Probability Statistics and Econometric Journal
Vol.4, Issue: 1; January - February- 2022
ISSN (5342 – 3371);
p –ISSN (9301 – 4221)

PUBLIC EXPENDITURE AND FINANCIAL ACCOUNTABILITY IN THE ECONOMY

Nwulu Stephen, O., and Ogunbiyi Samuel, S. (Ph.D.)
Department of Finance and Banking, Faculty of Management Sciences, University of Port Harcourt, Nigeria

Abstract: The objective of this paper was to examine empirically the contribution of the individual components and joint effects of capital and recurrent expenditure on the Nigerian economy using data from 1981 to 2020. The data was collected from the annual CBN statistical bulletin and analysed by Eviews. The dependent variable was GDP at constant basic prices or real GDP which is a proxy for the Economic growth. The two dimensions of public expenditure; capital and recurrent are the explanatory variables. The two dimensions were further broken down to their components: administration, economic services, social and community services and transfers. Auto regressive distributive lag (ARDL) models were employed based on the assumption that GDP is persistent and can be determined by its previous value. Results show that (i) the recurrent expenditure is significantly greater than the capital expenditure in the period under review, (ii) GDP and capital expenditure trended over time, though Capital expenditure (CAPEX) and its components appear to be affected by policy shocks and exogenous factors in later years specifically in 2016 and 2019, (iii) In the CAPEX-Growth model, all the coefficients are statistically significant except transfers. Economic Services is negatively signed, (iv) CAPEX variables have significant joint impact on GDP, (v) No recurrent expenditure component is statistically significant with Social and Community service and transfers having negative coefficients, and (vi) joint impact of recurrent expenditure on GDP is significant but less than that of CAPEX. Finally, this paper concludes that the effect of capital expenditure is more felt on the economy than recurrent expenditure. Therefore, the government should see that capital expenditure is given more attention if the growth objective of the economy would be achieved.

Keywords: Public Expenditure, Financial Accountability, Capital Expenditure, Recurrent Expenditure, Auto Regressive Distributive Lag, Gross Domestic Product

I. Introduction

The essence of financial accountability on public expenditure draws from the fact that government expenditure should be value based to affect positively the objective of economic growth. In this vein, the framework of public expenditure and financial accountability seek to see how the economy is affected by public spending. Investment in physical infrastructure can boast productivity in the private sector if there is efficient allocation of resources. According to Chenery and Syrque (1975), some theorists posit that government expenditure is necessary to overcome constraints of economic growth. Expenditures are capital and recurrent. Public expenditures in Nigeria are classified into four components; administration, economic services, social and community services and transfers. This accounts for productive and unproductive parts.

The motivation for this paper therefore is to have the empirical evidence of the individual and joint effects of public spending on the Nigerian economy using data from 1981 to 2020. This will provide a better insight given the various claims of the major political parties in Nigeria as

to their commitments to economic growth using the instrumentality of public spending.

We present the rest of the paper in four sections. Literature review is done in the second section. Section 3 gives the methodology, and the data analysis and discussion of findings is given in section 4, while the summary and conclusion comes in section 5.

2.0 Literature Review

2.1 Concept of the study

2.1.1 Functional Components of Government Expenditure

Expenditure items, whether recurrent or capital, is usually categorised into four major components, namely: administration, economic services, and social and community services. Ekpo (1995) showed that capital expenditures on transport and communication, agriculture, health and education move in the same direction with private investments in Nigeria. This in turn enhanced the growth of the overall economy. Government capital expenditure on construction and manufacturing, crowds out private investments.

2.1.2 Recurrent Expenditure

Government spending on administration fluctuated between 24.1 per cent and 48.6 per cent between 1980 and 1989 with a peak of 48.6 per cent in 1983. The increasing trend continued through 2001, but oscillated between 16.l per cent and 38.7 per cent. Government spending on this component has been rather large. The largest in terms of size is transfer payment; it fluctuated between 27.0 per cent and 51.1 per cent between 1980 and 1989 with a steady increase especially between 1984 and 1989. The trend fluctuated between l3.0 per cent and 75.3 per cent between 1990 and 2001 with its peak in 1992 and the trough in 1997. Economic services and social and community services, which are required to act as organs for achieving economic growth and development and raise the value of life of the people, oscillated between 4.2 per cent and 10.3 per cent for economic services, and 3.0 per cent and 17.7 per cent for social and community services between 1980 and 1989. Economic services continued to change between 3.1 per cent and 9.2 per cent through 2001, while social and community services showed an increasing trend during the same period (1990-2001). The ratio of economic service to recurrent expenditure averaged at 10.81 percent from 2002 to 2010 and down to 7.14 percent from 2011 to 2020. Social and community services averaged 15.11 percent between 2002 and 2010 and went up to 20.57 percent in the period covering 2011 and 2020. Administration spending went down to 33.78 percent between 2002 and 2010 and further to 31.29 percent for the period covering 2011 to 2020.

