Effect of Capital Expenditure on Unemployment Rate in Nigeria

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Abstract
This study investigated the effect of capital expenditure on the unemployment rate in Nigeria from 1981 to 2020. Data for the study was obtained from the Central Bank of Nigeria's Statistical Bulletin and the World Bank's World Development Indicators. Several diagnostic tests were performed to assess the relationship between the variables, including descriptive, correlation analysis, unit root test, Johansen co-integration test, and error correction model (ECM) approach. The results of the unit root and Johansen co-integration tests lead to the use of the ECM approach to determine the impact of capital expenditure on unemployment rate in Nigeria. The dependent variable was unemployment rate, and the explanatory variables were capital expenditure, tax revenue, labour force, compensation of employees, gross capital formation, gross domestic product, and import of goods and services. The findings revealed that four of the seven explanatory variables were statistically significant, with capital expenditure and gross capital formation having a negative and significant impact on unemployment rate in Nigeria. In contrast, labour force and gross domestic product had a positive and significant impact on unemployment. The study recommends that the Nigerian government should increase its capital expenditure to generate more employment opportunities, which will enhance labour productivity and reduce unemployment rate. Additionally, the government should carefully monitor the allocation of capital expenditure to productive sectors that will achieve the desired objectives.

Keywords: Capital Expenditure; Unemployment Rate; ECM.
JEL Classification Codes: C32, H00, H50, J60, J64

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1. Introduction

A high rate of population growth implies that the average wage rate in relation to capital cost is likely to decrease. This is because there are only a few economies in the world that can provide employment opportunities for the growing number of job seekers. It is, therefore, important for countries to control their population growth to be able to account for their citizens. According to Anaduaka (2014), as the size of the labor force increases, average wages relative to capital costs tend to decrease, assuming other factors remain constant. However, problems arise when wages cannot be reduced despite rapid population growth. This can result in high levels of unemployment and underemployment, which can lead to a reduction in the cost of labor. Several factors influence unemployment rates and average wages, including the relative balance between the number of people seeking work, the availability of employment opportunities, and the wages demanded by job seekers. In a competitive job market, employers aim to fill available positions as inexpensively as possible, according to the principles of supply and demand. While the impact of rapid population growth on high-wage jobs is uncertain, few economies are capable of generating enough jobs to accommodate the annual increase in job seekers. Therefore, governments must grapple with the challenges posed by resource scarcity and inequality (Alemayehu *et al.*, 2018).

The role of the government in an economy has been an important debate over the years in the world's growing economies. While some believe a larger role by the government is more beneficial for economic growth, others disagreed it should be remarked that governments have roles to play in an economy. Governments develop policies to react to certain economic conditions and these policies and regulations are usually geared towards economic growth or prevent negative economic consequences. Fiscal policy among many other policies is one policy framework used by governments to regulate their spending and taxation. Governments in developed and developing countries adopt the framework of fiscal policy as a means to adjust their spending levels and tax rates to monitor and influence their countries' economies. Fiscal policy, thus, is a management tool of a government with respect to the country's economy (Anayochukwu, 2012). More importantly, two major goals of fiscal policy are to regulate the labour market and encourage economic growth (Atomen *et al.*, 2015).

The emergence of Keynesian concepts has induced governments to assume essential roles in the administration of countries which may include the various direct government investments in all sectors of an economy. When the government increases its spending, for instance when there are high government funds on new public work programs like building infrastructures such as bridges, roads or train systems, it tends to create jobs that reduce unemployment and increases disposable income leading to high levels of consumption. When disposable income increases, consumers demand more goods and services which go a long way to boost businesses since the level of production will rise in order to meet the high demand of consumers. As the level of production increases, more people are employed. Taxation, on the other hand, is another way a government can use to reduce unemployment; tax cuts increase disposable income and enables business expansion and hiring. Tax hikes put less money into consumers' hands which tends to decrease consumption (Anumudu, 2015).

