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# Impact of Unemployment, Inflation and Households Consumption on Economic Growth

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**Abstract:** The challenges imposed by the rising cases of unemployment, inflationary rate and less purchasing power in households have stirred considerable interest amongst researchers and actors in contemporary times in designing agreeable mechanism that engenders economic growth. This paper examined the impact of unemployment, inflation and household's consumption on economic growth for 1960 to 2018. OLS estimation technique was adopted. From the findings, unemployment, inflation and household's consumption impacted on economic growth. But it was observed that inflation (INF) significantly influence economic growth in Nigeria. However, controlling for the influence of consumer price index (CPI), we observed that it is a key determinant of economic growth. The study therefore recommends for efficient and effective policy mix that may monitor the inflation rate in Nigeria.

**Keywords:** Unemployment, Inflation, Consumption, Households, Economic Growth

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## 1. Introduction

Globally, effective understanding of the behaviour of economic indicators enhances the response to societal issues such as employment, price system, inflation, and stabilization of socioeconomic activities as well as prevalent consumption patterns [3, 65, 67]. The impacts of these indicators however, are increasingly reflected in growth challenges of modern economic discussions. Efforts have been made to address them by capturing the issue on macroeconomic policies and programs aimed at stemming the tide of economic stagnation and promote growth. This necessitates the submission of [45] and, [53] who argued that employment and household consumption constitutes essential driving force of economic growth. The nexus between these variables have assumed the most important issues in growth index because; drops in

production are sequentially impacted on the aforementioned variables including low level of income and consequently, retard economic growth [10, 24]. These indicators exert significantly impact on economic advancement [69, 19, 6].

According to National Bureau of Statistic (NBS) reports, there has been a sustained increase rate of unemployment, which rose from 14.2% to 18.80% between 2015 and 2017, while inflationary curve also maintained upward shift with its consequences on the reduction in purchasing power amongst others in less developed nations [69]. Currently, many developing economies have witnessed astronomical inflationary and unemployment rates which engendered huge uncertainties in the patterns of societal consumption relations. However, other studies had argued that effective policy thrust could result to efficient economic growth and development which may be achieved through a relative price

stability and inflationary control [4, 47]. This may boost overall individual and household purchases and consumption. However, increase in inflationary rates discourages saving and impact negatively on essentialities; thus, impede economic output which is largely detrimental to economic growth despite the trend and pattern of the inflation.

“Based on inflationary perspective, it is noted that “Nigeria’s year-on-year headline inflation entered into the double-digit range in February, 2016 at 11.38 percent, from the 2015 year-end inflation of 9.55 percent, it went up to 18.55 percent by December, 2016. This was significantly above the recommended threshold of the West African Monetary Zone (WAMZ) convergence inflation rate of 5 percent. The rise in inflation was attributed mainly to foreign exchange shortages and hike in energy prices amidst poor power supply. The continued exchange rate pressures coupled with the depreciation of its currency against major convertible currencies are expected to pose potential inflation risk [50]”.

Consequently, policy frames around the globe is fraught with mechanisms to keep unemployment rate in check within reasonable limit as it represents a major indicator in measuring economic growth. According to [8], economic growth possesses major ingredients for addressing the menace of unemployment and mitigating the impact as well provides necessary condition for growth. However, sustained wave of unemployment exert considerable shock on growth trajectories of the economy. Although, studies by [9, 43, 30, 31] found an inverse relationship between unemployment, inflation and economic growth particularly in developing countries. Hence, economic growth as a reflection of the Gross Domestic Product (GDP) has not satisfactorily addressed the question of unemployment on its own, as high employment ratio indicates positive growth of economy. This is because; economic growth in most developing economies has not really reduced unemployment as noted by [49] where growth in Sub-Sahara Africa has been motivated by a particular sector of the economy which only accommodates a few numbers amongst the army of unemployed labor force.

