Impact of Government Expenditure on Socio-Economic Development of Borno State

Bukar Zanna Waziri (,bukarwaziri@unimaid.edu.ng)* Adam Konto Kyari (adamkyari@yahoo.com)** Emmanuel Samuel Mshelia(emmanuelmhelia@gmail.com)***

*&**Department of Accounting, University of Maiduguri, Nigeria ***Pension Transitional Arrangement Directorate (PTAD), 22 Katsina Ala Crescent, Maitama Abuja

Abstract

Government undertakes public spending in order to enhance the socio-economic status of its citizens. This study examines the impact of government expenditure on socio-economic development of Borno State. The study collected annual secondary data from the annual accounts of Borno State government and Global Data Lab (GDL) from the period 2013 to 2021. The data were analyzed using multiple regressions. The Augmented Dickey Fuller (ADF) and Phillip-Peron (PP) unit root tests were conducted on all the variable showed non-stationary at level but stationary at first differencing. The study established that there is a significant impact of economic, social and administrative capital expenditures on household income levels in Borno State. The study recommends that the State government should be spending more on economic and social capital expenditures in order to raise income levels in the long run which would cause an improvement in the socio-economic well beings of its citizens. The state government should ensure that the funds are channeled effectively in productive areas in communities in order to improve household income. The state government should support value creation in critical sectors of the economy that employs the larger population to further reduce poverty in the state. Also, Government spending should be oriented towards increasing investment in physical and human capital.

Keywords: Government expenditure, household income, economic capital expenditure, social capital expenditure and administrative capital expenditure, Borno State.

1. Introduction

For decades, the extent of government spending and its impact on economic growth has been a topic of intense debate among academics (Ahsan, Kwan, and Sahni, 2012, Kolluri, Panik, and Wahab, 2016 and Ghali, 2018). Some scholars argue that government spending on education, health and other essential services boosts productivity and national growth (Muritala, 2011; World Bank's Development Report, 2020). While others view that spending on infrastructure, lowers production costs, boosts private sector investment and promote economic growth (Wahab, 2016 and Ghali, 2018). However, Razzolini and Shughart (2017) opined that provision essential public goods and security for citizens is considered to be the primary functions of government.

In Nigeria, total government expenditure, both capital and recurrent has continued to rise as a result of increased demand for public goods and services. A record from the approved Budget, 2022 showed that government recurrent (non-debt) expenditure for the year 2022 was N6,909,849,788,737 while the capital expenditure figure amounts to N5,467,403,959,863. Compared to previous years, these figures have more than double. For example, government recurrent (non-debt) expenditure rose N4, 805.20 million in 2000 to N984,277.60 million in 2010 while capital expenditure rose from N2,482,617.80

million in 2010 to N4,934,352,611,797 in 2017. One of the key obstacles of economic development in developing countries is the provision of infrastructural facilities to meet the expectations of businesses, households, and other users.

Economic growth is defined as a rise in national income or output per capita over a long period of time. It is considered as an economic condition in which the rate of rise in national output must outpace the rate of population growth. Thus, economic growth is the long-term expansion of the economy's productive potential. It entails a gain in Real GDP, which translates to increased national output and wealth.

While Government expenditure is a term used to describe money that government spends in an economy. Government expenditure occurs at every level of government, starting from local councils, states and Federal. Economists classify government expenditure into three main types. Government purchases of goods and services for current use which is also referred to as government consumption. Government purchases of goods and services intended to create future benefits such as infrastructure investment or research spending which is referred to as government investment. Government expenditures that are not directly purchases of goods and services, they are also referred to as transfer payments. Government expenditure in Nigeria is financed through a variety of methods. Most often, government uses taxes to fund programs and expenditure, but this is far from the only means of creating assets for spending, where government may borrow based on future projected budgets in order to fund programs.

Government may also choose to take loans from foreign countries to finance expenditure. How money is spent and from what source is the main component in a government's fiscal policy.

The structure of Nigeria government expenditure can broadly be categorized into capital and recurrent expenditure. The recurrent expenditure are government expenses on administration such as wages, salaries, interest on loans, maintenance amongst others. Whereas capital expenditure are expenses on capital projects like roads, airports, education, telecommunication, electricity generation. One of the main purposes of government spending is to provide infrastructural facilities. The general view is that public expenditure either recurrent or capital expenditure, notably on social and economic infrastructure can be growth-enhancing although the financing of such expenditure to provide infrastructural facilities essential including transport, electricity, telecommunications, water and sanitation, waste disposal, education and health can be growth retarding. According to Stern (1990), government expenditure is an important instrument for a government to control its economy through the provision of economic stability during inflation or deflation and provision of employment amongst others. The involvement of government in the control of its economy is really important as the absence of government control will lead to inequality in wealth distribution. Government expenditure is aimed at proffering social and economic solutions which will lead to economic growth.