2.1.3 Capital Expenditure

This is the cost of bringing into existence new institutions, services and-projects. Spending on economic services used to take a greater share of the capital expenditure before being taken over by administration in 1991. It declined at a rapid rate before being overshadowed. It showed a decreasing trend from an earlier 58.8 per cent to 26.l per cent between 1980 and 1989, with its lowest value in 1986 (12.9 per cent). During the period 1990 to 2001, it gained thrust again and increased from 14.5 per cent in 1990 to 59.2 per cent in 2001. Between 1980 and 1989, both oscillated between 3.1 per cent and 28.5 per cent, and, 2.2 per cent and 76.3 per cent, respectively. Administration fluctuated between 7.5 per cent and 22.2 per cent, while transfer fluctuated between 17.4 per cent and 75.9 per cent from 1990 through 2001. Economic services spending averaged 49.32 percent between 2002 and 2010 and went down to 39.02 percent for the period covering 2011 t0 2020. Administration spending was at the average of 23.38 percent between 2002 and 2010 and went up to 25.66 percent from 2011 to 2020.

2.2 Theoretical Framework

This section introduces two different models of economic growth, a simple version of Solow's Neo-classical theory and an endogenous growth model.

2.2.1 Neo-classical Theory of Growth

The neo-classical theorists posit that economic growth is triggered by increase in labour supply, capital and productivity. Through labour, larger outputs are generated

and this increases if more people participate especially if those who were not part begin to participate. Productivity is also enhanced if physical capital is increased. A productive increase can for instance take place when investments in equipments like computers and machinery, can reduce man-hours. Labour comes with skills and people with better skills are more productive. Better skills are acquired through e.g. formal (education) training and on- the-job training. Productivity in more cases explains the increase in output that cannot be explained by the input increase (labour and capital). This is called the productivity of an input and can be affected by a number of factors. The most important factor is technology change, which affects the productivity in two stages. First, the advance in knowledge called inventions. Second; the use of that knowledge, which if it leads to a more efficient production is, called innovation (Burda and Wyplosz, 2001).

2.2.2 Endogenous Growth Theory

Endogenous growth theorists argue that continuous increase in labour and more resources facilitate increase in productivity. These resources include physical capital, human capital and knowledge capital (technology). Growth comes from accumulation of factors of production. Investment in private sector leads to this accumulation. This goes to say that the government through investment in capital, education and research and development causes economic growth, at least, in the long run. According to Foister and Henrekson (1997), reduction in the growth occurs only when expenditures hinder investment through tax wedges that are created beyond those necessary to finance the investment and create disincentives to savings.

2.3 Empirical Review

How does public expenditure and financial accountability affect the economy? Various opinions, theory and evidence are presented hereunder. Chenery and Syrquin, (1975) theorise that some categories of government expenditure are necessary to remove the impediments to economic growth.

Enweze (1973) in his study of fourteen selected developing countries based on time- series data found that the share of total government expenditures in national income was rising but the rising share was not associated with any functional component of total expenditures.

Longe (198l) studied the growth and structure of government expenditures in Nigeria and found no structural shift in the review period. He found a rising profile of government expenditure of the Gross national product.

Landau (1983) findings indicate that some aspect of government consumption reduce economic growth. This is in line with market view that bloated government hinder economic growth. Landau (1986) added human and physical capital, political, international conditions and a three-year lag on government spending in GDP. Government spending was disaggregated to include investment, transfers, education, defence and other government consumption. The results agreed with the earlier study that consumption of government was important with a negative influence on growth.

Three studies Gould (1983), Saunders (1985), and Smith (1985) explore the first correlation using somewhat different countries and time periods. Smith and Saunders found that higher levels of government spending are associated with slower growth; Gould found a mildly positive correlation. All the results are statistically weak or highly sensitive to outliers. For example, Smith no longer finds a strong correlation in the OECD countries if Japan, with its high growth rate and low government expenditure, is excluded.

Ram (1986) attempted to identify a theoretical link for identifying the effect of government expenditure on growth through public and private sectors production functions. The data was for 11 countries sufficient to derive broad categorisation for the market economies investigated. The impact on growth acted through two channels, the "externality" and the "differential productivity" effects related to the relative productivity of factors employed in the public as opposed to the private sector. Real government consumption is his measure of government size. The model finds a positive relation

between growth in government and overall economic growth.

Dervis and Petri (1987) found that the developing economies that grew the fastest between 1966 and 1984 had low shares of government spending in GDP, although this correlation disappears in regressions that include policy, structural, and external variables.

The work of Ashauer (1989) focused on a demand side hypothesis that a high marginal productivity of government spending would yield multiple expansions in output. To the extent that these expenditures are productive, a reduction in expenditure may affect longer form movements in productivity. The income effects arising from government expenditures align with Wagner's law that emphasises the earnings flexibility of public goods. Agreed that the findings, which employed US data, pointed out that non- military public capital and basic infrastructure were important to productivity, they did not support Wagner's hypothesis.

Barro (1990) further notes that for a broad group of 98 countries, growth in real per capita GDP was positively related to initial human capital and negatively related to share of government consumption in GDP.

Hemming (1991), observed the likelihood of growth influence by components of expenditure, as certain types of expenditures may be more growth inducing. Key elements of these spending are provision of socio-economic infrastructure, operations and maintenance, and general administrative and legal frameworks.

