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Research Article

Analyzing Government Spending and Consumers' Welfare in Nigeria: An Auto-Regressive Distributed Lag Approach (ARDL)

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Analyzing Government Spending and Consumers' Welfare in Nigeria: An Auto-Regressive Distributed Lag Approach (ARDL)

Abstract. Nigerian government spending on recurrent expenditures, particularly on financial intervention programmes, has increased during the past eight years. Despite this, the country is still recognized as a poor nation with a high percentage of poverty in Sub-Sahara Africa. Therefore, the study examined the effect of government spending on consumers' welfare from 1986 to 2023. The reason for the timeframe was due to the adoption ARDL approach. The study used secondary data that was collected from Central Bank of Nigeria, Statistical Bulletin (2023), as well as, International Monetary Fund data base (2025). Augmented Dickey Fuller (ADF) and Philip Perron (PP) unit root test were used for the pretest; while Auto-regressive Distributed Lag was used to achieved the formulated

objectives. Both the ADF and PP confirmed that lending interest rate was stationary at level; while, private consumption expenditure, recurrent expenditure, capital expenditure, and consumer price index were stationary at first level difference. The bound test confirmed a long-run association between the variables. The ARDL result showed that recurrent expenditure and lending interest rate were significantly and positively related to private consumption expenditure, whereas consumer price index was significantly and negatively related to it. Furthermore, capital expenditure was insignificant. It was concluded that recurrent expenditure was the only means through which Nigerian government boosts consumers' welfare in term of spending, while maintaining lower lending rates and consumer price index support consumers' welfare. Therefore, the study recommended that governments at the federal, state, and local levels should increase their capital expenditure through huge investments in infrastructure and other capital projects.

Keywords: Consumers' welfare, recurrent expenditures, capital expenditure, lending interest rate.

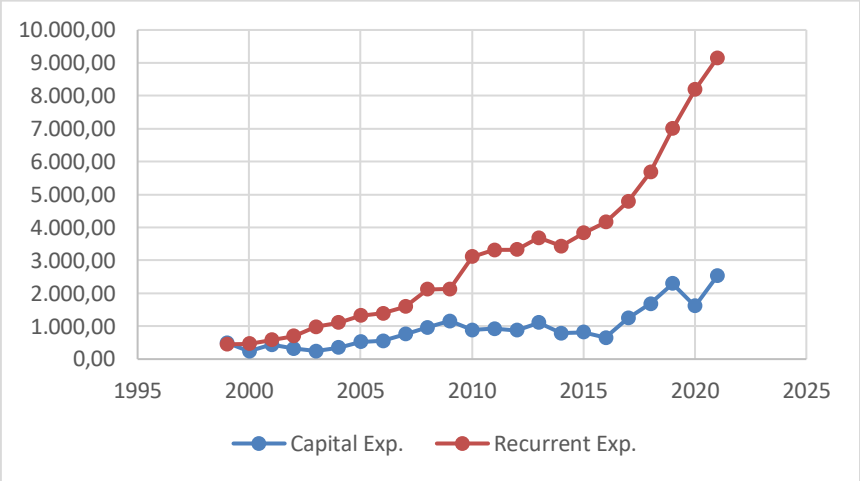
INTRODUCTION

The need for government's spending in an economy is a neoclassical economists' worldview. Neoclassical economists such as Keynes (1937) and others argue that massive government's spending is a national asset rather than a liability, and that continuous deficit spending is a necessary tool for increasing capital accumulation and achieving a steady state level of output per capita in an economy. The government must spend in order to guarantee economic stability, stimulate or boost production, or invest through direct public expenditure and investment (Falade, Aladejana & Oluwalana, 2018). Public expenditure refers to the expenses incurred by a government for its own day-to-day administration, on society and the economy as a whole (Jong, Yi, & Sang, 2019). Developing nations such as Nigeria have low consumer welfare, a high poverty rate, low calorie intakes, a low human development index, and many other poor nation's characteristics. In Nigeria, for example, 86.9 million Nigerians live on less than one dollar per day in 2018 and 91 million in 2019 (Falade, 2019), while the country is rated 156 on the Human Development Index with a value of 0.535 out of 187 in 2021. (World Bank, 2021). All of these considerations have been used to support the necessity for government spending to improve citizens' wellbeing and reduce poverty. Furthermore, George and Ekpenyong (2020) state that the government spends to redistribute money between the affluent and the poor.