Issues on fiscal policy especially government spending and its implications on key macroeconomic indicators including the unemployment outcome has been one of the most pertinent debatable topics for the past years. Both academicians and policy makers have developed a keen interest in

the issues of fiscal policy and its effects on key macroeconomic indicators. This has resulted in numerous researches works on the topic. Most often, vast numbers of studies are geared towards the impact of fiscal policy on the general economic growth of countries. Surprisingly, there seems to be a limited number of researches on the effects of fiscal policy on unemployment outcome and what makes it interesting is the lack of consensus in the limited literature and empirical analysis of the fiscal policy-employment-unemployment nexus (Nwosa, 2014). Therefore, this study is set to investigate the effect of capital expenditure on unemployment rate in Nigeria which is a join macroeconomic issue.

The rest of the paper are organized into fours section. Section two covers the literature review and section three is on methodology. Section four focused on data analysis and the section five deals with summary and conclusion.

2. Literature Review

The literature relating expenditure to labour outcomes according to Mukarramah *et al.* (2020), analyzed the effect of capital expenditure, human development index and labour absorbed partially and simultaneously on poverty through economic growth in Aceh Province from 2014 to 2018. The results showed that capital expenditure, human development index and labor absorbed simultaneously have a significant effect on economic growth. Capital expenditure has a positive but not significant effect on economic growth. Also, Tafuro (2015), investigated whether fiscal policy was able to affect the trend of employment rate, triggering hysteresis independently from GDP behaviour. The study shed light on issue by analyzing Panel of 17 OECD countries, covering the period 1980-2009 with annual data. The results suggested that a fiscal shock can modify the employment equilibrium level even without influencing potential output. Cavallo (2005), examined the relationship between government employment expenditure and the effects of fiscal policy shocks from 1950 to 2000. The study make used of impulse responses of vector auto-regressive (VAR) method. Identifying exogenous fiscal shocks with the onset of military build ups, the study showed that they lead to a substantial increase in both the number of hours worked and output for the government. The study also shows that allowing for the distinction between the two main components of government consumption improves the quantitative performance of the neoclassical growth model. In particular, a neoclassical model economy with government employment does a good job of accounting for the dynamic response of private consumption to a fiscal policy shock. Government employment expenditure acts as a transfer payment for households, thereby dampening substantially the wealth effect on consumption and labour supply associated with fiscal shocks.

Fatása and Mihov (2001), compared the dynamic impact of fiscal policy on macroeconomic variables implied by a large class of general equilibrium models with the empirical results from an identified vector autoregression from 1960 to 1996. The study compares these findings to several variations of a standard real business cycle model and find out that the positive conditional correlation in the responses of employment and consumption cannot be matched by the model under plausible assumptions for the values of the calibration parameters. Maku and Alimi (2018), investigated the impact fiscal policy instruments on employment generation in Nigeria within the periods of 1980-2015. The findings showed that government spending and manufacturing output had negative impact on unemployment rate in Nigeria. Bova *et al.* (2015), examined the impact of fiscal policy on employment through the lenses of Okun's Law for a panel of 34 OECD countries

for the period 1975 to the first quarter in 2012. The impact was found to be effective for most items of current discretionary expenditure and for corporate income taxes and social security contributions. Okun's Law was found to be stable under almost all model specifications, but higher spending on subsidies and lower social security contributions can amplify the impact of the output gap on employment gaps.