The recent revival of interest in growth theory has also revived interest among researchers in verifying and understanding the linkages between government spending and economic growth especially in developing country like Nigeria. Over the past decades, the public sector spending has been increasing in geometric term through various government activities and interactions with its Ministries Departments and Agencies (MDA's) (Niloy. 2003). Although, the general view is that public expenditure either recurrent or capital expenditure, notably on education, social and economic infrastructure can be growthenhancing although the financing of such expenditure to provide essential infrastructural facilities including electricity, telecommunications, education and health.

The existence of a level link between public spending metrics and economic growth in Nigeria was supported by empirical evidence. Specifically, government recurrent expenditures were found to have a negative influence on economic growth, but the positive impacts of public capital expenditures were not significant to economic growth over the study period. Studies have shown that developed countries focus more on transfers and subsidies, while developing economies pay more attention on social and community services. For the Nigerian state, government performed these functions religiously, and available statistics showed that government spend more on recurrent goods and services, specifically on transfers, than capital goods and services and this has implication on growth.

There are several studies that revealed a causal nexus between government expenditure and economic growth. For instance, Muritala (2011) conducted a study on government expenditure and economic development from Nigeria shows that there is a positive relationship between GDP and capital expenditure. Also, Katrakilidis and Tsaliki (2009) in their study of causal nexus between public spending and output growth, using Greece data between 1958 and 2004, demonstrated a long run equilibrium relationship between public spending and output. Similarly, Srinivasan (2013) examines the causal nexus between government expenditure and output growth in India. The results indicate one-way causality running from economic growth to government expenditure in short-run and longrun. All these studies were conducted across countries, regions and continents but indicating the same outcome. However, some studies, on the other hand, refute the existence of a long-term link between government spending and economic growth (Robert Barro, 1990; Alberto Alesina & Silvia Ardagna, 2009; Valerie Ramey, 2011; Kushwaha & Tiwari, 2019).

In a developing economy, government expenditure has an active role to play in reducing regional disparities, developing social overheads, creation of infrastructure of economic growth in the form of transport and communication facilities, education, and training (Abdurrauf 2015; Onifade, evik, Erdoan, Asongu, and Bekun, 2020). One way in which government expenditure is expected to affect the socio-economic growth is the will and capacity of the people to work, saves, and invests. In this connection, the exact effects depend largely upon the precise form and magnitude of government expenditure. Subnational governments expenditure also plays an important factor in boosting economic growth. For instance, Borno state in Northeast part of the Nigeria may have suffered socioeconomic growth due to the decade of BokoHaram insurgency. However, the current reconstruction, rehabilitation and resettlement efforts by the government has boosted economic growth and development.

There are many research studies conducted on government expenditure, on the socioeconomic development in Nigeria (Wahab, 2016; Ghali, 2018; Muritala, 2011; Okpabi, Abraham, and Sunday, 2021 and Chimobi, 2016). However, studies on government expenditure and socioeconomic growth on subnational government are scarce. Secondly, the impact of government spending on economic growth is still an unresolved issue theoretically as well as empirically. Although the theoretical positions on the subject are quite diverse, the conventional wisdom is that a large government spending is a source of economic instability or stagnation. Empirical research, however, does not conclusively support the conventional wisdom. A few studies report positive and significant relation between government spending and economic development while several others find significantly negative or no relation between an increase in government spending and economic development of Borno State. The paper is structured as thus. The next section discusses the applicable theory and hypothesis. The

methodology and empirical results are presented in the section 3 and 4 respectively. The last section concludes the paper.

