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The Trend Analysis and Long-run Nature between Government Expenditure and Economic Growth in Nigeria

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Abstract

Using descriptive, unit root, and cointegration analysis this study seeks to investigate the patterns and long-run nature of government expenditure and economic growth during the previous decades (1981-2020). For the analysis, the Central Bank of Nigeria provided time-series data. The ADF unit root test revealed that all of the model's variables were only stationary at first difference. Long-run analysis revealed a cointegration between government expenditure and economic growth (as measured by GDP). The unit root test was used to investigate the qualities of the time series data. The ADF unit root test revealed that the data were non-stationary at levels but stationary at first difference. The findings revealed a long-run significant relationship between the two; public expenditure and economic growth (measured as GDP) exists over the long run. This leads us to conclude that economic growth (measured by GDP) to capital expenditure, recurrent expenditure, and debt have long-run pattern of relating in the Nigerian economy.

Keywords: government expenditure, economic growth, Nigeria, trend analysis, cointegration analysis

1. Introduction

Government spending also known as public spending is a huge criterion to assess how much government contributes to economic growth. Most studies are biased toward the impact of such government activities on growth but the crux of this study is to simply take a look at the pattern of relationship between government has been in times past with growth in Nigeria (Tenny and Ekperi ware, 2022). This simply refers to the entire value of all products and services provided by the government (government). This kind of expenditure aims to boost economic growth and development, with the ultimate objective of transforming the country into an industrialized economy and raising people's living standards. The majority of government expenditures are split into two categories: capital and recurring. Capital expenditures comprise government spending on capital projects like roads, bridges, dams, energy, education, and health, whereas

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recurrent expenditures include government spending on an administration like labor, wages, interest, loans, and upkeep (Obinna, 2003, Okoro, 2013).

Government expenditure is the most significant policy instrument for encouraging growth and equal distribution in the majority of developing nations throughout the world. So this a strong motivation why this study seek to examine the trend of government spending in Nigeria with economic growth. In most of these nations, it is commonly understood that government spending is utilized to increase technology, human resources, and infrastructure development, as well as providing incentives and an enabling environment for private sector investments to accelerate growth. Government expenditure refers to how much money the government spends via taxes, levies, and other sources of revenue. Government expenditure on various areas has varying levels of effectiveness in terms of economic growth (Yusuf et al. 2015). Meanwhile, the two opposing viewpoints on government expenditure as defined by fiscal policy must be addressed.

Many empirical studies utilizing both time-series and cross-sectional data have been done over the last few decades to investigate the link between government expenditure and economic development, but the results have been varied, changing widely from nation to country and period to period (Essien 1997; Chang, 2002; Mutuku and Kimani, 2012). Economic theory does not necessarily lead to strong conclusions about the economic impact of government spending. Most economists think that reduced government spending increases economic growth at times and increased government spending enhances growth at other times. Because enforcing contracts, defending property, and building infrastructure would be extremely difficult without government spending, economic development would be minimal. To put it another way, for the rule of law to work properly, government spending is essential (Mitchell, 2005).

Because of the high demand for public goods such as roads, electricity, education, health, and external and internal security, as well as the high flow of revenue from crude oil sales, analytical and empirical research on the relationship between government expenditure and economic growth has exploded in Nigeria. The bulk of these studies, however, have not looked at the influence of different forms of government expenditure on economic growth.

According to Frank and Bernanke (2004), one of the policies required for promoting economic growth is the increase in human capital (expenditure on education, training, and skills of workers), which determines labor productivity. This assertion is also supported by Anyanwu (1997), who claims that government expenditure should be channeled to the provision of infrastructural facilities and a favorable economic environment to fuel growth. In a growing country like Nigeria, the government plays a critical role in supporting growth, and government spending should be directed toward this goal. As a result, it is critical to conduct ongoing research in order to determine the efficacy of government spending in proportion to money gained by economic growth. Despite the fact that government spending in Nigeria has increased in recent years, there are still public outcries over deteriorating infrastructure. Furthermore, despite its relevance for policy choices, only a few empirical studies have examined the impact of government spending on economic growth holistically. More importantly, assessing the influence of public expenditure on economic growth is a method to accelerate Nigeria's economy's growth in its ambition to become one of the world's largest economies by 2020. Furthermore, some studies in the existing literature used an econometrically flawed method,

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raising the likelihood that the findings were fabricated. As a result, this study use graphs and econometric views (Eviews) to investigate the link between government spending and economic development in Nigeria. The research is divided into the components below to do this.