Laokulrach (2013), studied whether the increase in service sector employment in Thailand is affected by monetary and fiscal policies or if the effect comes from other policies. The result showed that the supply side policies and socioeconomic factors affect employment of service sector in Thailand rather than fiscal and monetary policies. Trade openness, and industrialization have positive relationship while minimum wage rate has positive impact to service sector employment. Ray *et al.* (2015), examined the relationship between fiscal rules, growth and employment from 1997 to 2013. The result of the regressions suggested that fiscal rules do not have a statistically significant positive impact on either growth or domestic investment. Battaglini and Coate (2016), presented a political economy theory of fiscal policy and unemployment. Unemployment levels are weakly increasing in the economy's debt level, strictly so when the private sector experiences negative shocks. Conditional on the level of workers employed, the mix of public and private output is distorted. Obayori (2016), investigated fiscal policy and unemployment in Nigeria from 1980 to 2013. The parsimonious ECM result revealed that the two independent variables (government capital and recurrent expenditure) have both negative and significant relationship with unemployment in Nigeria. Ardagna (2007), investigated the effects of fiscal policy on economic activity, public finances, welfare, and income distribution in a dynamic general equilibrium model with a unionized labour market. The study showed that debt-financed increases of public employment, wages of public sector employees, unemployment benefits, and labor taxes put pressure on unions' wage claims, leading to higher private sector wages, lower employment, capital, and output.

Onwuemele (2013), assessed the achievements, challenges and prospects of these policies on employment generation from 1970 to 2008. The results revealed that the public sector dominated the employment sector within the period under review. Also, Umoru and Yaqub (2013), analyzed the labour productivity effects of health capital in Nigeria. The study finds out that health capital investment is a significant determinant of labour productivity. Evident from the hypotheses the null hypothesis of an insignificant impact of health capital investment on labour productivity in Nigeria is vehemently invalidated on the basis of a significant Wald coefficient. The analysis indicated that health capital investment enhances productivity of the labour force. Cvecic and Sokolic (2018), investigated the impact of selected macroeconomic, demographic, institutional and educational determinants on youth unemployment rates in Europe, with special attention to effects of active labour market policies on unemployment dynamics. The results indicate significant impact of the main macroeconomic variables on youth unemployment rates, total unemployment rates and shares of young people (15–24 years) neither employed nor in education or training. Other variables show various levels of significance, including variables which describe labour market policies (LMPs).

There appears to be a gap in the literature specifically addressing the relationship between capital expenditure and unemployment rate. This is surprising given the potential implications of capital expenditure on job creation and the labour market. This study will investigate the mechanisms

through which capital expenditure affects unemployment rate, such as through increased investment in infrastructure or expansion of firms. Also, more research is needed to fully understand the relationship between capital expenditure and unemployment rate, and to inform policy decisions aimed at promoting job creation and reducing unemployment which this study will be added to the list of research needed in this area.

3. Methodology

3.1 Theoretical Framework and Model Specification

In order to find out the effect of capital expenditure on unemployment generation in Nigeria, the study specified a model in line with error correction model (ECM). Also, based on the work of the past literatures, other variables will be included in order to make the model robust (Umoru and Yaqub, 2013, Kurre and Eiben, 2013, Ugwu, 2015, Awotunde, 2018 & Salama and Oláh, 2019). Other explanatory that will be included in this model includes labour force, compensation of employees, gross capital formation, gross domestic product and import of goods and services and the new model will be:

$$UMPLOY_t = \beta_0 + \sum_{k-1}^{n} \beta_1 LINCEXP_t + \sum_{k-1}^{n} \beta_2 LNTAXREV_t + \sum_{k-1}^{n} \beta_3 LF_t + \sum_{k-1}^{n} \beta_4 CE_t$$

$$+ \sum_{k-1}^{n} \beta_5 LNGCF_t + \sum_{k-1}^{n} \beta_6 LNGDP_t + \sum_{k-1}^{n} \beta_7 LNM_t + \lambda ECM_{t-1} \quad (1)$$

Where $UMPLOY$ is unemployment rate (using unemployment, total (% of total labor force) (modeled ILO estimate)

$CEXP$ is capital expenditure (using federal government capital expenditure, ₦'billion)

$TAXREV$ is tax revenue (using total federally collected revenue, ₦'billion)

LF is labour force (using labor force participation rate, total (% of total population ages 15+) (modeled ILO estimate))

CE is compensation of employees (using compensation of employees (% of expense))

GCF is gross capital formation (using gross fixed capital formation (₦' Billion).

