



IMPACT OF GOVERNMENT EXPENDITURE, UNEMPLOYMENT, INFLATION, AND HOUSEHOLDS CONSUMPTION ON ECONOMIC GROWTH IN INDIA

Jitendra Kumar Sinha

Retired Sr. Jt. Director & Head, DES, Bihar. E-mail: jksinha2007@rediffmail.com

ARTICLE HISTORY

Received : 22 March 2023

Revised : 25 April 2023

Accepted : 09 May 2023

Published : 30 June 2023

TO CITE THIS ARTICLE

Jitendra Kumar Sinha (2023). Impact of Government Expenditure, Unemployment, Inflation, and Households Consumption on Economic Growth in India. *Studies in Economics & International Finance*, Vol. 3, No. 1, pp. 63-76. <https://DOI:10.47509/SEIF.2023.v03i01.05>

Abstract: The impact of government expenditure, unemployment, inflation, and household consumption on the economic growth of India over the period 1990-2021 has been examined in this paper. The ordinary least squares (OLS) regression analysis was performed by observing the assumptions of the classical linear model. Augmented Dickey-Fuller (ADF) and Philips-Perron (PP) tests were carried out for the stationarity of the concerned variables. The study found that increasing government expenditure has a strong positive influence on the growth of national income and consumption and a negative influence on unemployment in India. The study recommends increasing government expenditure that could accelerate economic growth and create employment opportunities that also have a positive impact on improving consumption. Results indicate that inflation significantly depresses economic performance in India because of uncertainty and reduces investment, employment, and consequently output and consumption level. Unemployment has not significantly impacted the real GDP in India. Investment in physical capital and human capital has significantly promoted economic performance in India because investment in human capital improves the productivity of the labor forces and hence increases output and investment in physical capital increases the amount of capital per unit of labor and these have the potency of increasing productivity per worker. The overall effect is an increase in output and therefore economic performance. The study recommends increasing government expenditure as it boosts aggregate demand which could accelerate economic growth and create employment opportunities and enhance the consumption level of the public.

Keywords: Unemployment, Government Expenditure, Inflation, Consumption, Output Growth;

JEL: C25, E32, E37, E51

INTRODUCTION

Globally, an effective understanding of the economic indicators enhances the response to societal issues such as Income, Inflation, Consumption, Unemployment, and Public Expenditure is at the core of the goals of macroeconomic policies. The impact of these indicators is increasingly reflected in the growing challenges of economic discussions. Effects have been made to address them by capturing the issues on macroeconomic policies and programs aimed at stemming the tide of economic stagnation and promoting growth. This necessitates that employment and consumption constitute the essential driving force of economic growth. The nexus between these variables have assumed the most important issue in the growth index because drops in production are sequentially impacted by these variables including the low level of income and consequently retard economic growth. These indicators exert a significant impact on economic advancement. Many developing countries have witnessed inflationary and unemployment rates which endangered huge uncertainties in the pattern of societal consumption relations but an effective policy thrust could result in efficient economic growth and development through stability and inflationary control and boost overall purchases and consumption. However, an increase in inflationary rates discourages savings and negatively impacts essentialities; thus impeding economic output which is largely determinantal to economic growth despite the trend and pattern of inflation. Policy frame around the globe is fraught with mechanisms to keep the unemployment rate within reasonable limits as it represents a major indicator in measuring economic growth. Alhdiy(2015)(1) mentions that economic growth possesses major ingredients for addressing the menace of unemployment and mitigating the impact as well as providing necessary conditions for growth. However, Andreas(2018)(2); Hussain(2016)(3); and Inyiama(2013)(4) found an inverse relationship between unemployment, inflation, and economic growth, particularly in developing countries. Hence, economic growth as a reflection of Gross Domestic Product(GDP) has not satisfactorily addressed the question of unemployment on its own, as a high employment ratio indicates positive growth of the economy. This is because economic growth in most developing countries has not reduced unemployment. Thus, the economy may remain underdeveloped so long as the growth variables stagnated irrespective of the increase in economic growth. Economic growth is meaningful only when the growth rate catalyzes other development variables that only growth measured by GDP because it has to lead to improvement in household purchases and consumption. Therefore, growth is

seen as a steady process of increasing the production capacity of the economy, hence, increasing national income is characterized by a higher rate of economic output and total factor productivity, especially labor productivity. Hence, determining unemployment, inflation, and household consumption's impact on economic growth is important and may enhance the development of an effective policy thrust that may facilitate strengthening all major macroeconomic indicators that constrain employment opportunities to minimize its negative impact on economic growth.