Findings of Ekpo (1995) showed that capital expenditures on transport and communication, agriculture, health and education positively influenced private investments in Nigeria, which considerably enhanced the growth of the overall economy. Government capital expenditure on construction and manufacturing, crowds out private investments. The results were obtained from estimating the relationship between the disaggregated components of government capital expenditures on private investment,

Ogiogio (1995) observed the subsistence of long-run relationship between economic growth and government expenditure over the period 1970-93. Government recurrent expenditures, however, had more significant effect than the capital expenditures, while five-year lags of capital expenditures are more growth inducing. The study also showed that government investment programmes in socio-economic infrastructure provides enabling environment for private-sector-led growth.

Odusola (1996) studied the cause and effect relationship between military spending and economic growth in Nigeria by using a simultaneous equation model. It was found that aggregate military expenditure moved in opposite direction with growth at l0% significant level; and when decomposed into recurrent and capital expenditure, the former was more growth retarding than the later.

Fajingbesi and Odusola (1999) analyzed the existing link between public expenditure and economic growth in Nigeria using a vector error correction model. The findings showed that real capital expenditure positively and significantly affected real output while the effects of real recurrent expenditure were relatively marginal.

Al- Yousif (2000) used two different models while studying effect of government on economic growth in South Arabia and obtained contradictory results. However, he found the model with positive relationship between government size and economic growth more penetrating and understandable and, therefore, came to a conclusion that government size could move in the same direction with economic growth.

Foister and Henrekson (2000) established that government expenditure strongly move in opposite direction with growth. Their study was carried out in rich countries between the years 1970 - 1995. Their estimated coefficients suggested that an l0 percentage increase in government expenditure is associated with a decrease of 0.8 percentage points in growth rate.

In Nigeria, a little consideration has been placed on the issue of the productiveness of the various public spending components. This could be, remarkably, as a result of the notion that the primary purpose of fiscal policy is aggregate demand management (Diamond 1990).

Probability Statistics and Econometric Journal
Vol.4, Issue: 1; January - February- 2022
ISSN (5342 – 3371);
p –ISSN (9301 – 4221)

Considerably, this view places importance on total government expenditure and appears indifferent to give detailed view on the various public expenditure components.

3 Methodology

3.1 Data and Variables

We use yearly time series data covering from 1981 to 2020. The data are collected from the annual CBN statistical bulletin and are analyzed in EViews. The variables are described as follows:

Economic Growth: We use GDP at constant basic prices or real GDP (RGDP) as a proxy for economic growth.

Public Expenditure: We consider the two dimensions of public expenditure: namely, capital and recurrent expenditures, and their main components as follows:

- **Administration (ADMIN)**: This comprises General Administration, Defence, Internal Security and National Assembly.
- **Economic Services (ECOSERV)**: This variable comprises Agriculture, Road & Construction, Transport & Communication and Other Economic Services.
- **Social and Community Services (SCS)**: This comprises Education, Health and Other Social and Community Services
- **Transfers (TR)**: This comprises Public Debt Servicing, Pension and Gratuities, FCT/Other/Other CFR charges, and Contingencies/Subventions.

Table 1 shows the descriptive statistics for the study variables. Figures 1, 2 and 3 show the time series graph for the variables.

Table 1 shows statistical description of the variables

Variable	$\bar{x}$	σ	CV	$SKEW$	$KURT$	JB(P-value)
Real GDP	36843.4	19785.1	53.70	0.63	1.79	0.0787
Capital Expenditure (CAPEX)	502.50	551.79	109.81	1.27	4.31	0.0010
ADMIN	127.54	148.70	116.59	1.17	3.81	0.0059
ECOSERV	232.97	245.04	105.18	1.08	3.84	0.0104
SC	61.918	71.804	115.97	1.02	3.03	0.0295
TR	80.067	105.03	131.18	1.62	5.06	0.0000
Recurrent Expenditure (RECUR)	1607.49	2114.95	131.57	1.41	4.27	0.0003
ADMIN	498.37	617.39	123.88	1.09	3.12	0.0178
ECOSERV	133.52	168.10	125.90	1.01	2.72	0.0302
SC	303.58	415.57	136.89	1.25	3.32	0.0049
TR	672.01	961.06	143.01	1.92	6.52	0.0000

Probability Statistics and Econometric Journal
Vol.4, Issue: 1; January - February- 2022
ISSN (5342 – 3371);
p –ISSN (9301 – 4221)

