Vector Error Correction Model (VECM). The model of Abdikani (2020) is expressed as:

$$\Delta \log GDP_t = \alpha + \beta_1 \Delta \log CONS_t + \gamma ECT_{t-1} + e_t \tag{1}$$

Where $\Delta \log GDP_t$ and $\Delta \log CONS_t$ are the logged and first differences of the gross domestic product and consumption expenditure variables respectively. Δ , is the first difference operator of the series, α is a constant term, β_1 indicates the short run coefficient parameter for the consumption expenditure, ECT_{t-1} is the lagged residuals from the co-integrating regression and denotes the disturbance term. Here γ represents the long run coefficient parameter that adjust the disequilibrium.

However, in this current study, the model by Abdikani (2020) is modified with the consideration of the two components of household consumption expenditure- final household consumption expenditure and final consumption expenditure of non-profit institution serving household. The functional model for this study is expressed as:

$$GDPGR = f(FCEH, FCEN) \tag{2}$$

The econometric form of the model is written as follows in equation.

$$GDPGR_t = \beta_0 + \beta_1 FCEH_t + \beta_2 FCEN_t + \mu_t \tag{3}$$

Where:

- GDPGR = Gross Domestic Product Growth Rate
- FCEH = Final Consumption Expenditure of Household
- FCEN = Final Consumption Expenditure of Non-Profits Institution Serving Household

$\beta_0 =$ intercept parameter, $\beta_1 - \beta_2$: are the slope parameters which measure the impacts of the explanatory variables on the explained variable.

$\mu_t =$ (white-noise error term).

A priori Expectation

The a priori expectation is that $\beta_1, \beta_2, > 0$. That is, final consumption expenditure of household, final consumption expenditure of non-profits serving should have positive influence on economic growth.

Definitions and Measurement of Variables

Gross Domestic Product Growth Rate (GDPGR): The GDP growth rate refers to the percentage increase in the value of all goods and services produced in an economy, adjusted for inflation, over a specific period, typically annually or quarterly.

Final Consumption Expenditure of Household: Refers to the total spending by resident households on individual goods and services to satisfy their everyday needs This includes expenditure on clothing, food, entertainment, health care, and asset acquisition. This is measure in billion Naira (₦ Billion).

3.5.3 Final Consumption Expenditure of Non-Profits Serving

Refers to the goods and services consumed by non-profit institutions that provide goods or services. This includes healthcare services, education, environmental conservation, human rights and advocacy and water and sanitation to households free or at prices that are not economically significant This is measure in billion Naira (₦ Billion)

Pre-estimation Tests

Unit Root Test

The Augmented Dickey-Fuller (ADF) test is used to determine whether a time series has a unit root, indicating non-stationarity. Its main purpose is to test the null hypothesis that a time series is non-stationary (i.e., it has a unit root) against the alternative hypothesis of stationarity. The ADF test helps to assess whether shocks to the time series have permanent effects or dissipate over time.

Cointegration Test

Cointegration tests will ascertain whether there is long-run relationship between the dependent variable and its regressor. This test implies that there must be an adjustment process to prevent the deviations from the long-run equivalent relationship from becoming larger and larger.

Post-estimation Test

Causality Test

The data collected will be subjected to causality test using Granger Causality test statistic in order to determine the direction of causality between the macroeconomic variables intended in the regression analysis.

Stability Test

The stability test analyzes if the explanatory variable coefficients holds steady throughout the sample period. Inverse Root of AR Characteristics Polynomial is employed to evaluate the models' stability over time.

4. RESULTS AND DISCUSSIONS OF FINDINGS

Table 1: Augmented Dickey-Fuller (ADF) Unit Root Test Results

Augmented Dickey Fuller Unit Root					
Variable	Level	Prob.	First Difference	Prob.	I(d)
GDPGR	-2.607366*	0.5065	-8.303627***	0.0000	I(1)
FCEH	-0.142760	0.9378	-7.481114***	0.0000	I(1)
FCEN	-0.379276	0.9035	-6.068813***	0.0000	I(1)

Source: Authors' computation from E-view 12 Output, 2024

From table 1 above, all the variables; GDPGR, FCEH and FCEN are stationary at first difference, this presents enough evidence to estimate VECM estimation technique

Table 2: Johansen Cointegration Test Results

Unrestricted Cointegration Rank Test (Trace)

Hypothesized	Trace		0.05	
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob.**
None *	0.573918	70.99035	69.81889	0.0402
At most 1	0.312945	36.01232	47.85613	0.3957
At most 2	0.258726	20.62332	29.79707	0.3815