In view of the foregoing, contemporary Keynesian Macroeconomics proponents’ posted that even medium-run change in saving, consumption patterns and investment rates do not cause significant impact on unemployment situations [60]. Keys believe that a capital stock or productivity variable does not also alter the equilibrium unemployment rate, thereby presenting a negative relationship between the variables. This implies however, that economy may remain underdeveloped so long as the growth variables stagnated irrespective of increases in economic growth [1]. Also, [45] noted that the impact of recent recession on economic calculations escalated economic challenges of many households, leading to loss of employment opportunities. Expectedly, the reduction in consumption pattern following the contraction of employment opportunities, convey the extent to which the trio influences economic growth [1, 13]. A marked reduction in consumption, accompanied by inability of its reverse, could contribute to further

contractions in the overall economy with adverse impact growth [45]. However, economic growth is only meaningful when the growth rate catalyzes other development variables than only growth measured in parameters of the GDP, because it has to lead to improvement in household purchases and consumption. Therefore, growth is seen as a steady process of increasing the productive capacity of the economy, hence, increasing national income, characterized by higher rates of economic output and total factor productivity, especially labor productivity [8, 56, 68]. Hence, determining unemployment, inflation and household consumption’s impact on the economic growth is important. The outcome will deepen the understanding of the existing relationship and add to the already existing knowledge. However, outcome may enhance the development of effective policy thrust that may facilitate in strengthening all major macroeconomic indicators that constraint employment opportunity to minimize its negative impacts on economic growth.

## 2. Review of Related Literature

Plethoras of theories have been advanced over the years to explain the impact of macroeconomic variables on economic growth. The Keynesian theory of aggregate demand cited in [69] highlighted the importance and influence of these variables. The theory provides mechanism by which a change in quantity of money influences interest rate and induces investment while investment leads to a multiplier effect on consumption, employment and output. Keynes submitted that full employment opportunities could only be possible through fiscal policy, considering its centrality to economic growth, against classical theory which noted the opposite.

The aggregate supply-aggregate demand (AS-AD) paradigm also postulated a positive relationship between inflation and growth where, as growth increased, so did inflation [74]. However, the market and automatic propositions of employment variables of Keynes and classical writers only reflected aside view because, in modern discourse, unemployment, inflation and household consumption constitutes the major indicators in economic growth theories. Similarly, [47] use the Structuralists approach to ascertain the link between inflation, unemployment and other macroeconomic variable in explaining the growth of an economy. Applying Johansen co integration method, the theory generally posits positive impact of inflation, but not significant to economic growth because; it reduces purchasing power and consumption patterns.

In addition, [66] applied modified Phillips curve theory to establish the impact of inflationary trend similar variables of economic growth. This was to ascertain the observable degree and significance of the variables under study to economic growth and stability [20]. Although, restricted to few variables, it fell short of explaining other macroeconomic indicators of economic growth. On the other hand, [12] adopted Augmented Dickey-Fuller (ADF) to analysis inflation and unemployment variables on growth calculations and also affirm positivity and non-significant effect on economic growth when measured by

GDP. In response to the increasing argument, the structural vector error correction model (SVECM) approach was adopted by [39] and cited in [79] using the Ordinary Least Squares (OLS) regression to investigate the impact of macroeconomic variables to economic growth. Hence, it believed that significant inverse relationship exist between unemployment, inflation, household consumption and economic growth in developing economies [80]. Sometimes, the consumption decisions are motivated by a range of factors, among which employment is the determinant. However, consumption pattern is predicated on future disposable income derived from employment.

In recent years, effective economic growth has been supported by eradication of unemployment and monetary policy that checks inflationary incidences. In classical economic growth theory, [33] pointed that economic growth depends on factors of production, while in neo-classical growth theory; growth depends on the development of factors of production. Consumption is seen here, as the end product or reward for engaging in productive activities, which exert significant impact on economic growth. The amount of consumption is always changing according to the rise and fall of income, if income increases then consumption will increase, and will respond accordingly, if income falls, *ceteris paribus*.