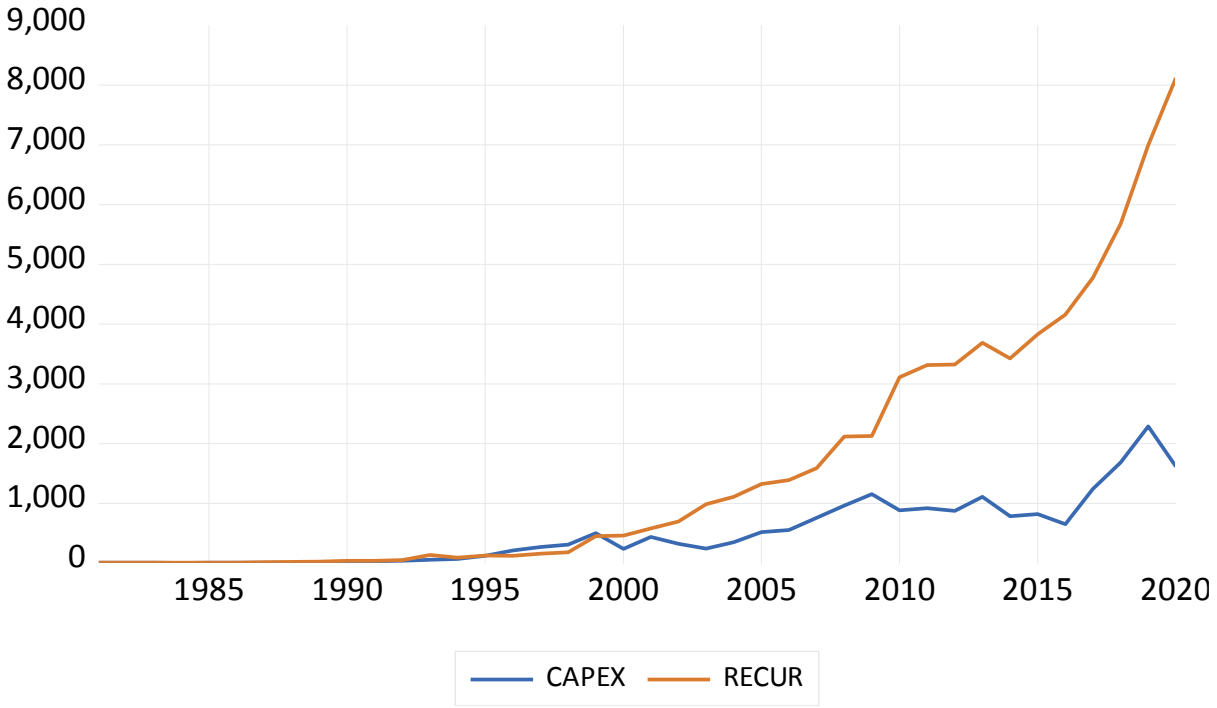

Figure 1: Time series plot of Capital Expenditure and Recurrent Expenditure.

As we can see from Table 1, real GDP at yearly frequency averaged ₦36,843.4billion over the period from 1981 to 2020, while the yearly averages of total capital expenditure and total recurrent expenditure over the same period stood at ₦502.5billion and ₦1607.4billion respectively. Hence, our data show that over time, recurrent expenditure has been significantly higher than capital expenditure in Nigeria. Also, as shown by both the standard deviation and coefficient of variation, although, both public expenditure dimensions recorded high variability, the variability in recurrent expenditure and each of its components is, however, much higher than the variability in capital expenditure and its components. Also, as indicated by the skewness and kurtosis coefficients, while all the variables have a positively skewed distribution, most of them have a distribution that is taller than normal distribution. The exemptions are real GDP and Recurrent Expenditure on Economic Services, whose distributions are flatter than normal distribution. The p-value of JB statistic is significant for all variables, although, at varying levels, hence confirming that our data are not normally distributed. Hence, there is need to transform them into logarithms to minimize the unwanted effects of outliers and data extremes.

From Figure 2, we can see that real GDP and capital expenditure variables trended upward over time, although, the latter and its components appear to be affected by exogenous or policy shock in the later years, specifically in 2016 and 2019. From Figure 3, the data show that recurrent expenditure and its components also trended upward over time. However, recurrent expenditure on transfers contains some outlying observations in 2006 and 2010. All these suggest that our data are non stationary and contain unit roots.

Probability Statistics and Econometric Journal
Vol.4, Issue: 1; January - February- 2022
ISSN (5342 – 3371);
p –ISSN (9301 – 4221)