Section one is the introduction. Section two reviews the theoretical and empirical literature on the relationship between government expenditure and growth. Section three is concerned with the methodology employed in this study. Section four analyzes the results while section five contains concluding remarks and recommendations.

The Keynesian and endogenous growth models are the foundations of the research. According to the Keynesian growth hypothesis, structural rigidities and certain characteristics of market economies worsen economic downturn and generate negative aggregate demand distortions, necessitating government intervention. Keynes went on to say that aggregate demand does not always match the economy's productive potential; rather, it is influenced by a variety of factors and might operate irregularly, impacting output, employment, and inflation (Blinder, 2008). As a result, private actions can sometimes result in inefficient macroeconomic consequences, necessitating active policy responses from the government through monetary and fiscal policy alternatives. The endogenous growth paradigm, on the other hand, claims that economic growth is predominantly driven by internal rather than external factors (Romer, 1994). As a result, the models include human capital into the aggregate production function and endogenize technological development (Rebelo, 1991). Investment in human capital, innovation, and knowledge, according to the notion, are key contributions to economic growth. It also emphasizes the positive externalities and spillover benefits of a knowledge-based economy on economic progress. Government intervention in the economy through induced investment (government spending increased and taxes reduced, or the other way around) in order to stimulate the economy (Keynesian view), as well as government investment in human capital, innovation, and knowledge, all contribute significantly to economic growth (endogenous growth model proposition).

In many economies across the globe, there is a lot of discussion among academics and experts about the relationship between government spending and economic development. Different researchers have taken different methods to this topic's investigation. Many academics looked into the debate based on the structure of government spending, namely capital and recurrent spending. Others look at the government's spending as a whole. However, the focus of this research is on the functional link between government spending and economic development in Nigeria. The subject under consideration is significant, and it should be treated to a thorough empirical study in order to stay current with the perspectives of interested academics and scholars on the subject, as well as to detect the gaps in previous relevant studies.

When resources are allocated efficiently, the supply of social and physical infrastructure through public investment and expenditure on particular products and services can potentially boost productivity in the private sector. Other advantages of government participation include market failure repair and property rights preservation through law, as well as the provision of security services.

In contrast, a rise in government consumption is achieved at the price of capital formation or private consumption from an accounting standpoint. Some structuralist development economists

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demonstrate that certain types of government spending are required to overcome economic growth restrictions (Chenery and Syrquin, 1975).

Several empirical studies on the link between government revenue and expenditure, using various econometric methodologies, have been undertaken for many nations, generating diverse or contradicting empirical conclusions. The relationship between government revenue and spending has piqued empirical curiosity, particularly in industrialized nations. The link between government expenditure and economic growth has been the subject of several studies. Landau (1983) found that increasing government consumption as a percentage of GDP slowed economic growth, corroborating the pro-market argument that government expansion stifles total growth. The findings were significant in terms of per capita output growth, but they did not suggest an improvement in economic well-being. The total amount spent on education has also been linked to economic growth.

Empirically, Ebiringa and Charles-Anyaogu (2012) used the Cochrane-Orcutt and ECM method to assess the impact of government spending on Nigeria's economic growth. They discovered that spending on telecommunications, defense and security, education, and health had a positive impact on Nigeria's economic growth, while transportation and agricultural expenditures had a negative impact.

Adewara and Oloni (2012) used vector Autoregressive models (VAR) to show that education spending has failed to boost economic growth due to the country's high rate of rent seeking and rising jobless rate. By using disaggregated analysis, Nwadiubu and Onuka (2015) found that government total capital expenditure (TCAP), total recurrent expenditures (TREC), and government investment on education (EDU) had a negative impact on economic development. However, Nwadiubu and Onuka (2015) concurred that more government spending on transportation and communication (TRACO) and health (HEA) leads to higher economic development.