Having viewed different propositions with regard to unemployment, inflation and household's consumption as keys determinants of economic growth [18]. Studies of [52, 18, 48, 54, 70] have all explained the degree to which these variables impacts economic growth. Employing the error correction mechanism (ECM), Sunusi and Muhammad tested the short run and long run impacts, and agrees on timelessness of the relationship of unemployment variable to economic growth, whereas other key components that jointly constitutes growth index were exempted. But [8] noted a time-bound relationship between unemployment rate and economic growth particularly, on the immediate, although with right policies, but also affirm that long-run increase in unemployment has severe impact on economic growth with statistical significant.

In addition, with the aid of structural vector error correction model, [11] studied the relationship between economic growth, fixed investment, and household consumption in Malaysia. The evidence shows that household consumption and foreign direct investment significantly impact on GDP both in the short and long run. In Nigeria, [39] carried out a similar study for the period 1979 – 2010. He found inflation to be negatively related to real GDP. Further investigations reveal that exchange rates and interest rates impacted positively on economic growth. Moreso, the impact of macroeconomic variables on economic growth in Bangladesh is investigated, and the evidence revealed that, inflation (INF), real interest rate (INT), exchange rate (EXR), and household consumption expenditures growth (HCE) are important determinants of economic growth. Hence, the correlation analysis indicates that GDP is positively correlated with INF, EXR and HCE except INT. In like manner, [15] examined the relationship

between inflation and economic growth in Pakistan for the period 1972 - 2009. Using Ordinary Least Squares (OLS) techniques, the result shows that inflation significantly and negative impact on economic growth.

Other studies considered the impact of individual variables in isolation and fail to holistically establish the link which jointly produces the dynamics in growth indices of an economy [79, 17, 5, 41, 16, 35]. In the same vein, [18], pointed the significance of various macroeconomic variables on economic growth in less developed economies. It was established that the coefficient of inflation on economic growth is positive with statistical significant, while unemployment is also positive but has no significant impact on economic growth. They equally noted that inflation substantially affect economic growth, although unemployment has little impact on it. However, these variables are increasingly reflected on daily economic growth projections. These arguments have been validated by a number of scholars, while others refuted it. For example, [72] contended that there is no trade-off between inflation and unemployment in the long run. This is contrary to [55] study on the impact of unemployment on economic growth. [55] argued that unemployment does not have a significant impact on the economic growth as Inflation does.

A shock on these indicators however, exerts substantially impact on investment opportunities in the economy and debar the growth circle, since growth is composed of mixture of factors, investment and expenditures inclusive [34]. Besides, unemployment and inflation lessens purchasing power with no production which further contracts wealth generation, as with an increase in inflationary rate by 1%, the growth rate of GDP decreases substantially [76]. It leads to loss of output which ultimately constitutes threat to growth and security of the economy. In investigating Fischer's proposition, [21] argued that growth of an economy depends on the ratio and availabilities of money supplied. He maintained that these supplies are outcomes of the variability of macroeconomic variables which encourage investment and widen the scope of household purchases and consumption. However, other studies have also revealed plethora of core drivers of economic growth across time. According to United Nations Reports in 2019, households' consumption is a significant and important determinant of economic growth. However, [14, 29, 75] submitted that the impacts of these variables are in specific thresholds which also influence growth differently. The specifics of the impacts are further stressed in the works of [7] where the study argued that an inflation thresh old of 1.26% is appropriate for economic growth, while above it elicits a negative impact on growth. Evidently, most macroeconomic variables appear inimical to economic growth and [23] noted the cardinal sources of unsustainable growth of the economy to include: inflation, growing foreign debt profile, unemployment, patterns of household consumption and trade imbalance amongst others. However, imbalance arising from poor economic calculations exerts considerable impact on the growth of the economy [61].