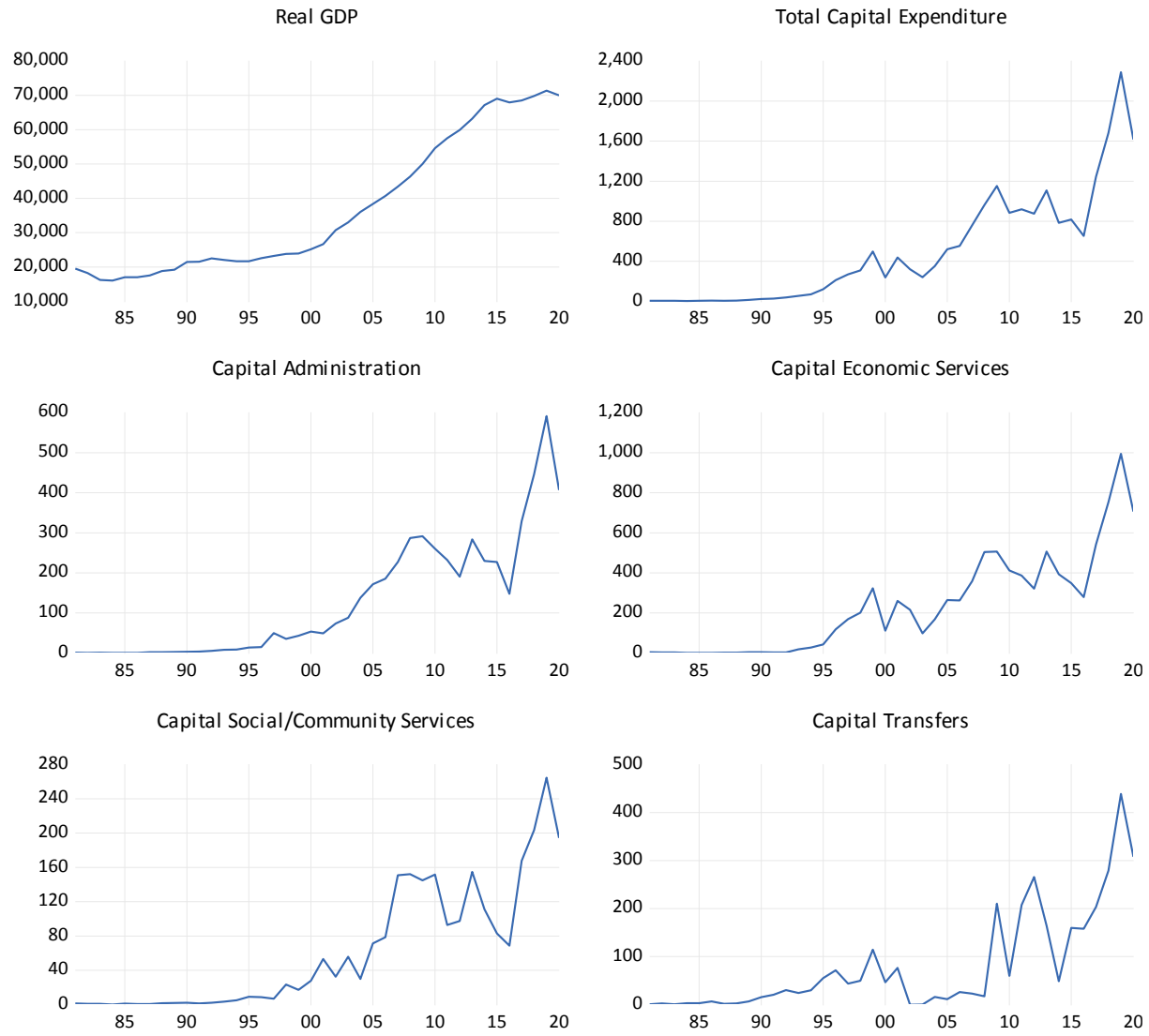

Figure 2: Time Series Plot for Real GDP and Capital Expenditure Variables

Probability Statistics and Econometric Journal
Vol.4, Issue: 1; January - February- 2022
ISSN (5342 – 3371);
p –ISSN (9301 – 4221)