Government spending may take the shape of both recurrent and capital expenditures. Recurrent spending refers to spending that occurs in the day-to-day operations of government, such as salaries and administrative expenses, whereas capital spending refers to spending on capital projects such as education, health, infrastructure, transportation and communication, irrigation, power, science and technology, and so on (Falade, 2023). Given this, Olaosebikan et al. (2022) established that prioritizing investment in education, health, and infrastructure produces economic development while decreasing unemployment, poverty, and inequality, all of which have a positive impact on consumers' welfare. However, in Nigeria, this may not be the case because recurrent spending accounted for the majority of government spending from the fourth republic in 1999 through 2021. For instance, from 1986-1999, there was 71.4% increase in capital expenditure; while that of recurrent was 28.6%. Also, there was sharp increase of 65.4% increase in recurrent; while that of capital was

34.6% from 2000-2021. This might be related to the sort of government structure we operate (unicameral system), which necessitates a large number of money and resources. Figure 1 depicts a detailed examination of the trajectory and pattern of capital and recurrent spendings from 1999 to 2021.

Figure 1: Trend Pattern of Nigerian Capital and Recurrent Spending



Source: Researcher's compilation from Excel (2024) (data obtained from CBN,2021)

Individual's advantages gained from the consumption of products and services are referred to as consumers' welfare (Fasoranti & Akindele 2015). Consumers' welfare is described in principle as an individual's judgment of his or her personal satisfaction, given the price of products and services as well as the individual's income. According to Ogundipe and Adesola (2022), the precise evaluation of consumer welfare needs information about individual preferences. As a result, government's expenditure has a significant impact on the proportion of social benefits that individual citizens get in the country (Salami *et al.,* 2017; Omodero, 2019). Government's spending, both capital and recurrent, contributes to consumption expenditures, which influences consumer welfare patterns (Ichiue & Nishiguchi, 2015; Salami., Olabode & Atoyebi 2017; Ogundipe & Adesola, 2022). Without a doubt, there is a circumstance in which the government is expected to intervene in the economic through provision of stimulus packages. A similar circumstance occurred during the pandemic phase of COVID-19, when a total lock-down was announced in all thirty-six states of the federation, including Abuja. As a result, several stimulus packages like palliatives, financial transfers, and others were implemented to mitigate the impact of the lockdown on residents. Because of the COVID-19 pandemic, the government increased budget deficits to maintain social safety nets such as unemployment benefits, laid-off workers, health-care sector empowerment, and the execution of fiscal measures to encourage economic activity. According to the International Monetary Fund, IMF (2020), both developed and developing countries spent more than $ 505 billion as a quick response fiscal stimulus to the virus in the first quarter of 2020, while Nigeria's government spent 50 billion Naira as of June 2020 (Central Bank of Nigeria, 2021).

Private consumption expenditure in Nigeria has recently grabbed up to 70% of

GDP; it is the largest component on the expenditure side and hence has played a significant influence in determining the country's economic growth (National Bureau of Statistics, NBS, 2021). The rise in private consumption expenditure has been ascribed to the failure of the government to reflect its expenditures on individuals, as well as the high rate of poverty and low standard of life (Manasseh *et al.*, 2018; Ogundipe & Adesola, 2022). Furthermore, rising commodity and service prices have been cited as a factor driving up private consumption expenditure in emerging nations (Shafque, Muhammad & Yaseen, 2017; Sephorah & Ayushi 2020). This remark is now true in Nigeria, as the problem caused by growing prices of products and services, resulting in a high cost of living, has proven too tough for the government to solve. For example, from 2016 and 2020, Nigeria had 2-digit increases in overall prices of goods and services of 18.54%, 15.36%, 11.44%, 11.98%, and 15.75%, respectively (IMF, Database, 2023). In light of this, Olubokun and Agbede (2018) revealed that food price spikes, along with a large increase in food price hikes, may have serious consequences for low-income households by reducing their consumption pattern and lowering their wellbeing. Also, between December 2020 and March 2021, milk increased by 28%, wheat increased by 23%, and beans increased by 41%. Furthermore, the Composite Food Index increased by 45.1% throughout this time period (NBS, 2021). Such an increase affects consumers' welfare by reducing their purchasing power, depriving households of other necessities of life, increasing food insecurity, and increasing the poverty rate.