### 3. Method, Data and Sources

This study focuses on the investigation on the impact of unemployment, inflation rate and household consumption on economic growth in Nigeria for 1960 to 2018. The availability of data informed our choices of variables and scope of study. Thus, in order to measure the economic growth, the real gross domestic product (RGDP) was employed; unemployment (UMP) long term unemployment (% of total unemployment); household consumption (HHC) a measure of household final consumption expenditure (annual % growth); inflation rate (INF); personal consumption expenditure (PCE) a measure of final consumption expenditure (% of GDP). However, we controlled for joint impact of unemployment, inflation rate and household consumption with consumer price index (CPI); per capita income (PCI) a measure of per capita GDP and savings (SAV) a measure of net national savings (% of GNI). However, all the variables were sourced from World Bank's world development indicator (WDI) 2019 edition. Real Gross Domestic Product (RGDP) described the total monetary or market value of all the finished goods and services produced within a country's borders in a specific time period. Calculated using the following formula:  $GDP = C + G + I + NX$ , or (consumption + government spending + investment + net exports). Savings (SAV) reflect the money left over after subtracting consumer spending from disposable income over a given time period. Per-capita income (PCI) measures the average income earned per person in a given area in a specified year. Personal consumption expenditure (PCE) is the consumer expenditure for a period of time. Consumer Price Index (CPI) measures changes in the price level of a weighted average market basket of consumer goods and services purchased by households in an economy. Unemployment (UMP) is a term referring to individuals who are seeking for a job but are unable to find a job. Household consumption (HHC) is defined as household final consumption expenditure which covers all purchases made by resident households (home or abroad) to meet their everyday needs, while inflation rate (INF) is the general increase in prices of goods and services in an economy. The data for the study were generated from world development indicator (2019).

$$RGDP = \omega_0 + \beta_1 UMP + \beta_2 INF + \beta_3 HHC + \beta_4 PCE + \beta_5 CPI + \beta_6 PCI + \beta_7 SAV + \varepsilon \quad (2)$$

Where: RGDP is the real gross domestic product; UMP is unemployment, INF denotes inflation rate, HHC is the households' consumption, PCE is the personal consumption expenditure, CPI is the consumer price index, PCI is the per capita income, SAV denotes savings.  $\varepsilon$  = the error term and  $\omega_0$  = slope parameter  $\beta_1, \beta_2, \beta_3, \beta_4, \beta_5, \beta_6$ , and  $\beta_7$  = coefficients; which represents the behaviour of (real gross domestic product, unemployment, inflation, household consumption, personal consumption expenditure, consumer price index, per capita income and savings). In the OLS model, the null hypothesis assumes that explanatory variables

However, we adopted ordinary least square (OLS) method of estimation. The choice of this method of estimation is due to its numerous advantages which include (a) OLS model produce residuals that have a mean of zero, have a constant variance, and are not correlated with themselves or other variables. (b) If the assumptions of the OLS are properly observed, it produces estimates that have best linear unbiased (BLUE) property. (c) Another advantage of OLS is that as the sample size increases to infinity, the coefficient estimates converge on the actual population parameters when compared to other estimation methods. However, ordinary least squares model is built on the premise of the assumptions which states that the regression model is linear in parameters; explanatory variable is assumed to be non-stochastic; there is zero mean value of disturbance ( $\mu_i$ ); there is homoscedasticity or equal mean or the conditional variances of  $\mu_i$  are identical; there is no autocorrelation between the disturbances; there is zero covariance between  $\mu_i$  and explanatory variables; the number of observation n must be greater than the number of parameters to be estimated; the variable must be finite positive number; the regression model must be correctly specified (there is no specification bias or error in the model); and there is no perfect multicollinearity among the explanatory variables. Based on research variables, the model for the study can be specified as follows:

$$Z = \omega_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_n X_n + \varepsilon \quad (1)$$