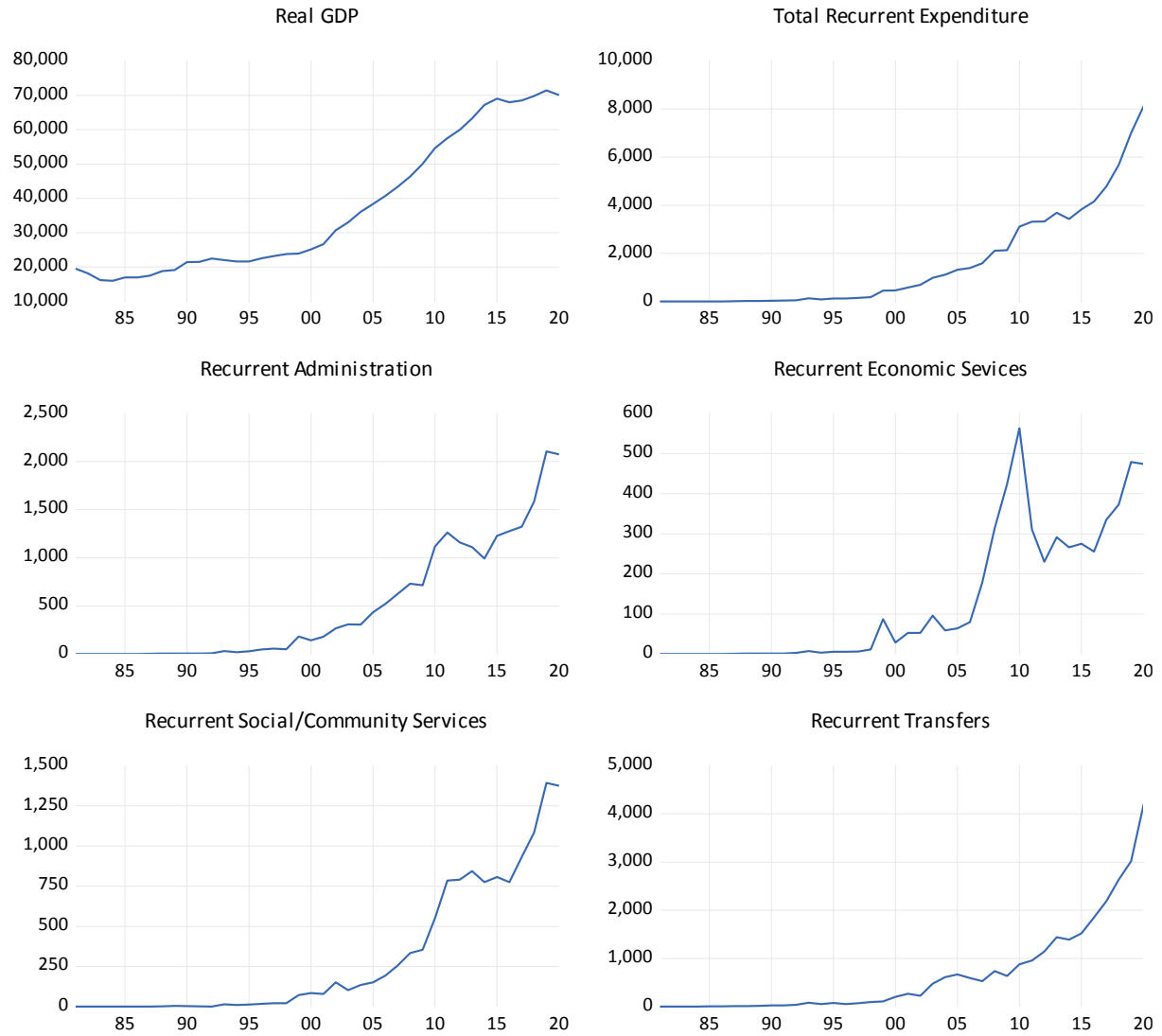

Figure 3: Time Series Plot for Real GDP and Recurrent Expenditure Variables

3.2 Method and Models

To investigate the impact of public expenditure dimensions on real GDP, we employ the ARDL framework. This dynamic time series framework is employed because of its advantage of producing optimal results regardless of the level of integration of the data on different variables.

We specify our ARDL models (in logarithmic form) for real GDP as follows:

$$LRGDP_t = \beta_0 + \beta_1 LRGDP_{t-1} + \beta_2 LADMIN_t + \beta_3 LECOSERV_t + \beta_4 LSC_t + \beta_5 LTR_t + \epsilon_t \quad (1)$$

$$LRGDP_t = \theta_0 + \theta_1 LRGDP_{t-1} + \theta_2 LADMIN_t + \theta_3 LECOSERV_t + \theta_4 LSC_t + \theta_5 LTR_t + \varepsilon_t \quad (2)$$

Our models are simple ARDL specifications as they include only one period lagged value of real GDP in the right-hand side of each equation. Hence, our modeling is based on the assumption that real GDP is persistent and can be determined by its previous value. However, this

Probability Statistics and Econometric Journal
Vol.4, Issue: 1; January - February- 2022
ISSN (5342 – 3371);
p –ISSN (9301 – 4221)

assumption would be validated based on Schwarz information criterion (SIC). Besides, our models allow us to test both the individual effects on real GDP of expenditure components and their collective impact. While the betas and thetas capture the individual effects, the joint significance of the estimated coefficients would be tested based on the Wald test.

4 Data Analysis and Discussion

Table 2 shows the regression results for the impact of public expenditure on real GDP in Nigeria. Our empirical models are estimated based on the modified standard errors suggested by Newey and West (1986), which are consistent and robust even when the model contains heteroskedasticity and autocorrelation. The optimal lag order selection is determined using the Schwarz information criterion (SIC).

Table 2: Regression Results

VARIABLE	1	2
LRGDP(-1)	0.8860***	0.8982***
	(0.0000)	(0.0000)
LADMIN	0.0375***	0.0173
	(0.0006)	(0.6236)
LECOSERV	-0.0434***	0.0153
	(0.0002)	(0.4128)
LSC	0.0360***	-0.0064
	(0.0060)	(0.6861)
LTRF	0.0044	-0.0006
	(0.3280)	(0.9817)
CONSTANT	1.1434***	0.9877**
	(0.0002)	(0.0421)
WALD	63.511***	9.9510**
	(0.0000)	(0.0413)
ECM	-0.1139***	-0.1017***
	(0.0000)	(0.0000)
R-squared	0.9964	0.9948
Adj. R-squared	0.9959	0.9941
DW	1.6113	1.3868
F-statistic	1807.33***	1284.89***
	(0.0000)	(0.0000)

The empirical results in Table 2 are striking in three significant ways. First, for both real GDP models, the ECM coefficient is correctly signed and is highly statistically significant, implying that the fitted models have long run stability. However, the coefficients of -0.1139 and -0.1017 show that the speed of adjustment is slightly higher for the model with capital expenditure components as explanatory variables than the model with recurrent expenditure components as explanatory variables. Secondly, the coefficient of determination shows that the estimated models are highly explained, while the F-statistic shows that they are highly statistically significant. Although, the Durbin-Watson statistic is below the theoretical value of 2, it is higher than the R-squared, indicating that our results are statistically valid.

In terms of the individual coefficients, the results show that real GDP exhibits strong persistence and is a positive function of its one period lagged value. The one period lagged real GDP (LRGDP (-1)) is highly statistically significant in the current real GDP model and has an estimated value of 0.8860 for model 1 and 0.8982 for model 2. This implies that a 1% increase in the real GDP in the current period would, on average, lead to approximately 0.89% increase in real GDP one year after, holding other factors constant.