Despite the increase in Nigerian government spending over the years, the expenditure took another dimension particularly on financial intervention through given of soft loan to respective petty traders in the economy. For example, Tradermoni, Marketmoni, and Farmermoni loans were launched to help the condition of the petty traders through giving of ₦10,000 Naira to small businesses and craftsmen under TraderMoni and MarketMoni initiatives respectively. According to Sadiya Umar, Minister of Humanitarian Affairs, all of these programs have moved 10 million Nigerians out of severe poverty (Isaac 2020). Despite these assertions, the country is still recognized as a poor nation with a high percentage of poverty in Sub-Sahara Africa. According to the World Bank (2019), 91 million Nigerians live on less than one dollar per day, with a low HDI of 0.494. Furthermore, since the country entered fourth republic in 1999, there has been declined in capital expenditure (see Figure 1). As such, creates a wide gap between recurrent and capital spending. This notion violates Ernest (1857) theory that advocates that in the early phases of national growth, overhead capital such as roads, power plants, pipe-borne water, and so on is required to achieve the desired welfare in the country.

Also, access to loan is an important factor for business growth, especially that of small businesses in developing countries like Nigeria, where majority of the real sector is characterized with such businesses. However, the repayment of the loan through lending rate may also pose serious challenges to individual that benefits from such loans. Hence, bringing the need to examine how people fare in term of interest repayment on such loans. Furthermore, studies such as Shafque, Muhammad, and Yaseen (2017), Manasseh, Abada, Ogbuabor, Onwumere, Urama and Okoro (2018) and Sephorah and Ayushi (2020) used total government spending (i.e. recurrent and

capital) in their separate studies; hence, ignored the individual explicit impact on consumers' welfare. On this note, the present study examines effect of government spending on consumer welfare from 1986 to 2021.

LITERATURE REVIEW

Manasseh et al. (2018) studied the connection between inflation, interest rates, and spending on consumption. It was confirmed that interest and inflation rates have an impact on consumer spending. Also, Fasoranti and Akindele (2015) investigated the connection between Nigerian consumer welfare and budget deficits between 1985 and 2014. The researchers discovered a one-way causal link between budget deficit and consumer wellbeing, suggesting that shifts in the budget deficit have an impact on consumer welfare. Nonetheless, the study found that the budget deficit had a negligible and favorable effect on consumer welfare. Furthermore, a two-way causal association between indirect tax and consumer welfare was discovered, pointing to a more intricate connection between these factors. Despite offering insightful information, the study's conclusions could not accurately represent the state of affairs now because of the historical period it took into account.

Shafque et al. (2017) investigated how rising food costs affected the wellbeing of consumers in the most populated nations in South Asia. It was discovered that staple commodities, such as rice and wheat grains, are comparatively price inelastic, indicating that price rises have little effect on demand. On the other hand, meals high in protein, such as chicken and mutton, react more quickly to changes in income. According to the study, consumer wellbeing decreases as food costs rise, especially for staples like milk and grains. Similarly, Keho (2019) looked on the connection between household consumption and government spending in ECOWAS nations. The results showed that private consumption is negatively impacted by government consumption, indicating that private and public consumption are interchangeable. Furthermore,

Sephorah and Ayushi's (2020) study looked at the connection between welfare, inflation, and consumer preferences. The study discovered that consumer choice raises the welfare cost of inflation, with choice more than doubling the welfare cost of 10% inflation. From 1981 to 2018, Akpan and Atan (2020) investigated the impact of government spending on private consumption in Nigeria using the Auto Regressive Distributed Lag (ARDL) approach. The empirical results of the long-run model demonstrated a substantial association between recurrent spending and private consumption in Nigeria, whereas capital expenditure exhibited a non-significant relationship. The findings also revealed a positive and substantial association between private consumption and GDP in Nigeria, both in the short and long run. Short-run research in Nigeria indicated a positive but non-significant link between private consumption and government expenditure. The study's time limit disregarded the COVID-19 era of 2020, which was considered one of the years Nigeria's government spent a huge amount on welfare.

Furthermore, a study by Ogundipe and Adesola (2022) confirmed that government expenditures on health, education, and agriculture have a big influence on Nigerians' level of life. In particular, health spending was considerable at 5%, and

spending on education and agriculture was significant at 10%.

Theoretical Framework and Methodology

Ernest Engel's public sector theory is used as the theoretical framework to achieve the study's stated objective. According to the hypothesis, the interaction of two persons promotes the wellbeing of the citizens. The theory assumes that there must be a steady growth in capital investment at the start of the economy in order to attain improved individual's wellbeing. However, existing studies indicate that many developed economies bought into this concept early in their developmental phases (Connolly & Li, 2016). The amount of capital investment carried out by government in Nigeria during the last twenty years has been low compared to the recurrent expenditure. Also, in an early stage of development, individuals expand their consumption pattern in line with their income level. The Ernest Engel hypothesis is mathematically represented below;

$Govt = f(\ Recexp_t, Capexp_t, Recexp_{t+1}, Capexp_{t+1})$ .....(i)