Trace test indicates 1 cointegrating eqn(s) at the 0.05 level

* denotes rejection of the hypothesis at the 0.05 level

**MacKinnon-Haug-Michelis (1999) p-values

Unrestricted Cointegration Rank Test (Maximum Eigenvalue)

Hypothesized	Max-Eigen		0.05	
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob.**
None *	0.573918	34.97803	33.87687	0.0368
At most 1	0.312945	15.38900	27.58434	0.7169
At most 2	0.258726	12.27478	21.13162	0.5208

Max-eigenvalue test indicates 1 cointegrating eqn(s) at the 0.05 level

* denotes rejection of the hypothesis at the 0.05 level

**MacKinnon-Haug-Michelis (1999) p-values

Source: Authors' computation from E-view 12 Output, 2024

From Table 2, Specifically, for the null hypothesis of no cointegration among the variables (None), the trace statistic is 70.99035, which exceeds the critical value of 69.81889, with a p-value of 0.0402. This result allows for the rejection of the null hypothesis, suggesting at least one cointegrating relationship among the variables. However, for the subsequent hypotheses (at most one cointegrating equation and at most two), the trace statistics fall below their respective critical values, with higher p-values (0.3957, 0.3815). Therefore, the null hypotheses for one and two cointegrating relationships cannot be rejected. The maximum eigenvalue test examines whether adding one more cointegrating equation significantly improves the model. Here, the test also indicates one cointegrating equation at the 5% level. For the null hypothesis of no cointegration (None), the maximum eigenvalue statistic is 34.97803, which is slightly above the critical value of 33.87687, with a p-value of 0.0368. This result confirms the rejection of the null hypothesis, supporting the presence of one cointegrating equation. For hypotheses suggesting up to one and two cointegrating equations, the test statistics are all below their corresponding critical values, with p-values of 0.7169 and 0.5208. As such, the null hypotheses for additional cointegrating relationships cannot be rejected. Both the trace test and the maximum eigenvalue test consistently indicate the presence of one cointegrating equation among the variables at the 5% level. This suggests that while the variables may individually be non-stationary, they share a long-run equilibrium relationship. The existence of one cointegrating relationship implies that although short-term fluctuations may occur, the variables tend to move together over time, maintaining a stable, long term association.

VECM Regression Results

Table 3: Short-run and Long-run Coefficients of VECM

Short-run Coefficients				
Variables	Coefficients	Std. Error	t-statistics	Probability
D(FCEH(-1))	9.351754	4.27514	2.77280	0.0052
D(FCEN(-1))	1.909589	0.99563	3.95689	0.0154
CoIntEq1/ECM	-0.471821	0.12152	-3.88275	0.0005
Long-run Coefficients				
FCEH(-1)	17.79662	5.27293	3.37509	0.0007
FCEN(-1)	-2.778586	1.30640	-2.12691	0.0335
R²	0.817805	Adjusted R²	0.715064	
DW	1.917217			

Source: Source: Authors’ computation from E-view 12 Output, 2024

From 3, Final consumption expenditure of households (FCEH) demonstrates a strong positive impact on GDP growth in both short and long run, with its effect intensifying over time. In the short run, the coefficient of Final Consumption Expenditure of Household is positively signed at (9.351754) about 9.35%. This conformed with the apriori expectation with probability value of 0.0052. This implies that one-unit increase in FCEH leads to a significant 9.35 percentage point increase in GDP growth rate. Since the P-value (0.0052) is less than 5% level of significance, the null hypothesis is rejected. It implies that Final Consumption Expenditure of Household has a strong positive short run effect on economic growth. This positive effect strengthens substantially in the long run, with each unit increase in FCEH resulting in a 17.80 percentage point rise in GDP growth. This also conformed with the apriori expectation with (P-value=0.0007). Since the P-value (0.0007) is less than 5% level of significance, the null hypothesis is rejected. It implies that Final Consumption Expenditure of Household has a strong positive long run effect on economic growth. The persistent and growing positive impact suggests that household consumption plays an increasingly crucial role in driving economic growth over time. Final consumption expenditure of non-profits serving households (FCEN)