1.1 Theory and Hypothesis

The applicable public expenditure theory in this study is based on Wagner's law, known as the law of increasing state spending. Wagner's law was formulated by Adolph Wagner (1835–1917). The theory states that for any country, public expenditure constantly rises as income growth expands. According to Magazzino, Giolli, and Mele (2015), Wagner's law stipulates that in the process of economic development, the share of the public sector in GDP has been increasing over time. Cosimo, Lorenzo, and Marco (2015) explain that the law is premised on four principles, as follows: that growth results in increased complexity because there are new and continuing increases in public expenditure. Similarly, the second principles advocate that public expenditure increases urbanisation and externalities. The third principles stipulate that goods supplied by the public sector should have a huge income elasticity of demand; and lastly, the growth results in an increase in demand with a resultant increase in public expenditure. This study expects that if growth in expenditure matches economic growth, then it should also translate into economic development; however, this has not been the case in reality in developing nations like Nigeria because sometimes there are elements of fiscal illusion in government activities.

Thus, the public sector has a role to play in society to ensure the smooth running of economic activities. Also, the goals of government are sometimes numerous and have several stakeholders involved. Therefore, to avoid chaos, efficiency and equity should guide public spending. Hindrizia and Myles (2005) explain that efficiency concerns the smooth running of public activities. Efficiency has to do with the coordination, collection and monitoring of government revenue and expenditure towards the provision of services to the stakeholders. Equity is about the fair sharing of public gains among stakeholders.

Be as it may, government spends on socioeconomic and administrative costs, and it expected to have the potential of increasing the per capita incomes of households and rural to urban drift. In addition, the current reconstruction, rehabilitation and resettlement efforts by the Borno State government has increased public expenditure and boosted economic growth and development. Consistent with public expenditure theory, this paper hypothesise that:

 H_1 : Government expenditure (economic capital expenditure, social capital expenditure and administration capital expenditure) will have significant negative influence on household income levels in Borno State.

2. Methodology

2.1 Data

In order to test the study hypothesis, secondary data from the published annual accounts of Borno State and Global Data Lab (GDL) was collected. In the published annual accounts of Borno State, social and economic data were collected while household income was sourced from Global Data Lab. The annual data collected for all variables are for the period from 2013 to 2021. The dependent variable is the Household Income Levels of Borno State. On the other hand, the independent variables are economic capital expenditure, socio capital expenditure and administrative capital expenditure.

2.2 Methods of Data Analysis

The data collected from the above sources is analysed using multiple regression analysis. The word regression as a statistical tool can be traced to Sir Francis Galton (1822-1911) who studied the relationship between the heights of children and their parents (Allen, 1997). However, in its widest term, multiple regression is a statistical technique that

attempts to predict the values of one variable (dependent) using the values of other variables (independent) (Gujarati, 2003; Allen, 1997). Thus, this implies outcome of regress and variable depends on the values of the regressor. The dependent variable is usually denoted by Y and the independent variables by $X_1, X_2, X_3, \ldots, X_n$. Thus, the multiple regression equation for a time series data can be written as follows.

$\mathbf{Yt} = \boldsymbol{\beta}_0 + \boldsymbol{\beta}_1 \mathbf{X}_{1t} + \boldsymbol{\beta}_2 \mathbf{X}_{2t} + \boldsymbol{\beta}_3 \mathbf{X}_{3t} + \boldsymbol{\beta}_n \mathbf{X} \mathbf{n} \mathbf{t}_{3t} \mathbf{\varepsilon} \mathbf{t}$

Where:

k=number of independent variables

β0= constant (intercept)

 β 1, β 2.... β k = partial regression coefficients

εt = error term, assumed to be normally distributed and has constant variance.

Note: all X variables are assumed to have a linear relationship with Y

The reasons for the adoption of regression analysis for this research work is borne out of the fact that it is the most appropriate statistical tool to measure and understand the relationships among the variables under study (Blaikie, 2007; Williams, 2007).

2.3 Model Specification

The model is stated below:

$$\mathbf{Y} = \boldsymbol{\beta}_0 + \boldsymbol{\beta}_1 \mathbf{X}_1 + \boldsymbol{\beta}_2 \mathbf{X}_2 + \boldsymbol{\beta}_3 \mathbf{X}_3 + \boldsymbol{\varepsilon}$$

Where;

Y = Household Income Levels (Poorest-Households with IWI under 35)

 $\beta_0 = \text{Constant}$

 $\beta_1 - \beta_2 - \beta_3 =$ Intercepts of Independent Variables

 X_1 = Economic Capital Expenditure

 $X_2 =$ Socio Capital Expenditure

 $X_3 =$ Administrative Capital Expenditure

 $\boldsymbol{\varepsilon} =$ Standard Error terms

3. Empirical Results

The empirical results obtained after the diagnostic test are also presented in this section. The diagnostic tests include stationary test, Co-integration tests, Causality test and vector error correction model.