$Ind = f(Income, Exp_1, Exp_2 \ldots\ldots Exp_n)$ .....(ii)

The schema is given below;

$Govt \uparrow \rightarrow Recexp_t \uparrow \rightarrow Capexp_t \downarrow \rightarrow I\ Recexp_{t+1} \downarrow \rightarrow Capexp_{t+1} \uparrow$ ....(iii)

$Ind \uparrow \rightarrow Income \uparrow \rightarrow Exp_1 \uparrow \rightarrow Exp_2 \downarrow \ldots\ldots Exp_n \downarrow$ ....(iv)

Where;

Govt = Government intervention; $Recexp_t$ = Recurrent expenditure at the early stage, $Capexp_t$,= Capital expenditure at the early stage; $Recexp_{t+1}$= Recurrent expenditure in the future; $Capexp_{t+1}$ = Capital expenditure in the future; *Ind* = Individual expenditure, *Income* = Individual Income, Exp_1= Expenditure in early stage; Exp_2= Expenditure in developmental stage Exp_n = Expenditure in subsequent years

Model Specification

The model for this investigation was based on the work of Fasoranti and Akindele (2015) with modification. Fasoranti and Akindele (2015) baseline model is shown below in linear form.

PCE = f (BDF, CPI, INT, ITX) .... (v)

Where; PCE = Private Consumption Expenditure. BDF = Budget deficit, INF = Consumer price index (Inflation), INT = Interest Rate and ITX = Indirect tax

The modified model of Fasoranti and Akindele (2015) is specified as following

pce= f (recexp, capexp, int, cpi) ....(vi)

Where; *pce* = Private consumption expenditure; *recexp*= Recurrent expenditure

capexp= Capital expenditure; *int* = lending interest rate; *cpi* = Consumer price index

Where the econometric form of equation (vi) becomes

$pce = \partial_0 + \partial_1 recexp + \partial_2 capexp + \partial_3 int + \partial_4 cpi + \mu \ldots$ .... (vii)

The above-mentioned equation iv as defined by Fasoranti and Akindele (2015), was modified for two reasons. First, because the budget deficit was not part of the research objectives, it was removed from the model and replaced with both recurrent spending and capital spending. Also, because of government intervention initiatives such as Tradermoni, Marketmoni, and Farmermoni given to market women, interest

rates were substituted by lending interest rates.

The autoregressive distributed lagged specification of equation (vi) above is presented below as:

$$\Delta Pce = \beta_0 + \sum_{i=1}^{p} \beta_1 \Delta pce_{t-i} + \sum_{i=0}^{p} \beta_2 \Delta pecexp_{t-i} + \sum_{i=0}^{p} \beta_3 \Delta capexp_{t-i} + \sum_{i=0}^{p} \beta_4 \Delta int_{t-i} + \sum_{i=0}^{p} \beta_5 \Delta cpi_{t-i} + \omega_1 pce_{t-1} + \omega_2 recexp_{t-1} + \omega_3 capexp_{t-1} + \omega_4 int_{t-1} + \omega_5 cpi_{t-1} + vt$$

Where: ω_1 -ω_5 are the long run multipliers and vt is the white noise error.

Table 1: Measurement of Variables

Variable	Unit	Measurement	Source
pce	Percentage	The total market value of all goods and services purchased by households dividend by GDP at constant prices.	International Monetary Fund (2025)
recexp	Percentage	The annual sum of recurrent expenditure as a percentage of GDP	CBN Statistical Bulletin (2023)
capexp	Percentage	The annual sum of expenditure incurred by government on administration, economic services, social community services and transfer as a percentage of GDP	CBN Statistical Bulletin (2023)
int	Rate	The lending rate is the bank rate that typically serves the private sector's short- and medium-term financial needs.	CBN Statistical Bulletin (2023)
cpi	Percentage	The percentage changes in the average cost of goods and service sold in the market	CBN Statistical Bulletin (2023)

Findings and Discussion

Table 2: Descriptive Statistics

Statistics	*pce*	*recexp*	*capexp*	*int*	*cpi*
Mean	5.332222	2.980145	2.04208	3.065556	19.24972
Median	1.755000	2.504699	1.047550	5.530000	12.15500
Std. Dev.	14.58483	1.920215	2464.278	10.55296	17.63917
Skewness	1.598421	1.092249	1.343801	-0.957693	1.748519
Jarque-Bera	34.74149	8.737367	12.46909	9.942759	22.73963
Probability	0.112549	0.012668	0.111961	0.106934	0.01212
Observations	38	38	38	38	38