Ebere and Osundina (2012) investigated the influence of government expenditure on agriculture on Nigerian economic growth and discovered a substantial association between government expenditure in the agricultural sector and Nigerian economic growth. The studies also highlighted that the industry continues to face issues such as insufficient financing, bad infrastructure, and others. Chude & Chude (2013) looked examined the impact of public education spending on economic development in Nigeria from 1977 to 2012, with a special focus on disaggregated and sectoral expenditures. Government spending is one of the most important economic growth levers available to policymakers in developing nations like Nigeria. The findings show that Total Expenditure Education is substantially and statistically significant, and has a long-term favorable impact on Nigeria's economic growth. Olulu, Erhievovwe, and Ukavwe (2014) looked at the link between government spending and economic development. Total government expenditure, public debt expenditure, health expenditure, and government expenditure on education were all broken down. The ordinary least square (OLS) regression was used to determine the short-run connection between variables in the equation, whereas the Augmented Dickey Fuller (ADF) unit root test was employed to determine the long-run relationship. The results of the test demonstrate that government expenditures on health have an inverse connection with economic growth, while government investment on education is

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insufficient to meet the needs of Nigeria's spending sector. It was also determined that government spending in Nigeria has the potential to boost both international and domestic investment.

Tenny and Ekperi ware (2022) examined the relationship between fiscal variables, inflation and economic growth in Liberia. They used the Vector Error Correction Model (VECM) and the results from the Impulse Response Function (IRF) analysis reveal that the respons of inflation to growth in the Liberian economy over the study period, was weak, though significant and negative in the short run. However, it became positive and normalized in the medium and long runs. This means that inflation retarded growth only in the short run which is consistent with Barro (1996). Moreso, Okere, Uzowuru & Amako (2019) examined the relationship between of government expenditure and economic growth in Nigeria with the objective of determining the impact of government expenditure on the economic growth. From 1981-2016, the Granger Causality method of econometric and error correction model (ECM) technique were used.

The result for stationarity shows that the series are integrated at first difference 1(1). Johansen Cointegration test was also employed and reveals the existence of long-run relationship among the variables. The result of Granger Causality revealed bi-directional causality between economic growth and government expenditure on administration and between economic growth and government expenditure on economic services. There was also a unidirectional causality between economic growth and Community Services.

2. Method

The goal of this study was to apply a qualitative approach using time series yearly secondary data. Because the data for this study was obtained over time and is intended to assess the influence of development on government spending in Nigeria, time series were used. As a result, the goal of this chapter is to lay out the analytical technique that will be used to evaluate the relative efficacy and dependability of the views stated in the literature, as well as to provide empirical evidence for the research project. The general research strategy employed in the study's execution was also depicted in this chapter.

Because data on economic development in Nigeria is not accessible, GDP is used as a proxy for economic growth as the dependent variable in this study. The entire money worth of all products and services generated inside a country at any particular moment is referred to as the Gross Domestic Product (GDP). Capital expenditure, recurring spending, and debt are the independent or explanatory variables in this study. Government spending on the acquisition of long-term assets are known as capital expenditures. They include capital projects such as buildings, road and bridge construction, and any permanent structures and assets. Government expenditures that occur on a regular basis throughout the year are referred to as recurring expenditures. If government functions are to be maintained, they must be made on a regular basis. It does not result in the creation of fixed assets purchase. They include normal staff pay, money spent on administration, and money spent on infrastructure upkeep. The gross government debt (also known as public debt or sovereign debt) of a country is the financial obligations of the

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government sector. Changes in government debt over time are mostly attributable to borrowing to cover previous budget shortfalls. When a government's expenditures surpass its receipts, a deficit arises. Using the Keynesian definition of aggregate output, the functional relationship is as follows;

equation $\mathbf{Y} = \mathbf{Y}_{ad} = \mathbf{C} + \mathbf{I} + \mathbf{G} + \mathbf{N}\mathbf{X}$ eqn 1

relating to government component mostly from equation 1 above the functional representation of the model is as follows;