shows a complex relationship with GDP growth, reversing from short to long run. In the short term, final consumption expenditure of non-profit serving institution (FCEN) is positively signed at (1.909589) about 1.91%. This conformed with the apriori expectation with probability value of 0.0154. This implies that with a one-unit increase in FCEN, leads to a 1.91 percentage point rise in GDP growth rate. Since the P-value (0.0154) is less than 5% level of significance, the null hypothesis is rejected. It implies that Final Consumption Expenditure of non-profit institution serving Household has a strong positive short run effect on economic growth. However, this relationship inverts in the long run, where Final consumption expenditure of non-profit serving institution is negatively signed at (2.778586) about 2.78%. A one-unit increase in FCEN results in a 2.78 percentage point decrease in GDP growth. This disagreed with the apriori expectation with a probability value of 0.0335. Since the P-value (0.0335) is less than 5% level of significance, the null hypothesis is rejected. It implies that Final Consumption Expenditure of non-profit institution serving Household has a strong negative long run effect on economic growth. This shift indicates that while non-profit spending may stimulate short-term growth, it might have offsetting effects on long-term economic expansion, possibly due to resource allocation dynamics. Table 3 also presents the R² measures how well the estimates have explained the actual dependent variable – it is a measure of the strength of the model. Adjusted R² is particularly used to assess if the addition of an independent variable has contributed to increased strength of the model. R-squared (R²) of 0.817805 indicates that approximately 81.78% of the variance in the dependent variable can be explained by the independent variables in the model. Adjusted R-squared of 0.715064 accounts for the number of predictors in the model, providing a more accurate measure of goodness-of-fit. In this case, it indicates that about 71.51% of the variance in the dependent variable is explained by the independent variables.

Causality Tests

Table 4: Granger Causality/Block Exogeneity Wald Tests

Null Hypothesis:	Obs	Chi-sq	Prob.	Decisions	Remarks
FCEH does not Granger Cause GDPGR	41	5.0005790	0.0253	Reject H ₀	Unidirecti
GDPGR does not Granger Cause FCEH		0.004543	0.9463	Accept H ₀	onal
FCEN does not Granger Cause GDPGR	41	8.667560	0.0032	Reject H ₀	Bidirectio
GDPGR does not Granger Cause FCEN		14.23802	0.0002	Reject H ₀	nal

Source: Authors' Computation 2024, using E-view 12.0 version

The Granger Causality Test results on table 4 indicated that there is uni-directional causality between Final consumption expenditure of household (FCEH) and Gross Domestic Product Growth rate (GDPGR) and it flows from Final Consumption Expenditure of Household (FCEH) to Gross Domestic Product Growth rate (GDPGR). This implies that Final Consumption Expenditure of Household (FCEH) granger cause Gross Domestic Product Growth rate (GDPGR) in Nigeria since the P-value is less than 5% level significance. Specifically, the Chi-square statistic for FCEH is 5.006 with a p-value of 0.0253. Therefore, Final Consumption Expenditure of Household (FCEH) has a strong and significant influence on Economic Growth in Nigeria.

However, the granger causality result revealed that there is a bi-directional causality between Final Consumption Expenditure of Non-profit institution serving household (FCEN) and Gross Domestic Product Growth rate (GDPGR). It flows from FCEN to GDPGR and from GDPGR to FCEN. This indicates that Final Consumption Expenditure of Non-profit institution serving household (FCEN) granger cause Gross Domestic Product Growth rate (GDPGR) and Gross Domestic Product Growth rate (GDPGR) granger causes Final Consumption Expenditure of Non-profit institution serving household (FCEN) since their p-values 0.0032 and 0.0002 are

less than 5% level of significance. This therefore means Final Consumption Expenditure of Non-profit institution serving household (FCEN) has strong and significant influence on economic growth in Nigeria and economic growth also has strong and significant influence on Final Consumption Expenditure of Non-profit institution serving household (FCEN).

Stability Test using the Inverse Root of AR Characteristics Polynomial
Inverse Roots of AR Characteristic Polynomial