Where Z; represents the dependent variable proxied with real gross domestic product (RGDP). Additionally, X; represents the explanatory variables;  $\omega$  is a slope parameter, which explains the status of the unobserved random variables in the absence of the explanatory variables. Similarly,  $\beta$  represents the intercept parameter, which represents which explains the magnitude and direction of the linear relationships, and  $\varepsilon$ ; represents the unobserved random variable or disturbance term. It captures the amount of variables which is unpredicted by intercepts and slopes parameters. In this study, the OLS model further suggests that RGDP be the dependent variable or predictor variable and unemployment, inflation, household consumption, personal consumption expenditure, consumer price index, per capita income and savings be the independent or explanatory variables. The OLS model is specified as follows:

for real gross domestic product (RGDP) does not have an impact in the dependent variable. On the other hand, the alternative hypothesis is that the explanatory variables of RGDP have impact in the dependent variable. Thus, the hypothesis is stated as follows:

$$H_0: \beta_1 = \beta_2 = \beta_3 = \beta_4 = \beta_5 = \beta_6 = \beta_7$$

$$H_1: \beta_1 \neq \beta_2 \neq \beta_3 \neq \beta_4 \neq \beta_5 \neq \beta_6 \neq \beta_7$$

If the P-value is greater than 5%, then the study fail to reject the null hypothesis, implying that there is no impact of the explanatory variables on the dependent variable. On the other hand, if the P-value is less than 5%, then the study

rejects the null hypothesis, implying that there is impact of the explanatory variables on dependent variable.

## 4. Empirical Results and Discussions

This section present the descriptive statistics of the data used for the analysis showcased to ascertain the nature of the variables. After this tests, stationary - Augmented Dickey-Fuller (ADF) and Philips-Perron (PP) test were carried out and the ordinary least squares (OLS) regression analysis was performed observing the assumptions of classical linear

model. Descriptive statistics are used to describe the basic features of the data in the study. It provides simple summaries about the samples and the measures as well as quantitative descriptions of the variables of the model used in the study. It also measures the average values of the variables used in the study. From table 1, we observed the minimum and the maximum coefficients are -1.651565 and 9.685511 respectively, which is the least value and highest value of the coefficients. Also the coefficients of the Jarque-Bera statistics are statistically significance at 1% for all the variables implying that the model is normally distributed.

*Table 1. Summary of descriptive statistics.*

	RGDP	UMP	INF	HHC	PCE	CPI	PCI	SAV
Mean	0.073309	0.972946	0.144313	0.827616	-0.647499	0.068526	0.139849	0.454339
Median	-0.021613	1.012400	0.131737	0.519848	-0.911075	0.018172	0.112926	0.462794
Maximum	0.862501	1.821097	0.246795	9.685511	0.565302	0.562788	0.310996	1.781635
Minimum	-0.446520	0.003588	0.084325	0.022375	-1.651565	0.001850	0.018333	-0.132973
Std. Dev.	0.442376	0.551540	0.047745	1.694436	0.794316	0.131846	0.087849	0.451425
Skewness	0.512529	-0.362599	1.165775	4.990579	0.501119	2.520467	0.232606	0.676905
Kurtosis	1.650726	2.090658	3.376533	26.64821	1.707823	8.589452	1.808372	3.450231
Jarque-Bera	13.59106	21.91020	60.97383	823.5769	33.32752	70.81625	29.04599	52.544385
Probability	0.000202	0.000038	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Sum	2.199283	29.18839	4.329375	24.82849	-19.42498	2.055793	4.195456	13.63016
Sum Sq. Dev.	5.675189	8.821698	0.066107	83.26226	18.29719	0.504116	0.223807	5.909746
Observations	30	30	30	30	30	30	30	30

Source: Author's computation.

### 4.1. Unit Root Test

To avoid spuriousness of the estimates in the regression, the variables were subjected to unit root test. We adopted Augmented Dickey-Fuller (ADF) test complemented by Philips-Perron (PP) test. The rationale for complementing the two test lies on the fact that while ADF assumes that the error term is homoscedastic, the Philips-Perron test make a no  $\rho$ -parametric correction of statistic when compared to Kwiatkowski-Phillips-Schmidt-Shin (KPSS) test. Table 2: ADF and PP unit root tests.