For the main regression coefficients, the results are generally mixed. For CAPEX–growth model, almost all the estimated coefficients are highly statistically significant, except LTRF, whose beta is small and not statistically significant. This shows that capital expenditure on administration; economic services and social and community services all have a highly significant impact on real GDP, while the impact of capital expenditure on transfers is not statistically significant. However, the Wald statistic is large with a zero probability, indicating that these capital expenditure variables have a highly significant joint impact on real GDP.

In terms of the signs of the coefficients, the results show that capital expenditure on administration, social and community services and transfers all have positive coefficients, indicating that any increase in any of these variables would contemporaneously increase the real GDP. On the contrary, the coefficient on economic services is negatively signed, showing that an increase in capital expenditure on economic services would lead to a reduction in the real GDP. Hence, while real GDP moves in opposite direction with capital expenditure on economic services, it moves in similar direction with capital expenditure on administration, social and community services and transfers. However, given that the estimated coefficients (i.e., 0.0375, -0.0434, 0.360 and 0.0044) are all small in magnitude; their economic significance cannot be guaranteed.

For the relationship between recurrent expenditure and economic growth, the results show that none of the components of recurrent expenditure is statistically significant in the real GDP model, although, the estimated betas capturing the effects of these variables have mixed signs. Also, estimated coefficients are all small, signifying that they lack economic significance. Hence, unlike the case of capital expenditure, the individual components of recurrent expenditure only have marginal impacts on real GDP. Further, compared with the CAPEX-growth model, while administration retains its positive sign, there is reversal in the signs associated with economic services, social and community services and transfers. For example, capital expenditure on economic services enters the real GDP model with a negative sign, while recurrent expenditure on economic services enters the growth model with a positive sign. Also, both social/community services and transfers dimensions of capital expenditure have positive signs in the real GDP model, while social/community services and transfers dimensions of recurrent expenditure have negative signs in the real GDP model.

Finally, the results show that the joint impact of the four components of recurrent expenditure on real GDP is significant. The Wald statistic, which formally tests the joint significance of these variables in the real GDP model, has a probability of 0.0413; hence, it is statistically significant at the 5% level. Our results, therefore, show that, at the 5% level, the four dimensions of recurrent expenditure: namely, administration, economic services, social and community services, and transfers (debt service, pension and gratuity, etc.), jointly have a significant impact on real GDP, while individually, none of them has a significant impact on real GDP, both statistically and in economic sense.

4.1 Discussion of Findings

PUBLIC EXPENDITURE, FINANCIAL ACCOUNTABILITY AND ECONOMIC PERFORMANCE IN NIGERIA

Analysis indicate that the Nigerian government spend more on recurrent expenditure than on capital expenditure with average recurrent spending of N1607.49 Billion against that of N502.50 Billion on capital expenditure. In line with previous studies of Hemming (1991) and Ashauer (1989), spending on capital expenditure components of administration, economic services and social and community services significantly impact positively on the economy. However, the expenditure on the same headings in the recurrent section of the budget shows movements in opposite direction. None of the recurrent expenditure has significant impact on the economy. This is in line with the studies of Laudau(1983), Barro(1990) and Longe (1981). Again the joint effect of both capital expenditure and recurrent expenditures are positive on the economy though that of recurrent expenditure is less significant. This agrees with earlier work of Fajingbesi and Odusola (1999). It is difficult for this paper to reconcile with the statement of the Director-General of the All Progressives Congress Governor's forum as quoted in the Sun Newspaper of September 23, 2021 that the present Government has been prudent and achieving the best economic benefits to the country through spending when compared with previous Governments. This is at variance with the facts thrown out from this research as the average recurrent expenditure at

N1607.49 Billion is much higher than that of capital expenditure which is N502.50 Billion. This gap is highest in the years between 2015 and 2020 (See figure 1 above). Then this goes to explain that, if most of the Government expenditures of the administration are more of recurrent expenditures and empirical findings indicate that the joint impact of recurrent expenditure on the economy is less significant, then the bulk of the government spending has not achieved the desired economic benefit and growth as claimed. This is more pronounced when the individual components of economic services, social and community services and transfers show negative impact on the economy.

5 SUMMARY AND CONCLUSION

The motivation for this study was to examine empirically the contribution of the individual components and joint effects of capital and recurrent expenditure on the Nigerian economy using data from 1981 to 2020. This would provide better insight given the various claims of prudence by government. The theoretical foundation is anchored on the neo-classical theory of growth and endogenous growth theory. According to the Neo-classical theories, growth comes about from increase in labour supply, increase in capital and increase in production. It goes to say that increase in investment in capital increases output. The endogenous theory highlights that if productivity is to increase, the labour force must continuously be provided with more resources. Resources in this case include physical capital, human capital and knowledge capital.

To examine the contribution of public expenditure to the economy, we use yearly time series data covering from 1981 to 2020. The data was collected from the annual CBN statistical bulletin and analysed by Eviews. The dependent variable was GDP at constant basic prices or real GDP which is a proxy for the Economic growth. The two dimensions of capital and recurrent expenditure are the explanatory variables. The two dimensions were further broken down to their components: administration, economic services, social and community services and transfers. Two models were specified; first, for the components of the capital expenditure and second for the recurrent expenditure components.