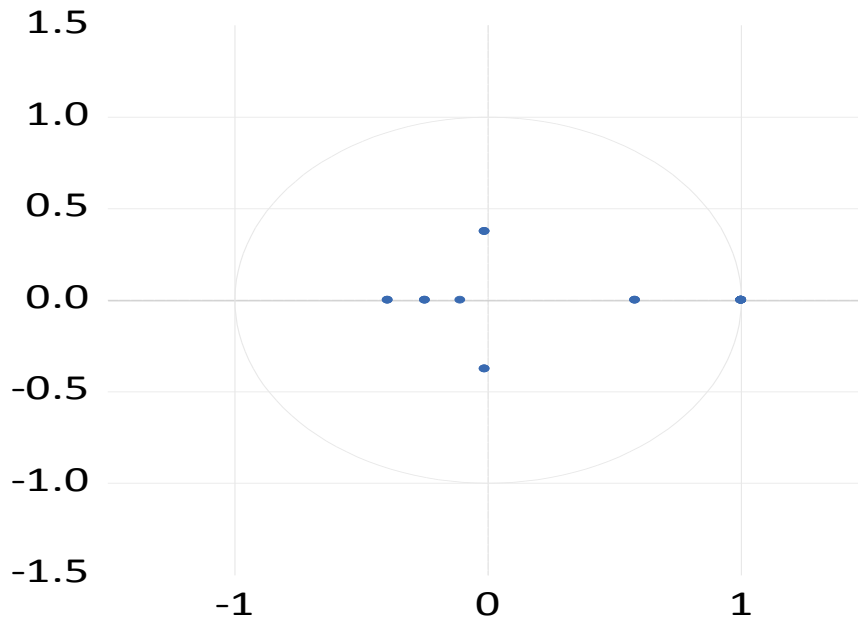


Fig 4 Inverse Root of AR Characteristics Polynomial
Source: Authors' computation from E-view 12 output, 2024

For diagnostic test, Figure 4 shows the AR Roots Graph. The AR Roots Graph shows that all inverse roots lie within the unit circle, indicating a stable AR model. This stability suggests that the model is stationary, with shocks dissipating over time rather than persisting. The roots are symmetrically distributed near the center, implying quick shock decay and mean-reverting behavior in the time series. Overall, the model appears reliable for forecasting, with no risk of explosive growth or divergence.

Discussions of finding

The Final Consumption Expenditure of Households (FCEH) plays a significant role in driving Nigeria's GDP growth, both in the short and long term, which aligned with the findings of Kulsom, Cui, Naeem, Madiha and Hira (2024), Krasniqi and Markaj (2024), Gajabo (2023), Akermi, Ben-Yedder & Bakari (2023) and Kingu (2023) but contrary to the finding of Adelowokan (2021). The short-term impact, where a one-unit increase in FCEH leads to a 9.35 percentage point increase in GDP growth ($p=0.0052$), indicates that household spending is vital for immediate economic activity. This immediate boost reflects Nigeria's high dependency on consumer spending, particularly in sectors such as retail, transportation, and food services. As the impact strengthens to 17.80 percentage points in the long term ($p=0.0007$), it suggests that sustained household consumption builds a foundation for durable economic growth. Contemporary issues, such as the expansion of e-commerce, the development of digital payment systems, and policies that encourage household spending, have further fueled this impact, allowing for greater consumer participation in the economy. Also, the removal of fuel subsidies in 2023, which increased disposable incomes for some households, could result in

higher consumption, potentially amplifying the positive effect on GDP growth over time. In contrast, the Final Consumption Expenditure of Non-Profits Serving Households (FCEN) shows a mixed relationship with GDP growth. Initially, a one-unit increase results in a 1.91 percentage point rise in GDP growth ($p=0.0154$), reflecting the short-term benefits of non-profit activities on the economy, such as employment generation, welfare programs, and essential services, which is in line with the outcome of Muda et al. (2023), Takashi (2021), Blaževski (2018) but contrary to the finding of Mose (2021). This is particularly relevant as NGOs and non-profit institutions play a crucial role in addressing Nigeria's healthcare, education, and poverty challenges, thus bolstering economic activity. However, the long-term negative impact of 2.78 percentage points ($p=0.0335$) suggests that sustained reliance on non-profit interventions might limit resource allocation towards productive investments or create dependency rather than innovation and self-sufficiency. This phenomenon could be attributed to the shifting donor funds and emphasis on short-term projects over long-term structural changes in the economy.

5. CONCLUSIONS AND RECOMMENDATIONS

Conclusion

This study empirically analyzed the impact of disaggregated household consumption expenditure- final household consumption expenditure and final consumption of non-profit institution serving household on economic growth in Nigeria from 1981-2023. Findings revealed that Final consumption expenditure of households (FCEH) demonstrates a strong and positive impact on GDP growth in Nigeria during the period 1981-2023 both short and long run, with its effect intensifying over time. Final consumption expenditure of non-profits serving households (FCEN) showed a complex relationship with GDP growth, reversing from short to long run. In the short run, Final Consumption Expenditure of non-profit institution serving Household has a strong and positive impact on economic growth. However, this relationship inverts in the long run, where Final Consumption Expenditure of non-profit institution serving Household has a strong and negative long run effect on economic growth.

Recommendations

- i. Federal Inland Revenue Service should embark on targeted tax cuts, especially for low- and middle-income households, this can reduce the financial burden on families, enabling them to spend more on goods and services.
- ii. Federal Ministry of humanitarian service should expand social welfare programs—such as direct cash transfers, food subsidies, and healthcare benefits to enhance household economic security, driving increased demand within the economy
- iii. Non-profit organizations should focus on capacity building and reducing dependency.
- iv. The government should prioritize funding and support for non-profit programs that offer long-term benefits, such as skills training, entrepreneurship development, and financial literacy programs.

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