Source: Researcher's Compilation (2024) from E-view-9

The descriptive data in Table 2 above include private consumption expenditure (pce), recurrent expenditure (recexp), capital expenditure (capexp), lending interest rate (int), and consumer price index (cpi). The mean result indicates that the consumer price index had a greater influence on private consumption spending throughout the research years than any other identified variable. Its impact on consumer welfare is that the spiral rate on prices of items consumed by households during the study period worsens consumers' welfare. The similar tendency was identified for median value, showing that non-stability in product pricing affects consumers' wellbeing on average. According to the standard deviation, capital expenditure (capexp) showed the most variance among the independent variables. Its consequence is that effective used of government's capital expenditure through massive investment in social needs improved individual's welfare. Skewness estimations demonstrated that the variables employed had an uneven distribution; while, *Jarque-Bera* also validated the model's normality distribution.

Pre-Test

Unit Root

Table 3: Results of Unit Root Test

Augmented Dickey Fuller (ADF)					Philip Perron(PP)			
Variable	Test Statistic	5% critical value	Level	S/NS	Test Statistic	5% critical value	Level	S/NS
pce	/6.344470/	/2.941145/	I(1)	S	/6.391820/	/2.941145/	I(1)	S
recexp	/4.092726/	/2.938987/	I (1)	S	/4.030230/	/2.938987	I (1)	S
capexp	/4.022373/	/2.941145/	I(1)	S	/4.022373/	/2.941145/	I(1)	S
int	/2.957085/	/2.938987/	1(0)	S	/2.992683/	/2.938987	1(0)	S
cpi	/5.759959/	/2.941145/	I (1)	S	/7.097190/	/2.938987	I (1)	S

Note; S presents Stationary; NS represents non Stationary

Source: Researcher's Compilation (2024) from E-view-9

According to the ADF and PP results in Table 3, the lending interest rate (*int*) was stationary at level, although private consumption expenditure (*pce*), recurrent expenditure (*recexp*), capital expenditure (*capexp*), and consumer price index (*cpi*) were stationary at first level difference. The policy implication is that the variables employed in the model have a strong statistical power to make inferences about the study's objective. The result obtained from both the ADF and PP justified the use of Auto-regressive Distributed Lag (ARDL). Therefore, ARDL was sued to achieve the stated objectives.

Bound Test Result

Table: 4: ARDL Bound Test Result

Test Statistic	*Value*	*k*
F-statistic	10.42165	4
Critical Value Bounds		
Significance	Io Bound	I1 Bound
10%	2.45	3.52
5%	2.86	4.01
2.5%	3.25	4.49
1%	3.74	5.06

Source: Researcher's Compilation (2024) from E-view-9

Based on the bound test results in Table 4, it was proved that 10.42165 of the F-statistic obtained value was greater than the critical upper bound value at 1%, 2.5%, 5%, and 10% significance levels; thus, justifying a long run relationship between the variables in equation vii

Lag Order Selection

According to Mogaji et al. (2020), the estimation of ARDL is subject to lag order selection. Therefore, the lag order selection is shown below in Table 4.

Table 5: Lag Length Selection (1986-2021)

Lag	LogL	LR	FPE	AIC	SC	HQ
0	-280.0444	NA	13.17096	16.76732	16.99178	16.84386
1	-180.1543	164.5248	0.163867	12.36202	13.70881*	12.82131
2	-145.3384	47.10385*	0.101853*	11.78461*	14.25373	12.62665*

* represent lag order selection

Source: Researcher's Compilation (2024) from E-view-9

As shown in Table 5, lag order of 2 was chosen as stated by the majority of the selection criteria used. Hence, the study used 2 lag order.

Estimated Result of ARDL

Table: 6: Short-run Result of ARDL (Dependent Variable: *pce*)

R^2=0.904388; Adjusted R^2 =0.721034; Prob.(F-statistic)= 0.007276; *Durbin-Watson stat*=2.111445

Variable	*Coefficient*	*Std. Error*	*t-Statistic*	*Prob.**
pce(-1)	0.131964	0.062284	2.118746	0.0424**
recexp	0.414233	0.140408	2.950209	0.0305**
recexp(-1)	0.665111	0.576321	1.154063	0.1305
recexp(-2)	0.912111	0.412231	2.212621	0.0399**
capexp	-0.507105	0.731609	-0.693140	0.1119
capexp(-1)	0.100351	0.335615	0.299006	0.2990
capexp(-2)	0.925937	0.215274	4.301202	0.0017**

int	0.820208	0.282525	2.903139	0.0078**
int(-1)	-0.726197	0.280813	-2.586054	0.0162**
int(-2)	1.072338	0.301023	3.562309	0.0016**
cpi	-3.147854	1.154198	-2.727308	0.0092**
cpi(-1)	4.068121	2.981215	1.364585	0.1292
cpi(-2)	6.148921	4.675421	1.315159	0.1120
constant	0.211154	0.731432	0.288686	0.7118