GDP=f (RECEXP, CAPEX, DEBT) ------ eqn 2 The multiple linear regression equation is stated in Eqn 3 as follows; LNGDP= $\beta o + \beta 1$ RECEXP + $\beta 2$ CAPEXP + $\beta 3$ DEBT + μ ------ eqn 3 Taking the natural log of equation 3 we have; LNGDP= $\beta o + \beta 1$ LNRECEXP + $\beta 2$ LNCAPEXP + $\beta 3$ LNDEBT + μ_{t} ------ eqn 4

The general error correction model adoption for this study is;

 $\Delta LNGDP = \beta o + \beta 1 \Delta LNRECEXPt + \beta 2 \Delta LNCAPEXPt + \beta 3 \Delta LNDEBT + ECM_{t-1} + \mu_t -----eqn$

3. Finding and Discussion

This section concerns presentation of results starting from descriptive analysis, unit root result, trend analysis and Johansen Co-Integration Test. This is to establish the trend analysis of government spending and economic growth in Nigeria

3.1 Descriptive Statistics

Table 3.1 displays the descriptive statistics for the data from 1981 to 2020. For the mean, minimum, and maximum values, summary statistics are presented. The dependent variable is Gross Domestic Product (GDP), which is given as a percentage, whereas Total Recurrent Expenditure, Total Capital Expenditure, and Debt are all expressed in naira.

	LGDP	LCAPEXP	LRECEXP	LDEBT	
Mean	23.65431	25.77704	26.43639	27.09743	
Median	24.09536	26.47627	26.97153	27.18619	
Maximum	26.10575	28.45913	29.72555	30.17307	
Minimum	20.37447	22.13428	22.28158	21.56965	
Std. Dev.	1.914579	2.026604	2.429565	2.042642	
Skewness	-0.41524	-0.588964	-0.379329	-0.914548	
Kurtosis	1.689721	1.860532	1.763389	3.344776	
Jarque-Bera	4.010876	4.4765	3.507945	5.774104	
Probability	0.134601	0.106645	0.173085	0.05574	
Sum	946.1723	1031.082	1057.455	1083.897	
Sum Sq. Dev.	142.9589	160.1779	230.2086	162.7231	
Observations	40	40	40	40	
SOURCE, E-tur of and from E of and 10.0 Ordered Commenties					

SOURCE: Extractions from E-views 10.0 Output Generation

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The nature of the model's independent variables is shown in Table 3.2 It demonstrates that the lowest and maximum values of the series for all of the independent variables are relatively high. RECEXP is 29.72555, while CAPEXP is 28.45913. Debt has the highest value of 30.17307, followed by Recurrent Expenditure (RECEXP) at 29.72555 and Capital Expenditure (CAPEXP) at 28.45913. Furthermore, Capital Expenditure (CAPEXP) has the least standard deviation when compared to Recurrent Expenditure (RECEXP) and Debt, indicating that departures from the mean are minor (DEBT). The normally distributed data series are positively skewed and may be used to anticipate Nigeria's deficit situation since the median values of Debt (Debt), Recurrent Expenditure (RECEXP) are greater than the mean values.

3.2 Unit Root test

Table 3.2

Variables	ADF Statistics (5% critical	ADF statistics (5% critical	Order of
	value) at Level	value) at 1st Difference	Integration
GDP	-1.527449(-2.941145)	-3.131808(-2.941145)	1(1)
CAPEXP	-1.083606(-2.938987)	-6.356934(-2.941145)	1(1)
RECEXP	-1.567347(-2.941145)	-8.393704(-2.941145)	1(1)
DEBT	-1.526344(-2.941145)	-4.792763(-2.941145)	1(1)

Source: Author's computation using E-views 10.0

In this study, the Augmented Dickey-Fuller (ADF) approach is employed to examine data stationarity. At a 5% level of significance, the decision is made to reject the null hypothesis that the variable has a unit root.