3.1 Unit Root Tests

This is used to test for the stationary of the time series data. In this section, we analyze the time series of the chosen data during the period of 2013-2021. Augmented Dickey Fuller (ADF) and Phillip-Peron (PP) unit root tests were conducted on all the variables to know the existence of stationary or reliability of the data. The results, presented in Table (1), judging by the Augmented Dickey Fuller (ADF) and Phillip-Peron (PP) tests statistics, R-Squared and Durbin-Watson statistics at 1%, 5% and 10% level of significance, reveals that all the variables (HIL, ECE, SCE, ACE) are non-stationary at level but stationary at first differencing.

This means that they are integrated of order 1(1). In order to determine whether the variables are stationary or otherwise, unit root tests are conducted. If non-stationary at levels, the order of integration will be determined. Next is a test of co-integration which is carried out between Household Income Levels (HIL), Economic Capital Expenditure (ECE), Socio Capital Expenditure (SCE) and Administrative Capital Expenditure (ACE). Test for the stationary of the variables are presented in table 4.1 below.

The test results suggest that the null hypothesis of unit root for the three-time series namely, Household Income Levels (HIL), Economic Capital Expenditure (ECE), Socio Capital Expenditure (SCE) Administrative Capital Expenditure (ACE) cannot be rejected at levels. This prompted us to test the Augmented Dickey-Fuller (ADF) and Philip Peron (PP) tests at first and second levels. The result as shown in table 1 suggests that the null hypothesis of the variables can be rejected in the first difference. These shows that all the variables are stationary at first difference and are integrated of order one or are 1(1) series. The test results are presented below:

Variable	t- statistics	1%	5%	10%	Decision
Household Income Levels (HIL)	-5.5638	- 4.2873	- 3.5662	- 3.2175	1(1)
Economic Capital Expenditure (ECE)	-5.6543	- 4.2963	- 3.5638	- 3.2164	1(1)
Socio Capital Expenditure (SCE)	-6.4682	- 3.6741	- 2.9651	- 2.6182	1(1)
AdministrativeCapitalExpenditure (ACE)	-6.4761	- 3.6652	- 2.9762	- 2.6195	1(1)

 Table 1: Augmented Dickey Fuller (ADF) Unit Root Test (Trend and Intercept)

Table 2: Philip Peron (PP) Unit Root Test (Trend and Intercept)

Variable	t- statistics	1%	5%	10%	Decision
Household Income Levels (HIL)	-4.7643	- 4.5423	- 3.6582	- 3.2774	1(1)
Economic Capital Expenditure (ECE)	-4.3351	- 4.4874	- 3.6473	- 3.2678	1(1)
Socio Capital Expenditure (SCE)	-9.7231	- 4.5482	- 3.6582	- 3.2774	1(1)
AdministrativeCapitalExpenditure (ACE)	-9.5158	- 4.5475	- 3.6582	- 3.2774	1(1)

Note: All variables are stationary at first differencing.

Table 1 shows that HIL, ECE, SCE and ACE are integrated of order one. Looking at the tables above, it was discovered that both ADF and PP with trend and intercept test statistics are greater at 5% and 10% critical values. This means that the series are stationary at first differencing.

For the ADF statistics, the 99%, 95%, and 90% critical values are shown after each Tstatistics at the left hand side of second column of tables 1 and 2. The result in tables 1 and 2 above show that none of the variables were stationary at levels. This can be seen by comparing the observed values (in absolute terms) of the ADF and PP tests statistics at 1%, 5% and 10% levels of significance. The result provides some evidence that none of the variables were stationary when differenced at levels, hence there is evidence of nonstationary. However, differencing once indicates stationary in all the variables (HIL, ECE, SCE and ACE). Therefore, the null hypothesis is accepted for non-stationary of the variables at levels and it is sufficient to conclude that there is a presence of unit root at levels. As a result, all the variables were differenced and the ADF tests were conducted on them; the result is shown in tables 1 and 2 above.

This reveals that none of the variables were stationary at level but at first difference. On these bases, the null hypothesis of non-stationary is rejected for all the variables and we therefore, conclude that the variables are stationary. This further implies that the variables are integrated of order one, I (1).