*** & * represent statistically significant at the 0.05 & 0.1*

Source: Researcher's Compilation (2024) from E-view-9

Long-run Estimates of ARDL

Table 7: Long-run Estimates (Dependent Variable: Δ(*pce*)

Variable	*Coefficient*	*Std. Error*	*t-Statistic*	*Prob.*
recexp	-0.354987	0.178807	-1.985310	0.0587
capexp	-0.553913	0.585132	-0.946646	0.3533
int	1.343665	0.558367	2.406418	0.0242
cpi	0.782485	0.305968	2.557407	0.0249
C	0.117639	0.313850	0.374827	0.7111

*** represent statistically significant at the 0.05 and 0.1 level*

Source: Researcher's Compilation (2024) from E-view-9

Diagnostics Test for ARDL

Figure 2 CUSUM Stability Test Graph

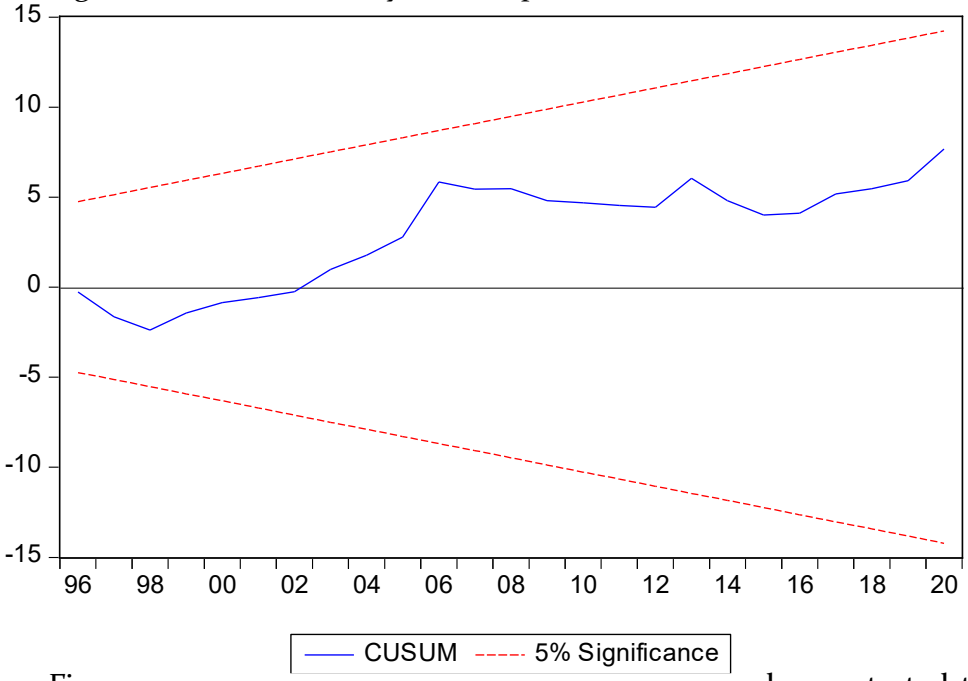


Figure 2 demonstrated that the blue lines were contained inside the red lines, implying that the model was stable.

Autocorrelation Test of the Model

Table 8: Breusch-Godfrey Serial Correlation LM Test:

F-statistic	0.665403	Prob. F(2,22)	0.5241
Obs*R-squared	1.939384	Prob. Chi-Square(2)	0.3792

Source: E-view (2024)

From the result in Table 8, the absence of serial correlation in the model was confirmed.

Heteroskedasticity Test

Table 9: Heteroskedasticity Test: Breusch-Pagan-Godfrey

F-statistic	0.992518	Prob. F(9,24)	0.4716
Obs*R-squared	9.222164	Prob. Chi-Square(9)	0.4170
Scaled explained SS	5.263406	Prob. Chi-Square(9)	0.8108

Source: E-view (2024)

The F-statistic was found to be larger than 0.05. As a result, the ARCH test is devoid of heteroskedasticity.