Table 3.3 is used to assess the stationarity of the underlying variables. Gross Domestic Product (GDP), Capital Expenditure (CAPEXP), Recurrent Expenditure (RECEXP), and Debt (DEBT) all remain constant at their initial differences. This means that the variables don't have a unit root. GDP, CAPEXP, RECEXP, and DEBT are therefore classified as 1(1), 1(1), 1(1), and 1(1), respectively.





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3.3.1 Trend Analysis of GDP in Nigeria from 1981-2020 fig 1 Source: Author's computation using E-views 10.0

Figure 1 depicts the Gross Domestic Product (GDP) growing at a healthy pace since 1981. The chart shows that GDP growth increased at a steady pace between 1981 and 1989. It progressively rose beginning in 1989 and has continued to rise. According to CBN, In 1991, the federal government's revenue rose from #32 million to 63.5 million in 1992. The government's total expenditure rose by 40million or 59.5% from 67.5 million in 1991 to 107.7 million naira. Then, from 2015 and 2020, the trend for GDP growth rate stays constant.



3.3.2 Trends Analysis of Capital Expenditure in Nigeria from 1981-2020 fig 2 Source: Author's computation using E-views 10.0

Capital Expenditure varies between 1981 and 2020, as seen in fig 3. CAPEXP trends were quite high and growing between 1981 and 1999, then somewhat decreased in 2020, then rose again in 2001 and dropped again from 2001 to 2003, then increased continuously from 2003 to 2009 and maintained a fluctuating rate continually up to 2018 and declined from 2018 to 2020.



3.3.3 Trend Analysis of Recurrent Expenditure (RECEXP) in Nigeria from 1981-2020 fig 3 Source: Author's computation using E-views 10.0

Recurrent Expenditure has also grown rapidly since 1981, as seen by the trends in exhibit 3. The graph illustrates that the growth rate of recurrent expenditure stayed constant from 1990 to 1992.

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It rose somewhat from 1993 to 1994 before leveling out in 1994 to 1998. It gradually increased from 1995 to 2020 and continues to do so, with a brief hiatus between 2010 and 2014.



3.3.4 Trend Analysis of Debt in Nigeria from 1981-2020 fig 4 Source: Author's computation using E-views 10.0

Debt varies between 1981 and 2020, as seen in fig 4 above. Debt was relatively modest and slowly growing between 1981 and 1995, with a minor drop in 1996, a slight increase in 1998, a slight decrease in 2002, and a slight increase again until 2004. Then it fell in 2005 and rose steadily from 2006 to 2020.

Johansen Co-Integration Test

In this study, the Johansen Co-integration Test was used as a co-integration test. One of the prerequisites for running this test is that the variables be stable at first difference (1) and that the lag interval at lag 2 be chosen using the Akaike information criterion. The Johansen test will examine two types of tests: Eigen value and Trace statistic tests. The null and alternative hypotheses are the two hypothesis statements in this test. The null hypothesis asserts that no co-integration exists between the variables, while the alternative hypothesis asserts that it does.

If the trace statistic and maximum Eigen value are more than the critical value, reject the null hypothesis and accept the alternative hypothesis; if the trace statistic and maximum Eigen value are less than the critical value, reject the null hypothesis and accept the alternative hypothesis.

After each time series has been verified for stationarity, the next step is to look for cointegration between the variables. The Johansen approach is used to determine whether or not the variables have a long-term connection. The dynamic foundation for forecasting is provided by the co-integration of the dependent and independent variables. Only when the trace test statistics above the crucial threshold is the null hypothesis rejected.

The trace statistic has a greater value than the crucial value. However, with just one, two, or three proposed co-integrating equations, we are unable to reject the null hypothesis, which claims that there is no co-integration among the variables. There is only one co-integrating vector since the trace test is stronger than the max eigenvalue test. As a result, the VAR model will be calculated.