GDP is gross domestic product (using GDP at 2010 constant basic prices – annual, ₦' Billion)

M is imports of goods and services (using total imports of goods and services, ₦' Million)

ECM_t is error correction model

Therefore, β_0 is the intercept coefficient and the slope coefficients in the models $\beta_1 - \beta_7$ define elasticity's of the logged variables while *t* denotes time period.

3.2 Estimation Techniques

The study makes use of error correction model (ECM). An error correction model belongs to a category of multiple time series models most commonly used for data where the underlying variables have a long-run stochastic trend, also known as co-integration. ECMs are a theoretically-driven approach useful for estimating both short-term and long-term effects of one time series on another. The term error-correction relates to the fact that last-period's deviation from a long-run equilibrium, the *error*, influences its short-run dynamics. Thus, ECMs directly estimate the speed at which a dependent variable returns to equilibrium after a change in other variables.

3.3 Sources of Data

The study is based on time series data covering the period of 1981 to 2020. The data is source from Central Bank of Nigeria Statistical bulletin (CBN 2020) and World Development Indicator (WDI 2020). This period is chosen given that it is a mixture of 15 years of military government and 25 years of civilian or democratic government.

4. Data Analysis

Table 4.1: Descriptive Analysis Output

	UMPLOY	LNCEXP	LNTAXREV	LF	CE	LNGCF	LNGDP	LNM
Mean	7.503525	5.049048	6.447309	76.76968	35.95675	9.037904	10.38826	13.42374
Median	7.500000	5.753005	7.156273	77.86950	32.15745	9.012711	10.17245	13.96104
Maximum	7.700000	7.735869	9.316217	79.35300	45.40159	9.667111	11.18573	16.99995
Minimum	7.400000	1.411011	2.352203	71.70000	30.38266	8.642745	9.693476	8.696778
Std. Dev.	0.091044	2.021240	2.527529	2.340827	5.497348	0.216729	0.525254	2.688622
Skewness	0.299112	-0.595497	-0.431100	-1.402212	0.637675	0.523438	0.313149	-0.467440
Kurtosis	2.088701	1.861308	1.665433	3.365953	1.529300	3.403742	1.541791	1.838007
Jarque-Bera	1.980565	4.525140	4.207428	13.33119	6.315799	2.098262	4.197702	3.707048
Probability	0.371472	0.104083	0.122002	0.001274	0.042515	0.350242	0.122597	0.156684
Sum	300.1410	201.9619	257.8923	3070.787	1438.270	361.5162	415.5303	536.9496
Sum Sq. Dev.	0.323273	159.3310	249.1477	213.6994	1178.612	1.831893	10.75979	281.9189

Source: Author's Computation, 2021

The yearly growth rate of unemployment rate over the period of study was 7.5% having a minimum value of 7.4% and maximum value of 7.7%. Yearly, unemployment rate increases by 7.5% in Nigeria. Also, the yearly average growth rate of capital expenditure was 5.05% which was within its positive minimum value of 1.41% and positive maximum value of 7.74%. The growth rate of tax revenue was 6.45% having a minimum growth rate of 2.35% and maximum value of 9.32%. The growth rate of capital expenditure is greater than that of tax revenue growth rate and this is so because expenditure encourage consumption and there will be increase in aggregate demand while tax revenue will discourage it. The mean value of labour force was 76.77%; its minimum and maximum ranges between 71.7% and 79.35% respectively. This high percentage shows that there are lot of people that are entering the labour force in Nigeria every year while the rate of employment creased was just 17.45% yearly. This great different is the reason why employment compensation is low with just 35.96% growth rate. The average value of compensation of employees was 35.96% with its positive minimum value of 30.38% and positive maximum value of 45.40%. The mean of growth rate of gross capital formation over the period of study was 9.04% having a minimum value of 8.64% and maximum value of 9.67%. This means that private investment in Nigeria grows by 9.04% yearly. The mean growth rate of gross domestic production was 10.39%; its minimum and maximum ranges between 9.69% and 11.19% respectively. Since investment rate is low, it will affect the level of employment and this will discourage consumption and also, gross domestic product. Also, the average growth rate of imports of goods and services was 13.42% with its positive minimum value of 8.70% and positive maximum value of 17%. As shown in the table, all the series exhibit positive average values of growth rate. Consequently, labour force has the highest yearly mean value of growth rate of 76.77% while capital expenditure has the lowest yearly mean growth rate value of 5.049048%. Given the standard deviation values of the ten series under consideration, compensation of employees seems to be more volatile while unemployment rate appears to be least volatile. This finding is however, in agreement with the statistical properties of the series. With respect to the statistical distribution of the variables, all the series are positively skewed except for capital expenditure, tax revenue, labour force and import