Discussion of Findings

The result obtained from the ARDL as shown in Table 6 demonstrates that recurrent expenditure (*recexp*) was significant and substantially influenced private consumption expenditure (*pce*) with a positive sign for short-run; while that of long run was significant also with a negative sign. This discovery has two economic consequences for the welfare of customers. First, a rise in government spending on recurrent expenditure raises the take-home pay of households (governments' workers), as well as, those in the real sector by increasing demand for more goods by governments' workers, which raises the household budget line and their wellbeing. Second, inefficient uses of recurrent spending are likely to harm consumers' welfare in the long term. Evidence of this negativity impact of recurrent expenditure on consumers' welfare is currently visible in the country, as a large percentage of government expenditure goes into recurrent, where a large part is for political appointees and government official. However, studies carried out by Akpan and Atan (2020) and Ogundipe and Adesola (2022) arrived at a similar finding in their separate studies with a notion that a positive significant relationship existed between private consumption expenditure and recurrent spending. On the contrary, Keho (2019) discovered a significant and negative effect on private consumption expenditure. The disparity in finding may be attributed to countries, methodology, etc. For instance, Keho (2019) study was conducted in ECOWAS; while that of Ogundipe and Adesola (2022) in Nigeria.

Also, capital expenditure (*capexp*) was positive and significant in the short term; while that of long-run estimate was negative and non-significant. This finding has two

policy implications. First, current government's investment in areas such as infrastructure and capital projects has not resulted into improved welfare for citizens. Secondly, present rate of investment on capital project is minimal; hence, worsens the consumers' welfare in the future due to low demand for labour as well as other factors. The reason for the negative might be attributable to a low capital budget as well as corruption. As a result, Nigeria's government expenditure was inconsistent with Ernest Engel's public-sector theory, which argues for government spending on capital projects to enhance individual's welfare through the consumption of goods and services. Furthermore, research such as Salami *et al.* (2017) and Akpan and Atan (2020) found no significant association between capital spending and consumer welfare.

Lending interest rate (*int*) for current years was substantially significant with a positive sign at 5% in the short run and the long run estimate. The policy implication is that the current lending interest rate on financial intervention by the government has increased the individual's benefits gained from the consumption of goods and services; but, if the current lending interest rate does not continue, consumers' welfare would suffer in the future. In this regard, Manasseh *et al.* (2018) identified lower interest rate as a decisive variable to increase wellbeing.

In addition, the consumer price index (*cpi*) had a negative and substantial influence on private consumption expenditure (*pce*) in the short run and the long run. For policy implications, the monetary authority must maintain a single digit inflation rate to sustain consumers' welfare; since persistent increases in general price level reduces consumer purchasing power, which directly reduces their consumption and welfare. This conclusion was consistent with the findings of Sephorah and Ayushi (2020), as well as Olubokun and Agbede (2018) who discovered an inverse and substantial link between inflation rate and consumers' welfare.

CONCLUSION AND RECOMMENDATIONS

According to the findings, recurrent expenditure (*recexp*) and consumer price index (*cpi*) were significant and positively related to private consumption expenditure (*pce*), whereas lending interest rate (*int*) was significantly and negatively related to it. Furthermore, capital expenditure (*capexp*) was insignificant. It was concluded that recurrent expenditure was the only means through which Nigerian government boosts consumers' welfare in term of spending, while maintaining lower lending rates and consumer price index support consumers' welfare. These conclusion was similar to the study of Akpan and Atan (2020) and Ogundipe and Adesola (2022) who concluded that recurrent expenditure promotes consumers' welfare. On contrary note, Keho (2019) concluded that recurrent expenditure cannot only promote consumers' welfare. As a result, the study advised that governments at the federal, state, and local levels should increase their capital expenditure through huge investments in infrastructure and other capital project. The apex bank, which manages cash transfers for the government, should maintain lower lending interest rates, particularly on loans geared toward consumers' welfare. The government should implement additional intervention programs to improve the welfare of consumers and to assure the program's continuation from one administration to the next. In this study, the consumer price index was found to be negatively connected to private consumption

spending, meaning that the higher the consumer price index, the lower the purchasing power of households. Therefore, in order to increase consumers' welfare, inflation must be decreased to a single digit. The central bank might do this by accepting the notion of inflation targeting, which would limit the inflation rate to 3% per year.

REFERENCES

Akpan, P. E., & Atan, J. A. (2020). Government expenditure and private consumption in Nigeria: An empirical investigation. *International Journal of Economics and Management Studies. 7*(1), 75-85.

Chandana, A., Adamu, J. & Musa, A. (2021). Impact of government expenditure on economic growth in Nigeria, 1970-2019. *CBN Journal of Applied Statistics*, 12(1), 13-25

Connolly, M., & Li, C. (2016). Government spending and economic growth in the OECD countries. *Journal of Economic Policy Reform, 19*(4), 386–395.