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Table 3: Co integration analysis 1981- 2020Unrestricted Cointegration Rank Test (Trace)				
Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None	0.442400	42.90782	47.85613	0.1348
At most 1	0.249010	20.71152	29.79707	0.3759
At most 2	0.172377	9.829727	15.49471	0.2941
At most 3	0.067120	2.640202	3.841466	0.1042

Trace test indicates no cointegration at the 0.05 level

* denotes rejection of the hypothesis at the 0.05 level

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

Source: Author's computation using E-views 10.0

The results of the john co-integration test using the trace statistic are shown in Table 3. At least one, no more than two, and no more than three. Because the trace statistic value is smaller than the crucial value, the null hypothesis is accepted. Because the trace statistics value is less than the significant value, there is no co-integration. The null hypothesis is accepted because the data reveal that there is no long-term association between the variables.

Table 4: Results of Johansen Co-integration Test Based on Eigen Value

Hypothesized No. of CE(s)	Eigenvalue	Max-Eigen Statistic	0.05 Critical Value	Prob.**
None	0.442400	22.19630	27.58434	0.2105
At most 1 At most 2 At most 3	0.249010 0.172377 0.067120	7.189525 2.640202	14.26460 3.841466	0.6591 0.4670 0.1042

Unrestricted Cointegration Rank Test (Maximum Eigenvalue)

Max-eigenvalue test indicates no cointegration at the 0.05 level

* denotes rejection of the hypothesis at the 0.05 level

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

Source: Authors' Own Computation using Eviews 10

Table 4. shows that there is no co-integration between the variables using the Eigenvalue. Because the variables' Max-Eigen statistic is less than their critical value or their probability is

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less than the 5% threshold of significance, they are not co-integrated. Because the test result indicated that there is no co-integration test by multiplying the equation with the negative (-) sign, the results simply suggest that there is no long-run relationship between Capital Expenditure, Recurrent Expenditure, Debt, and GDP.

Conclusion

The study looked at descriptive analysis, unit root result, trend analysis, and Johansen Co-Integration Test long-run relationship between government expenditure and economic growth in Nigeria. The study establishes the trend analysis of government spending and economic growth in Nigeria. Using the econometric approaches of Co-integration, this study evaluated the link between public expenditure and economic development in Nigeria from 1981 to 2020. The unit root test was used to investigate the qualities of the time series data. The ADF unit root test revealed that the data were non-stationary at levels but stationary at first difference. The findings revealed a long-run significant linear relationship between the two types of public expenditure and economic growth (measured as GDP) over the long run. This leads us to conclude that economic growth (measured by GDP) to capital expenditure, recurrent expenditure, and debt have long-run pattern of relating in the Nigerian economy.

Recommendation

The research made the following recommendations based on its findings:

- (i) The government should make an effort to boost economic growth. Increased public spending, particularly capital spending, will have an influence on the government's aim of economic development.
- (ii) The government and its management should guarantee that a suitable part of the budget is set aside for capital expenditures. Through multiplier effects, this will enhance the volume of economic activity.

References

- Adewara, S. O. & Oloni, E. F. (2012). Composition of public expenditure and economic growth in Nigeria. Journal of Emerging Trends in Economics and Management Sciences (J ETEMS) 3(4), 403-407.
- Chang, T. (2002). "An econometric test of Wagner's Law for six countries based on cointegration and error correction modeling techniques", Applied Economics, 34: Pp. 1157-1170.
- Chenery, H. and Syrquin, M. (1975). "Patterns of Development: 1950-1970". Oxford University Press.
- Chude N P. & Chude D I (2013). Impact of Government Expenditure on Economic Growth in Nigeria International Journal of Business and Management Review Vol.1, No.4, pp.64-71, December 2013 Published by European Centre for Research Training and Development UK (www.ea-journals.org)
- Ebere C &, Osundina, K C (2012). Government Expenditure on Agriculture and Economic Growth in Nigeria. International Journal of Science and Research (IJSR) ISSN (Online): 2319-7064.