The outcome of Augmented Dickey-Fuller (ADF) complemented by Phillips-Perron (PP) test shown in table 2 below, suggest that the null hypothesis "has a unit root" could be rejected for all the variables. Also, the outcome of ADF test shows that all the variables are integrated of order I(1) apart from INF. Similarly, all the variables was found to be integrated of order I(1). As a convention, when variables are statistically significance and integrated of the same order, the researcher moves on with finding the cointegration since the assumptions of OLS are justified.

*Table 2. ADF and PP Stationarity Tests Result.*

Variables	ADF	Order of Integration		PP	Order of Integration	
		Level	First Difference		Level	First Difference
RGDP	-5.455105***	-	I(1)	-5.468414***	-	I(1)
UMP	-7.349013***	-	I(1)	-7.183951***	-	I(1)
INF	-3.289963**	I(0)	-	-8.330655***	-	I(1)
HHC	-6.211888***	-	I(1)	-5.894578***	-	I(1)
PCE	-5.775680***	-	I(1)	-13.56561***	-	I(1)
CPI	-5.816248***	-	I(1)	-4.116087***	-	I(1)
PCI	-6.661296***	-	I(1)	-8.496287***	-	I(1)
SAV	-6.788972***	-	I(1)	-7.045441***	-	I(1)

Source: Author's concept. \*\*\*, \*\* and \* represents 1%, 5% and 10% levels of significance.

### 4.2. Correlation Tests

Correlation analysis is carried out in order to gage the strength of relationship between the variables in the model. Also due to some unobserved shocks, spatial effects or autocorrelation, correlation test was performed and the outcome is presented in table 3 below.

Table 3. Correlation matrix.

	RGDP	INF	UMP	HHC	PCE	CPI	PCI	SAV
RGDP	1							
INF	-0.342394	1						
UMP	-0.879717	-0.631325	1					
HHC	0.590330	-0.334354	0.703304	1				
PCE	-0.547864	0.636358	-0.487259	-0.350678	1			
CPI	0.506588	-0.891518	0.717363	-0.321830	-0.405357	1		
PCI	-0.688834	-0.932228	0.878513	-0.391425	0.272777	-0.517927	1	
SAV	-0.209043	-0.716775	0.130109	-0.832904	-0.551976	0.400728	0.801618	1

Source: Author's computation.

The inflation rate, unemployment, personal consumption expenditure, per capita income and savings depicted a negative relationship with real gross domestic product. Household consumption and consumer price index depicted a positive relationship with real gross domestic product. The outcomes of INF and UMP are in consistent with theory, while the behavior of PCI and SAV is not in consistent with apriori economic expectations. The reason for the violation of the apriori expectation may be attributed to poor governance and institutional quality in Nigeria which encourage corruption. However, Nigerian government should ensure that good policies should be initiated in order to enhance wellbeing of her populace.

#### 4.3. Estimated Results

The model was subjected to pre and postseconometric estimation test which includes normality test, Breusch-Godfrey Serial Correlation LM Test, Heteroskedasticity Test, and Ramsey RESET Test following the basic assumptions of OLS. The results of the test suggest that the error term of the model is normally distributed and serially

uncorrelated. In addition, there is no evidence of heteroscedasticity and the model was correctly specified. Thus, in order to measure the economic growth, the real gross domestic product (RGDP) was employed; and other variables such as unemployment - UMP (% of total unemployment), household consumption (HHC), inflation rate (INF); personal consumption expenditure (PCE) also enters the model. However, we controlled for joint impact of unemployment, inflation rate and household consumption with consumer price index (CPI); per capita income (PCI) a measure of per capita GDP and savings (SAV) a measure of net national savings (% of GNI). The real gross domestic product (RGDP) serves as the dependent variable. In addition, the unit roots tests results (see table 2) indicate that all the variables are integrated at the same order with the dependent variable. This suggests the likelihood of all the variables moving together in the long run. To confirm if actually there exists a long run relationship between the variables, the residual of the model was generated and subjected to unit root test at levels (see table 4 below).