of goods and services that are negatively skewed. All the series are playkurtic (<3) while labour force and gross capital formation exhibit leptokurtic in nature (>3).

Table 4.2: Correlation Matrix Output

	UMPLOY	LNCEXP	LNTAXREV	LF	CE	LNGCF	LNGDP	LNM
UMPLOY	1							
LNCEXP	0.75351	1						
LNTAXREV	0.77302	0.79853	1					
LF	-0.00351	-0.38035	-0.40613	1				
CE	0.34395	0.70717	0.74774	-0.55141	1			
LNGCF	0.14662	0.33058	0.35078	-0.48448	0.42665	1		
LNGDP	0.57708	0.78708	0.29160	-0.62198	0.78998	0.47337	1	
LNM	0.73300	0.59823	0.98595	-0.45082	0.75508	0.37022	0.29379	1

Source: Author's Computation, 2021

From Table 4.2 above, the correlation analysis carried out between the capital expenditure and labour market outcome in Nigeria are presented. The correlation analysis between unemployment rate and capital expenditure was positively related. This implies that there was linear positive relationship between unemployment and capital expenditure. Specifically, the correlation coefficient between the two was 0.57351. Since the coefficient of the relationship between the two was greater than 0.5, there exit a "strong positive correlation" between the unemployment rate and capital expenditure. The correlation analysis between unemployment and tax revenue was positive. This implies that there was linear positive relationship between unemployment and tax revenue. Specifically, the correlation coefficient between the two was 0.77302. Since the coefficient of the relationship between the two was greater than 0.5, there exit a "strong positive correlation" between unemployment and tax revenue. Also, the correlation analysis between unemployment and labour force was negative. This implies that there was linear negative relationship between unemployment and labour force. Specifically, the correlation coefficient between the two was -0.00351. Since the coefficient of the relationship between the two was less than -0.5 there exit a "weak negative correlation" between unemployment and labour force.

Furthermore, the correlation analysis between unemployment and compensation of employees was positive. This implies that there was linear positive relationship between unemployment and compensation of employees. Specifically, the correlation coefficient between the two was 0.34395. Since the coefficient of the relationship between the two was less than 0.5 there exit a "weak positive correlation" between unemployment and compensation of employees. Still, the correlation analysis between unemployment and gross capital formation was positive. This implies that there was linear negative relationship between unemployment and gross capital formation. Specifically, the correlation coefficient between the two was 0.14662. Since the coefficient of the relationship between the two was less than 0.5 there exit a "weak negative correlation" between unemployment and gross capital formation. Besides, the correlation analysis between unemployment rate and gross domestic product was positively related. This implies that there was linear positive relationship between unemployment and gross domestic product. Specifically, the correlation coefficient between the two was 0.57708. Since the coefficient of the relationship between the two was greater than 0.5, there exit a "strong positive correlation" between the unemployment rate and gross domestic product. The correlation analysis between unemployment and import of goods and services was positive. This implies that there was linear positive relationship between unemployment and import of goods and services. Specifically, the correlation coefficient between the two was 0.73300. Since the coefficient of the relationship between the two was greater than

0.5, there exit a "strong positive correlation" between unemployment and import of goods and services. Lastly, it was seen that no serious problem of multicollinearity exists, as the Pairwise correlation coefficient for any of the independent variables does not exceed 0.80 (Gujarati, 2003).