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ISSN: 2456-7760

- Ebiringa, O. T. & Charles- Anyaoku, N. B. (2012). Impact of government sectorial expenditure on the economic growth of Nigeria. International Journal of Economics Research 3(6), 82-92.
- Ekperiware, M. C., Olatayo, T. O., & Egbetokun, A. A. (2017). Human capital and sustainable development in Nigeria: How can economic growth suffice environmental degradation? (No. 2017-29). Economics Discussion Papers.
- Ekperiware, M. C., Oladeji, S. I. & Yinusa, D. I. (2017). Dynamics of human capital formation and economic growth in Nigeria. Journal of Global Research in Education and Social Science, 10(3), 139-153.
- Ekperiware, M. C. & Olomu, M. O. (2017). The economic and social components of education in sustainable development. 4. 68-84.
- Essien E.A (1997). "Public sector growth, an econometric test of Wagner's law", Central Bank of Nigeria Economics and Financial. Reviews, 35:3, Pp.63-92.
- Landau, D. (1983): Government Expenditure and Economic Growth: a Cross-Country Study. Southern Economic Journal, Vol. 49, No, 3, Pg. 783-92.
- Mitchell, J. (2005). The Impact of Government Spending on Economic Growth. Backgrounder, 1831
- Mutuku, C.M and Kimani, D.K (2012). "Investigating Wagner's law: Cointegration and Granger Causality Tests for Kenya", Current Research Journal of Economic Theory, 4(2) Pp. 43-52
- Nwadiubu, A. & Onuka, I. O. (2015). Public expenditure and economic development in Nigeria – A time serial study (1980 – 2012). Journal of Arts, Social Sciences Humanities 1(5), 20-30.
- Obinna, O.E. (2003). Public finance. Nigeria: Nsukka, AP and P Press ltd, Pp. 210-231.
- Okere P. A., Uzowuru L. N. & Amako J. C (2019). Government Expenditure and Economic Growth in Nigeria, International Journal of Economics and Financial Management Vol. 4 No. 2 2019 ISSN: 2545 – 5966, www.iiardpub.org
- Okoro, A.S. (2013). "Government spending and economic growth in Nigeria:1980-2011)". Global journal of management and business research, economic and commerce, 13(5) version 1.0.
- Olulu R. M, Erhiryovwe E.K & Ukavwe A (2014) Government Expenditures and Economic Growth: The Nigerian Experience, Mediterranean Journal of Social Sciences MCSER Publishing, Rome-Italy Vol 5 No 10 June 2014
- Tenny, L. Z., & Ekperiware, M. (20210(022)). The Macroeconomics of 17-25. Fiscal Policy Behavior in Liberia: An Error Correction Methodology, Archives of Business Research, Vol. 10, No. 2 Publication Date: February 25, 2022 DOI:10.14738/abr.102.11709.
- Yusuf S.A, Babalola BTA, Aninkan O. D. & Salako M. A. (2015) Analysis of Impact of Sect oral Government Expenditures on Economic Growth in Nigeria: Bound Test Cointegration Approach. European Journal of Business and Management www.iiste.org ISSN 2222-1905 (Paper) ISSN 2222-2839 (Online) Vol.7, No.1