Table 4. Residual Test.

	t-Statistic	1% level	5% level	10% level	Prob.*
ADFTest statistic	-9.352598	-2.604746	-1.946447	-1.613238	0.0000

From the results discovered truly there exists long run relationship between the variables. In light of this, we corrected for the long run relationship (ECM-1) as indicated in the main OLS estimation. Moreso, the Durbin-Watson Stat result show evidence of autocorrelation. To correct the influence of this problem, Newey West Hac Standard error was adopted in the OLS estimation.

The OLS estimated results presented in table 5 below, show evidence of cross sectional dependence, serial correlation and autocorrelation as earlier pointed. Thus, during the estimation, the model was estimated using Newey West Hac Standard error procedure to correct any form of unobserved serial correlation, cross sectional dependence and autocorrelation in the model. The results suggest that unemployment (UMP) have negative and insignificant impact on RGDP. This suggests that a percentage increase in UMP may cause 1.1% decreases in RGDP *cetris paribus*. Similarly, inflation rate (INF) exerts a positive and significant influence on RGDP at 5%

critical level, its coefficient suggests that a unit increase INF would lead to about 8.618975 decreases in RGDP all things being equal. Household consumption (HHC) depicted a positive but insignificant impact on RGDP. Hence, one percent rise in HHC would lead to about 3.1% decreases in RGDP. We also observed that personal consumption expenditure (PCE) influence on RGDP is negatively related, though not significant. This suggests that one percent increase in the PCE would exert about 1.5% decreases in the RGDP. The outcome of the CPI, PCI and SAV exerted positive relationship with RGDP. While DCPI significant impact of RGDP, PCI and SAV were insignificant. In addition, the result of the (ECM-1) is -1.296131 suggests that -12.9% of the long run is being accounted for in the short run. The measure of the goodness of fit,  $R^2$ , shows that variations in the explanatory variables explain more than 62% of total variations in the RGDP in Nigeria. These findings were consistent with [9, 1, 5, 14, 10, 41].

Table 5. OLS Estimated Result.

Variable	Coefficient	Std. Error	t-statistic	Proby
DL_UMP	-0.011413	0.146862	2.401747	0.9451
INF	8.618975	1.775689	-3.850316	0.0399
DL_HHC	0.030699	0.042431	-3.707633	0.5445
DL_PCE	-0.153400	0.237447	2.776283	0.5845
DCPI	5.183797	1.137679	5.169216	0.0449
DL_PCI	0.245685	0.130709	6.235347	0.2009
DL_SAV	0.054300	0.130860	8.465941	0.7185
ECM(-1)	-1.206131			
Constant	-1.923214			
R-Squared		0.622095		
Adjusted R-Square		0.576952		
F-Statistic		308.5839		
Durbin-Watson Stat		2.729978		
Normality Test:		887.7813 (0.000000)		
Serial Correlation Test:		0.343527 (0.7132)		
Ramsey Reset Test:		0.177975 (0.0000)		
Heteroscedasticity Test:		1.643656 (0.1779)		

Source: Author's Conception.

## 5. Conclusion and Policy Recommendation

This study focuses on the impact of unemployment, inflation rate and household consumption on economic growth in Nigeria. Thus, economic growth is proxied with real gross domestic product (RGDP). The explanatory variables include; unemployment (UMP), household consumption (HHC), inflation rate (INF), and personal consumption expenditure (PCE). Ordinary least squares (OLS) estimation method was used and all the assumptions of OLS were carried out. Augmented Dickey-Fuller (ADF) and Philips-Perron (PP) unit root tests was employed to test for stationarity and all the variables were found to be stationary at order one. The result of correlation also shows that most of the explanatory variables are highly correlated to RGDP. We also observed that unemployment, inflation rate and household consumption move together in the long run. However, inflation (INF) and consumer price index (CPI) are important determinants of economic growth in Nigeria. Therefore, we suggest that effective policy trust should be implemented to control for its influence on economic growth. Hence, the study recommends for efficient and effective institutionalization of processes that may responds to challenges bothering on macroeconomic indicators which inhibits the attainment of economic growth in Nigeria.

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