4.2 Co-integration Tests

This is used to test for the existence of long-run relationship between dependent and independent variables. The Johansen co-integration test was conducted on the selected variables. The results obtained from the above unit root test confirm that all the explanatory variables: HIL, ECE, SCE and ACE are co-integrated of order one. The test indicates three co-integrating equation at 5% level of significance.

After forming the stationary of the variables, we proceed to test for the co-integration among the variables. When co- integration is present, it means that ECE, SCE and ACE share a common trend and long-run equilibrium as suggested in the Theory. We started the co-integration analysis by employing the Johansen and Juselius multivariate co-integration tests. The maximum Eigen value statistics indicated (3) co-integrating equation at the 5 percent level of significance, suggesting that there is co-integration relation between the determinants of socio-economic development in Borno State. It is also used to test for the existence of long run relationship between dependent and independent variables. The Johansen co-integration test was conducted on the selected variables. The variables can therefore be said to have reliable long-run relationship among them with dependent variable coefficient of normalized co-integration of 1.000000. The result is presented in Table 3 below:

Hypothesized	Eigenvalue	Trace	5%	Probability-
No. of CE(s)	Eigenvalue	Statistic	Critical Value	value
None*	0.9215	186.1818	88.8123	0.0000
At most 1*	20.8246	99.6523	63.8751	0.0000
At most 2*	0.5273	45.5112	42.9151	0.0257
At most 3*	0.6411	46.432	44.4795	0.0378

Table 3: Johansen and Juselius Multivariate Co-Integration Tests

() denotes rejection of the hypothesis at 5% significance level. The trace test indicates 3 co-integration equation(s) at 5% significance level. Considering the tables above, there is a long run relationship between dependent variable (HIL) and the independent variables (ECE, SCE and ACE) within the period under review 2013-2021.

Normalized 1 Co-integrating Coefficients Equation(s): The normalized co-integrating coefficients for one co-integrating equation given by the existence of long run relationship are shown below: HIL (1.000000) = ECE (0.000000), SCE (9994.372), ACE (6801.27).

Where HIL is the dependent variable, 1.00000 is the coefficient, 0.000000 is the coefficient of Economic Capital Expenditure (ECE), 9994.372 is the coefficient of Socio Capital Expenditure (SCE) and 6801.27 is the coefficient Administrative Capital Expenditure (ACE).

The figures in parentheses behind the estimated coefficients are the standard errors. The values were extracted from Johansen's Co-integration test under the "Normalized 1 co-integrating coefficient equation" sub-section. They are the coefficients showing the direction and strength of the relationship which exist between dependent variable and independent variables in the long run.

The table above reveals that there is strong positive relationship among Household Income Levels (HIL), Economic Capital Expenditure (ECE), Socio Capital Expenditure (SCE) and Administrative Capital Expenditure (ACE). As indicated in the table above, the variables under consideration are co-integrated because the probability values are all less than the significance level at 5%.

 Table 4: Summary of Multiple Regression Analysis

Variable	Coefficient	Standard Error	t-statistics	Prob.
Constant	225738.7	83736.91	2.695808	0.0112
ECE	0.284557	0.053544	5.385766	0.0000
SCE	0.911342	0.146675	6.239823	0.0000
ACE	0.725546	0.151644	4.801322	0.0000
R-squared	0.848327	Mean dependent var	126760.7	
Adjusted R-squared	0.817628	S.D. dependent var	162764.6	
S.E. of regression	161323.7	Akaike info criterion	26.87891	
Sum of squared resid	8.07E+11	Schwarz criterion	26.96960	
Log likelihood-statistics	-441.5019	Hannan-Quinn criter.	26.90942	
F-statistics	1.574207	Durbin-Watson stat.	2.271096	
Prob (F-statistics)	0.000000			

Table 4 shows that Economic Capital Expenditure (ECE) was significantly related to Household Income Levels (HIL) at 5% level. The positive co-efficient estimate of ECE indicates that ECE has positive impact on household income levels, reflecting a positive relationship.

Socio Capital Expenditure (SCE) was found to be positive and significantly related to household income levels at 5% level. The positive coefficient of SCE means that socio capital expenditure has positive impact on household income levels.

Similarly, Administrative Capital Expenditure (ACE) has positive coefficient and significantly related to household income levels at 5% level of significance. The positive coefficient of ACE indicates that administrative capital expenditure has positive impact on household income levels in Borno state.