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Appendix Presentation of Data N					
YEARS	GDP	RECEXP	CAPEXP	DEBT	
1981	705,536,795.99	4,846,700,000.00	6,567,000,000.00	2,331,200,000.00	
1982	809,976,172.85	5,506,000,000.00	6,417,200,000.00	8,819,400,000.00	
1983	968,547,320.12	4,750,800,000.00	4,885,700,000.00	10,577,700,000.00	
1984	1,023,223,245.87	5,827,500,000.00	4,100,100,000.00	14,808,700,000.00	
1985	1,094,137,597.53	7,576,400,000.00	5,464,700,000.00	17,300,600,000.00	
1986	1,153,408,864.61	7,696,900,000.00	8,526,800,000.00	41,452,400,000.00	
1987	1,380,242,810.12	15,646,200,000.00	6,372,500,000.00	100,789,100,000.00	
1988	1,658,754,302.92	19,409,400,000.00	8,340,100,000.00	133,956,300,000.00	
1989	2,139,287,128.66	25,994,200,000.00	15,034,100,000.00	240,393,700,000.00	
1990	2,281,938,947.07	36,219,600,000.00	24,048,600,000.00	298,614,400,000.00	
1991	2,712,443,422.78	38,243,500,000.00	28,340,900,000.00	328,453,800,000.00	
1992	3,980,625,188.86	53,034,100,000.00	39,763,300,000.00	544,264,100,000.00	
1993	5,638,168,601.23	136,727,100,000.00	54,501,800,000.00	633,144,400,000.00	
1994	8,079,032,705.17	89,974,900,000.00	70,918,300,000.00	648,813,000,000.00	
1995	14,170,649,779.24	127,629,800,000.00	121,138,300,000.00	716,865,600,000.00	
1996	17,924,345,358.34	124,291,300,000.00	212,926,300,000.00	617,320,000,000.00	
1997	18,830,327,085.41	158,563,500,000.00	269,651,700,000.00	595,931,900,000.00	
1998	19,961,199,851.42	178,097,800,000.00	309,015,600,000.00	633,017,000,000.00	
1999	22,640,867,661.45	449,662,400,000.00	498,027,600,000.00	2,577,374,400,000.00	
2000	27,774,124,967.20	461,600,000,000.00	239,450,900,000.00	3,097,383,900,000.00	
2001	30,571,783,786.31	579,300,000,000.00	438,696,500,000.00	3,176,291,000,000.00	
2002	37,025,817,048.26	696,800,000,000.00	321,378,100,000.00	3,932,884,800,000.00	
2003	40,654,736,240.90	984,300,000,000.00	241,688,300,000.00	4,478,329,300,000.00	
2004				4,890,269,600,000.00	

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	49,749,047,752.42	1,110,800,000,000.00	351,300,000,000.00	
2005				2,695,072,200,000.00
	59,629,010,641.07	1,321,300,000,000.00	519,500,000,000.00	
2006				451,461,700,000.00
	73,860,548,680.99	1,390,200,000,000.00	552,400,000,000.00	
2007				438,890,869,200.00
	79,101,007,152.73	1,589,270,000,000.00	759,323,000,000.00	
2008				523,254,088,000.00
	85,367,907,603.31	2,117,362,000,000.00	960,890,100,000.00	
2009	05 050 105 020 10	2 107 071 500 000 00	1 150 707 500 000 00	590,437,134,000.00
2010	85,952,195,038.12	2,127,971,500,000.00	1,152,796,500,000.00	(90, 927, 499, 200, 00
2010	100,000,000,000,00	2 100 279 509 000 00	992 974 500 000 00	689,837,488,200.00
2011	100,000,000,000.00	5,109,578,508,000.00	885,874,500,000.00	806 840 616 600 00
2011	100 510 006 208 62	2 214 512 224 427 07	018 548 000 000 00	890,849,010,000.00
2012	109,510,090,508.02	5,514,515,554,457.97	910,540,900,000.00	1 026 002 022 100 00
2012	110 663 045 301 03	3 325 156 500 000 00	874 700 000 000 00	1,020,903,923,100.00
2013	117,005,045,501.05	5,525,150,500,000.00	074,700,000,000.00	1 387 331 994 000 00
2013	126 691 209 800 43	3 689 061 059 919 18	1 108 386 402 061 80	1,567,551,574,000.00
2014	120,071,207,000.15	2,009,001,009,919.10	1,100,300,102,001.00	1.631.500.000.000.00
2011	132.598.542.485.79	3.426.897.936.117.71	783,122,402,061,80	1,001,000,000,000.00
2015			,	2,111,510,000,000,00
	136,394,668,529.72	3,831,947,407,165.56	818,365,000,000.00	_,,,,,,
2016		, , , ,		3,478,910,000,000.00
	149,400,332,287.80	4,160,110,389,438.70	653,609,000,000.00	
2017		, , , ,		5,787,512,640,000.00
	166,024,247,352.32	4,779,988,766,346.33	1,242,296,000,000.00	
2018				7,759,200,000,000.00
	183,004,203,504.72	5,675,200,685,880.50	1,682,099,000,000.00	
2019				9,022,421,640,000.00
	202,009,920,718.31	6,997,193,526,334.64	2,288,996,000,000.00	
2020				12,705,618,480,000.00
	217,561,147,190.29	8,121,639,723,069.53	1,614,889,000,000.00	