To estimate the relationships, two simple Auto regressive distributive lag (ARDL) models were employed based on the assumption that GDP is persistent and can be determined by its previous value. This was validated based on Schwartz information criterion. The models also allowed us to test both the individual effects on real GDP of expenditure components and their collective impact. While the betas and thetas capture the individual effects the joint significance of the estimated coefficients was tested based on the Wald test.

Results show the following;

1) That the recurrent expenditure is significantly greater than the capital expenditure in the period under review.
2) That GDP and capital expenditure trended over time, though Capital expenditure (CAPEX) and its components appear to be affected by policy shocks and exogenous factors in later years specifically in 2016 and 2019.
3) In the CAPEX-Growth model, all the coefficients are statistically significant except transfers. Economic Services is negatively signed.
4) CAPEX variables have significant joint impact on GDP
5) No recurrent expenditure component is statistically significant with Social and Community service and transfers having negative coefficients.
6) Joint impact of recurrent expenditure on GDP is significant but less than that of CAPEX.

Finally, this paper concludes that the effect of capital expenditure is more felt on the economy than recurrent expenditure. Therefore the government should see that capital expenditure is given more attention if the growth objective of the economy would be achieved.

References

Akpan N.I. Government Expenditure and Economic Growth in Nigeria: A Disaggregated Approach. *CBN Economic and Financial Review*, 43(1), 51-69

Al-Yousif, Y. (2000).Do Government Expenditure Inhibit or Promote Economic Growth: Some Empirical Evidence from Saudi Arabia. *The Indian Economic Journal*, 48(2).

Aschauer, D. A. (1989).ls public Expenditure Productive? *Journal of Monetary Economics*, 23 ,177-200.

Barro, R. S. (1990).Government spending In a Simple Model of Endogenous Growth. *Journal of Political Economy*, 98, 103-125.

Burda, M. and Wyplosz, C. (2001).Macroeconomic a European Text. 3'd ed. Oxford University Press, New York, USA.

Chenery, H. and Syrquin, M. (1 975).Patterns of Development: 1950-1970. Oxford University Press.

Dervis, K. and Petri, P. (1987).The Macroeconomics of Successful Development: What are the Lessons? *National Bureau of Economic Research (NBER) Macroeconomics Annual, Cambridge.*

Diamond, J. (1990).Fiscal Indicators for Economic Growth: An Illusory Search?.*IMF Working Paper(August).*

Ekpo, A. H. (1995).Public Expenditure and Economic Growth In Nigeria, 1960-1992. Final Report, AERC, Nairobi, Kenya.

Enweze, C. (1973).Structure of Public Expenditure In Selected Developing Countries: A Time Series Study. *The Manchester School of Economic and Social Studies.*

Essien, E. A. (1997).Public Sector Growth: An Econometric Test of Wagner's Law. *Economic and Financial Review, Central Bank of Nigeria,* 35(3), 332- 352.

Foister, S. and Henrekson, M. (1997).Growth and the Public Sector: A critique of the critics. *The Research Institute of Industrial Economics Working paper No. 492*.

Foister, S. and Henrekson, M. (2001).Growth Effects of Government Expenditure and Taxation in rich countries. *European Economic Review*, 15(8),1501- 1520.

Fajingbesi, A. A. and Odusola, A. F. (1999).Public Expenditure and Growth. Paper Presented at a training programme on Fiscal Policy Planning and Management In Nigeria, organized by NCEMA, Ibadan, 137-179.

Gould, F. J. (1983).The Development of Public Expenditures in Western Industrialized Countries: A Comparative Analysis, *Public Finance* 38(1), 38-69.

Hernming, R. (1991).Public Expenditure, stabilisation and Structural Adjustment, In Public expenditure Handbook: A Guide to Public Policy in Developing Countries. Key-Young Chu and Richard Hemming, eds, Washington, D.C.: IMF.

Landau, D. (1983). Government Expenditure and Economic Growth: A Cross Country Study. *Southern Economic Journal* 9, 783-793.

Landau, D. (1986).Government and Economic Growth in the Less Developed Countries: An Empirical Study For 1960-I980. *Economic Development and Cultural Change* 35(4), 35-75.

Longe, J.B. (1981).The Growth and Structure of Federal Government Expenditure in Nigeria. *The*

Nigerian Journal of Economic and Social Studies, 26(1).

Newey, W. K., & West, K. D. (1986). A simple, positive semi-definite, heteroskedasticity and autocorrelationconsistent covariance matrix.

Odusola, A. F. (1996).Military Expenditure and Economic Growth in Nigeria. *The Nigerian Journal of Economic and Social Studies,* 38(I,) 2 - 3.

Ogiogio, G. 0. (1995).Government Expenditure and Economic Growth in Nigeria, *Journal of Economic Management* 2(1).

Ram, R. (1986).Government Size and Economic Growth: A New Framework and Some Evidence from Cross-Section and Time Series Data, *American Economic Review* 76(1), 191-203.

Saunders, P. (1985).Public Expenditure and Economic Performance in the OECD Countries, *Journal of Public Policy* 5(1),1-21.

Smith, D. (1985).Public Consumption and Economic Performance. *National Westminster Bank Quarterly Review,* 17-30.

Sun Newspapers of September 23, 2021 retrieved from https://www.sunnewsonline.com/foreign-loan-buhari-govt-more-prudent-than-all-pdp-govts-apc-chieftain/