The statistical evidence emanating from the study of co-efficient of determination R^2 shows that the endogenous variable jointly explained over 84.83% of the total variation in the dependent variable (HIL). The value of the adjusted R^2 (0.848327) which is over 84% re-affirms the goodness of fit and signifies that over 84% variations did not merely result from the use of simple variable in the model. The F-statistic (1.574207) of the model estimate is statistically satisfactory such that the hypothesis of the equation being equal to zero can be rejected. The joint influence of the explanatory variable was statistically significant at 5 percent level of significance. Durbin Watson test of auto-correlation (2.271096) indicates the presence of positive auto-correlation.

Specifically, at 5% level of significance, HIL, ECE, SCE and ACE have direct and significant positive implication on household income levels in Borno state within the period under review.

Household Income Levels in Borno State	Table 5: Summary of Simple Linear Regression of Economic Capital Expenditure on
	Household Income Levels in Borno State

Variable	Coefficient	Standard Error	t-value	P-value	Remark
Constant	0.457	0.149	3.067***	0.001	Significant
ECE	1.151	0.132	8.719**	0.000	Significant
F-value (ANOVA)	56.341			0.000	Significant
$R^2 =$	0.786	79%			

Note: *** significant at 1% level, * * significant at 5% level, * significant at 10% level

The result shows that ECE has a positive coefficient that was significantly related to HIL at 1 % level (P< α). This means that ECE improves HIL in Borno state. The R² = 79% indicates that the model is suitable for explaining the impact of economic capital expenditure on household income levels in Borno State.

Expenditure on Hou	isehold Incon	ne Levels in Borno	State		
Variable	Coefficient	Standard Error	t-value	P-value	Remark
Constant	0.431	0.153	2.817***	0.017	Significant
SCE	0.372	0.112	3.321**	0.000	Significant
F-value (ANOVA)	72.543			0.000	Significant
$R^2 =$	0.672	67%			

 Table 4.6: Summary of Simple Linear Regression Result of Social Capital

 Expenditure on Household Income Levels in Borno State

Note: *** significant at 1% level, * * significant at 5% level, * significant at 10% level Table 4.6 shows that the SCE has a positive coefficient that was significantly related to HIL at %5 level. The positive coefficient of SCE indicates that SCE has positive impact on HIL in Borno state. The $R^2 = 67\%$ indicates that the model is suitable for explaining the impact of social capital expenditure on household income levels in Borno State.

 Table 4.7: Summary of Simple Linear Regression Results of Administration Capital

 Expenditure on Household Income Levels in Borno State

Variable	Coefficient	Standard Error	t-value	P-value	Remark
Constant	1.146	0.123	9.317*	0.000	Significant
ACE	0.723	0.152	4.757**	0.000	Significant
F-value (ANOVA)	51.632			0.000	Significant
$R^2 =$	0.723	72%			

Note: * * significant at 5% level, * significant at 10% level

Table 4.7 shows that ACE has a positive coefficient that was significantly related to HIL at %5The $R^2 = 72\%$ indicates that the model is suitable for explaining the impact of administration capital expenditure on household income levels in Borno State.

4.3 Test of Hypotheses

H₁: Economic capital expenditure, social capital expenditure and administration capital expenditure will have significant negative influence on household income levels in Borno State.

Based on the F-statistics (1.574207) in table 4.4, the null hypothesis which states that there is no significant impact of economic capital expenditure, social capital expenditure and administration capital expenditure on household income levels in Borno State is rejected at 5% level of significance. This is because the probability of the (F-statistics = 0.00000) is less than the alpha value (α = 0.05). Hence, there was a significant impact of economic capital expenditure and administration capital expenditure, social capital expenditure and administration capital expenditure, social capital expenditure and administration capital expenditure on household income levels in Borno State (P< α).

H₂: Economic capital expenditure will have significant negative influence on household income levels in Borno State.

Table 4.5 shows a significant impact of economic capital expenditure on household income levels in Borno State. This is because the P-value (0.000) of the ANOVA is less than the alpha value (α = 0.05). Hence the null hypothesis which states that there is no significant impact of economic capital expenditure on household income levels in Borno State is hereby rejected at 0.05 level of significance. Hence, there was a significant impact of economic capital expenditure on household income State (P< α).

H3: Social capital expenditure will have significant negative influence on household income levels in Borno State.