Table 4.3: Unit Root Test Result using (ADF) and Phillip-Perron (PP)

Variable	ADF at Level	PP at Level	ADF at First Difference	PP at First Difference	Status
	ADF Critical Value[t-test]	PP Critical Value[t-test]	ADF Critical Value[t-test]	PP Critical Value[t-test]	
UMPLOY	-1.299066	-1.580605	-9.492593	-9.291829	I(1)
	[-3.615588]	[-3.610453]	[-3.615588]*	[-3.615588]*	
LNCEXP	-1.182563	-1.190201	-6.237695	-6.236592	I(1)
	[-3.610453]	[0.6690]	[-3.615588]*	[-3.615588]*	
LNTAXREV	-1.123488	-1.129327	-6.136414	-6.136414	I(1)
	[-3.610453]	[-3.610453]	[-3.615588]*	[-3.615588]*	
LF	-1.565573	-0.492753	-3.052718	-2.771720	I(1)
	[-3.615588]	[-3.610453]	[-3.615588]*	[-3.615588]*	
CE	-0.825899	-0.700690	-6.564552	-6.647483	I(1)
	[-3.610453]	[-3.610453]	[-3.615588]*	[-3.615588]*	
LNGCF	-2.266923	-2.408021	-4.249023	-5.642765	I(1)
	[-3.610453]	[-3.610453]	[-3.626784]*	[-3.615588]*	
LNGDP	-0.328070	0.451047	-3.783083	-3.783083	I(1)
	[-3.615588]	[-3.610453]	[-3.615588]*	[-3.615588]*	
LNM	-0.722903	-0.717157	-7.194091	-7.157604	I(1)
	[-3.610453]	[-3.610453]	[-3.615588]*	[-3.615588]*	

Source: Author's Computation, 2021
Note: *, ** & *** implies 1%, 5% & 10% respectively

The above results in 4.3 showed that the variables are non-stationary at levels. The unit root tests applied to the variables at levels reject the null hypothesis of stationarity of all the variables used. The variables that are not-stationary at level are therefore differenced once in order to perform stationarity tests on difference variables. After differencing the variables once, all other variables were confirmed to be stationary. The ADF and PP test applied to the first difference of the data series accept the null hypothesis of stationarity for all other variables used. It is, therefore, worth concluding that the variables are integrated of order one I(1). Therefore, Johansen co-integration test will be conducted in order to ascertain the existence of long-run relationship of the variables.

Table 4.4: Johansen Co-integration Test

Hypothesized No. of CE(s)	Trace Statistic	Prob.**	Max-Eigen Statistic	Prob.**
None *	427.3096	0.0000**	116.7882	0.0000**
At most 1 *	310.5214	0.0000**	94.71778	0.0000**
At most 2 *	215.8036	0.0000**	56.02761	0.0202**
At most 3 *	159.7760	0.0001**	46.92754	0.0421**
At most 4 *	112.8485	0.0020**	37.88844	0.0864
At most 5 *	74.96005	0.0183**	23.63914	0.4822
At most 6 *	51.32091	0.0228**	19.26578	0.3942
At most 7 *	32.05514	0.0270**	15.58283	0.2502
At most 8 *	16.47231	0.0355**	11.54097	0.1291
At most 9 *	4.931338	0.0264**	4.931338	0.0264

Source: Author's Computation, 2021
Note: ** implies 5%

The trace rank suggests ten integrating vectors while maximum Eigenvalue unrestricted co-integration rank test result suggests four integrating vectors in the model. Therefore, unrestricted trace rank test and unrestricted co-integration rank test (maximum Eigen-value) suggest that there was existence of long-run because the trace statistics values and maximum Eigen-value were higher than the critical values. This is also corroborated by the *p*-values which are less than 0.05 i.e. the implication of the result was that there is at least a long-run relationship among the variables.