Ernest, S. O. (2011). Government expenditure on health, economic growth and long waves in A CGE Micro-Simulation Analysis: The Case of Nigeria. *European Journal of Economics, Finance and Administrative Sciences, 3*(4), 34-42.

Falade, A. O. O. (2023). Foreign aids and sustainable development in Nigeria: An application of Dynamic Least Squares Approach. *ORGANIZE: Journal of Economics, Management and Finance*, *2*(4), 196–210. https://doi.org/10.58355/organize.v2i4.61

Falade, A. O. O. (2019). Poverty reduction in Nigeria: Do remittances inflow really matter? *Nigerian Studies in Economics and Management Sciences, 2*(1),26 – 33.

Falade, A. O. O., Aladejana, S. A., & Oluwalana, F. A. (2018). External debt in Nigeria: How sustainable using Heavily Indebted Poor Countries (HIPC) indicators? *AAU Anal of Accounting, Educational and Social Research*, *5*(2), 34-43.

Fasoranti M. M., & Akindele, O. O. (2015). An assessment of the relationship between budget deficit syndrome and consumer welfare in Nigeria (1985 – 2014). *Journal of Social Economics Research, 2*(4), 58-74.

George-Anokwuru, C. C., & Ekpenyong, B. I. (2020). Government expenditure and inflation in Nigeria. *Journal of Economics and Management Sciences, 3*(2), 20-30.

Ichiue, H., & Nishiguchi, S. (2015). Inflation expectations and consumer spending at the zero bound: Micro evidence. *Economic Inquiry*, *53*(2), 1086-1107.

Jong. C. L., Yi, J. W., & Sang, Y. J. (2019). Study of the relationship between government expenditures and economic growth for China and Korea. *Journal of Economic Sustainability, 2*(1), 34-42.

Keho, Y. (2019). Impact of government spending on private consumption: Evidence from ECOWAS Countries. *Modern Economy, 10*, 600-614.

Manasseh C. O., Abada, F. C., Ogbuabor, J. E., Onwumere, J. U. J., Urama, C. E., & Okoro E. o. (2018). The effects of interest and inflation rates on consumption expenditure: Application of consumer spending model. *International Journal of Economics and Financial Issues, 8*(4),32-39.

Mogaji, O., & Falade, A. O. O. & Ogundipe, S. A. (2020). Inflation, interest rate and domestic investment in Nigeria: An Auto-Regressive Distributed Lag (ARDL) Approach. *International Journal of Engineering and Management,* 2(8), 516-525.

National Bureau of Statistics. (2021). Consumption Expenditure Pattern in Nigeria 2021, Volume I: Expenditure Pattern Report (Q4 2017-Q3 2021).

Ogundipe, M., & Adesola, A. (2022). Examine the impact of government expenditure on standard of living in Nigeria (1981 – 2018). *Journal of Management Science, 3*(2), 23-45.

Olaosebikan**, O.,** Olaniyi, R. B., & Ojekunle, F. J. (2022). Impact of capital market performance on capital formation in Nigeria. *FUOYE Journal of Finance and Contemporary*, 3(2), 148-163. Available online: https://www.fjfci.fuoye.edu.ng/index.php/fjfci/article/view/60/51

Olubokun, S., & Agbede, M. O. (2018). Food price inflation and consumers' welfare in Ondo State, Nigeria. *Journal of Economics and Sustainable Development, 9*(24), 20-32.

Omodero, C.O. (2019). Government general spending and human development: A case study of Nigeria. *Academic Journal of Interdisciplinary Studies, 8*(1), 51–60.

Salami D. K., Olabode O. S., & Atoyebi K. O., (2017). Effects of government health and education expenditures on economic growth in Nigeria. *International Journal of Social & Management Sciences, Madonna University (IJSMS), 1*(1):118–130.

Sephorah, M,. & Ayushi B. (2020). Consumer choice, inflation, and welfare. *Research School of Economics, 3*(9), 23-41.

Shafque, A., Muhammad, R., & Yaseen, S. A., (2017). Impact of rising food prices on consumer welfare in the most populous countries of South Asia. *International Journal of Social Economics, 44*(8), 1062-1077,

World Bank (2019). *world development report, New York*: Oxford university press.

World Bank (2021). Migration and development brief 27, migration and remittances: Recent development and Outlook, Special Topic on Global Compact on Migration. *The World Bank, Washington, DC.*

Yahaya N. (2019). Relationship between government expenditure and poverty: A study of Nigeria (1965–2014). *Journal of Econo*