Table 4.6 shows a significant impact of social capital expenditure on household income levels in Borno State. This is because the P-value (0.000) of the ANOVA is less than the alpha value (α = 0.05). Hence the null hypothesis which states that there is no significant impact of social capital expenditure on household income levels in Borno State is hereby rejected at 0.05 level of significance. Hence, there was a significant impact of social capital expenditure on household income levels in Borno State is hereby rejected at 0.05 level of significance. Hence, there was a significant impact of social capital expenditure on household income levels in Borno State (P< α).

H4: Administration capital expenditure will have significant negative influence on household income levels in Borno State.

Table 4.7 shows a significant impact of administration capital expenditure on household income levels in Borno State. This is because the P-value (0.000) of the ANOVA is less than the alpha value (α = 0.05). Hence the null hypothesis which states there is no significant impact of administration capital expenditure on household income levels in Borno State is hereby rejected at 0.05 level of significance. Hence, there was a significant impact of administration capital expenditure on household income levels in Borno State (P< α).

4.4 Summary of Findings

- i. There was a significant impact of economic capital expenditure, social capital expenditure and administration capital expenditure on household income levels in Borno State.
- ii. There was a significant impact of economic capital expenditure on household income levels in Borno State.
- iii. There was a significant impact of social capital expenditure on household income levels in Borno State.
- iv. There was a significant impact of administration capital expenditure on household income levels in Borno State.

4.5 Discussion of Results

The first finding revealed a significant impact of economic capital expenditure, social capital expenditure and administration capital expenditure on household income levels in Borno State with probability of the (F-statistics = 0.00000) is less than the alpha value (α = 0.05). Hence, there was a significant impact of economic capital expenditure, social capital expenditure and administration capital expenditure on household income levels in Borno State (P< α). This finding is consistent with the study of Okpabi, Abraham, and Sunday (2021) and Chimobi (2016). However, it has contradicted with the study of Molefe and Choga (2017), Ebaid and Bahari (2019), and Olayungbo and Olayemi (2018).

The second finding revealed a significant impact of economic capital expenditure on household income levels in Borno State, with P-value (0.000) of the ANOVA is less than the alpha value (α = 0.05). Hence, there was a significant impact of economic capital expenditure on household income levels in Borno State (P< α). The finding of this study agreed with the finding of Abdurrauf (2015)

The third finding revealed a significant impact of social capital expenditure on household income levels in Borno State, with P-value (0.000) of the ANOVA is less than the alpha value (α = 0.05). The finding of this study agreed with the findings of Alper and Demiral (2016), Uma, et al. (2013) and Patricia (2013).

The fourth findings revealed a significant impact of administration capital expenditure on household income levels in Borno State, with P-value (0.000) of the ANOVA is less than the alpha value (α = 0.05). There was a significant impact of administration capital expenditure on household income levels in Borno State (P< α). The finding of this study is in line with the findings of Greg and Okoiarikpo (2015) and Serap (2016).

5. Conclusion and Policy Implications

The study assessed the effects of House hold income levels Poorest Households in % with International Wealth Index under 35) in Borno State on Socio-Economic and Administrative Capital Expenditure of Borno state. The study was guided by three (3) hypotheses which question the efficacy of the effects of House hold income levels Poorest Households in % with International Wealth Index under 35) on the Socio-Economic and Administrative Sectors of Capital Expenditure in Borno state.

From the findings, the study concludes that there is a significant impact of economic capital expenditure, social capital expenditure and administration capital expenditure on household income levels in Borno State with probability of the (F-statistics = 0.00000) is less than the alpha value (α = 0.05). Hence, there was a significant impact of economic capital expenditure, social capital expenditure and administration capital expenditure on household income levels in Borno State (P< α). This justifies that government capital and recurrent expenditure on education, health, economic, housing, household income and community utilities have a statistically significant impact socio economic development. From the findings and conclusion of the study, the following recommendations was made;

State government capital expenditure on administration should be maintained in future budget since it has a positive and effective relationship to the economic growth in the state.

The state government capital expenditure on economic service should increase and channeled effectively into the communities to improved household income.

The state government capital expenditure on social community service should be maintained in the agriculture, transportation, communication and construction sectors for economic growth in the state.

Macroeconomic reforms, including to fiscal, trade could help diversify the economy and create productive jobs.

Government spending could also be increased for pro-poor causes, such as health, education, and infrastructure

Borno state government should support value creation in critical sectors of the citizen's economy which employs large population like agriculture and industry in order to make growth pro-poor

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