Table 4.5: Error Correction Model (ECM) Result for the Three Models

Variable	Dependent Variable: UMPLOY Coefficient with Probability Value
D(LNCEXP)	-0.034543[0.0897]***
D(LNTAXREV)	0.018233[0.3461]
D(LNTAXREV(-1))	-0.026881[0.1252]
D(LF)	0.017066[0.0730]***
D(CE)	-0.002200[0.5627]
D(LNGCF)	-0.115880[0.0725]***
D(LNGCF(-1))	-0.075386[0.1380]
D(LNGDP)	0.417780[0.0305]**
D(LNGDP(-1))	0.240001[0.2436]
D(LNM)	0.024954[0.2162]
ECM(-1)	-0.600877[0.0020]*
C	9.116438[0.0000]*
R-squared	0.950409
Adjusted R-squared	0.908256
F-statistic with prob.	22.54680[0.000000]*
Durbin-Watson Stat.	1.901081

Source: Author's Computation, 2021
Note: *, ** & *** implies 1%, 5% & 10% respectively

The study adopted the error correction model (ECM). The ECM directly estimate the speed at which a dependent variable returns to equilibrium after a change in other variables. Error correction mechanism (ECM) is meant to tie the short-run dynamics of the co-integrating equations to their long-run static dispositions. The error term is also found to be normally distributed because the coefficient of the error correction term with one period lag [ECM(-1)] was negative as expected with a value of -0.600877. The bench mark for ECM coefficient is that it must be negative and significant and this was so because all the ECM was negative and significant. This signifies that the long-run relationship of the estimated model was stable and any disequilibrium created in the short-run will be temporary and will get corrected over a period of time. The results of ECM indicated that the model seems to be good as it satisfies the diagnostic test and also has a high Adjusted R-Squared (R^2) value of 0.950409 which indicate that about 95.04% of the total variations in unemployment was accounted for by the explanatory variables all taken together. The Durbin Watson (DW) statistics value of 1.901081 showed that there were no serious problem of serial correlation and heteroskedasticity.

The result of revealed that four out of the seven variables used as explanatory variables are statistically significant which are capital expenditure, labour force, gross capital formation and gross domestic product but labour force and gross domestic product exert a positive significant effect on unemployment while capital expenditure and gross capital formation exert a negative significant effect on unemployment in Nigeria. Therefore, a percentage increase in capital expenditure leads to a decrease of 0.03% in unemployment. This implies that as government capital

expenditure increases, it will lead to more employment generation and unemployment rate will fall in Nigeria. Also, a percentage increase in labour force will bring about 0.02% increase unemployment rate in Nigeria. Since the growth of labour force in Nigeria is higher than the growth rate of employment, this translates to increase in unemployment in Nigeria. Also, gross capital formation by a percentage increase brings about 0.002% decrease in unemployment rate in Nigeria. The more the investment in Nigeria, the more the employment generated and the lower will be the unemployment rate in the system. Furthermore, gross domestic product exerts a positive significant effect on unemployment rate in Nigeria implying that increase in gross domestic product bring about 0.42% increase in unemployment rate in Nigeria. This result described the nature of Nigeria economy in the sense that her growth rate of gross domestic product fall to generate more employment and this led to more unemployment rate.

5. Summary and Conclusion

Summary of findings showed that four out of the seven variables used as explanatory variables are statistically significant which are capital expenditure, labour force, gross capital formation and gross domestic product but labour force and gross domestic product exert a positive significant effect on unemployment while capital expenditure and gross capital formation exert a negative significant effect on unemployment in Nigeria. The study concluded that capital expenditure, labour force; gross capital formation and gross domestic product determine the unemployment rate in Nigeria. The study recommended that government should increase her capital expenditure on order for more employment to be generated and this will lead to labour productivity and reducing unemployment rate in Nigeria. If government capital expenditure will achieve the objectives of reducing unemployment, government capital expenditure should be properly monitor so that the spending will be channel toward productivity sector that will achieve these objectives.

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