The assertion that government expenditure contributes positively to economic growth has become an accepted premise in most economies (Prasetyo&Zuhdi, 2013)(5). Recently, unemployment is viewed as one of the most intractable problems facing developing countries. It has become a cankerworm that is eaten deep into the fabric of developing economies. Over the years, unemployment has increased in India. According to International Labour Organization(2019)(6), unemployment in India has increased from 6.4% in 2008 to 6.7% in 2010 and 6.9% in 2017 respectively. It has been seen as a social and economic malady. National income has been on the rise without improvement in the level of unemployment. The negative effect of unemployment in India has created the greatest problem for the people and society and adversely affects consumption, purchasing power, and capability of production for the economy. Hence, in an attempt to reduce unemployment, increase income and encourage employment generation, fiscal policy tool such as government spending has been used by most developing countries. High inflation causes a sharp decline in real money holdings leading to a decline in output, real wage, and private consumption; while deflation triggered falling prices, output profit, and employment – as such both high and low inflation hurt the economies. Unemployment affects peoples' living standards – both at present and in the future, and investments made in the skill development/ education of the unemployed are lost as they gradually lose their skill/ education in the long run, and the children of their families suffer deprivation of skill development/ education. Low economic growth leads to social and economic problems in terms of increased poverty, a decline in quality of life, lesser creation of jobs, and ultimately low human development index. Under this background, interrelated studies of these macroeconomic factors are essential. Studies made so far do not lead to a general conclusion for all the economies and are needed for each economy separately to assist policymakers with specific findings to take appropriate decisions in the interest of the economy at hand. More importantly, however, is the overall impact of India's unemployment situation on the economy from a macroeconomic perspective which is accentuated by the influence of labor market fluctuations on monetary policy, changes in the gross domestic product (GDP) as accounted for by unemployment, as well as the relationship between unemployment, private consumption, and inflation in India.

2. LITERATURE REVIEW

There is scant literature on inflation, unemployment, private consumption, public expenditure, and output growth, which are the tremendously vital macroeconomic variables in India's economy. The success of the economy is hinged on these variables which are indispensable fundamentals for the economic policies of India. This study is an attempt to add knowledge and provide policy recommendations for the sustainable development of the Indian economy. Such recommendations could be based on sorting out differences in the existing literature on the impact of inflation and unemployment on economic performances in different economies. For instance, Tenzin (2019)(7) has established that unemployment has no impact on output in Bhutan; Muryani and Pamungkas (2018) (8) have demonstrated using the Error Correction Model (ECM) that unemployment has significantly contributed to output growth in Indonesia. While Makaringe and Khobai (2018)(9) have shown using Auto-Regressive Distributed Lag (ARDL) regression that unemployment has a depressing effect on output in South Africa. Banda, Ngirande, and Hogwe (2016)(10) have demonstrated that unemployment promotes output growth in South Africa. In the case of inflation, however, there are more consistent findings that inflation depresses output. For instance, Tenzin (2019)(7), Saidu and Muhammad (2018)(11), Muryani and Pamungkas (2018)(8), and Munyeka (2014)(12), among others have all established that inflation depresses growth in the studies across different economic settings. The differences in the findings on the impact of unemployment on output may be explained by the nature of data at the different periods under varying economic situations prevailing thereon. The differences in the impact of unemployment may also be caused by the non-consideration of omitted variables or an incomplete model.

Keynes's theory asserts that increases in government spending lead to high aggregate demand and rapid growth in national income (Keynes, 1936)(13). It favored government intervention to correct market failures, criticize the classical economists, and argues that we are all dead in the long run (Keynes, 1936)(13). It also rejected the idea that the economy would return to a natural state of equilibrium and envisaged economies as being constantly in flux, both contracting and expanding. Keynes advocated a countercyclical fiscal policy in which, during the boom periods, the government ought to cut spending, and during periods of economic woe, the government should undertake deficit spending. Keynes categorized government spending as an exogenous variable that can generate economic growth instead of an endogenous phenomenon. It believed in the crucial role of the government to avoid depression by increasing aggregate demand and thus, switching on the economy again by the multiplier effect. Keynes' theory of fiscal stimulus assumes that an injection of government spending eventually leads to added business activity and even more spending. The theory proposes that

government spending boosts aggregate output and generates more income. A Wagnerian theory however focused on the view that an increase in national income causes more government spending (Bataneh, 2012(14); Ahmad & Loganathan, 2015(15)). According to the Wagnerian approach, the share of government spending increases with growth in national income (Kumar, Webber & Fargher, 2012(16)). Several studies have examined the relationship between government expenditure and economic growth [Kimaro, Keong, and Sea (2017)(17); Dudzevičiūtė, Dimelytė, and Liuèvaitienė (2017)(18); Bojanic (2013)(19); Kapunda and Topera (2013)(20); Taiwo and Abayomi (2011)(21) and Wang (2011)(22); and Beraldo, Montolio, and Turati (2009)(23); Sinha (2022)(24)]. These studies conclude that increasing government expenditure spurs economic growth. But Carter, Craigwell, and Lowe (2013)(25); Chang, Huang, and Wei (2011)(26); and Nurudeen and Usman (2010)(27) have demonstrated that increasing government expenditure reduces economic growth. A similar study was carried out by Kimaro, Keong, and Sea (2017)(17) using a panel analysis of Sub-Saharan African low-income earners in analyzing the impact of government expenditure and efficiency on economic growth. The study showed that increasing government expenditure accelerates the economic growth of low-income countries in Sub-Saharan Africa. Holden and Sparrman (2016)(28) also attempted to the effect of government purchases on unemployment in 20 OECD countries covering 1980 to 2007. The study found that an increase in government purchases reduces unemployment.

3. RELEVANCE OF THE STUDY

This study is designed to avoid the problem of omission of variables by considering the major factors that affect output such as physical and human capital, and the labor force which has been dropped because of its high correlation with physical capital. The opinion of this study is that having included most of the variables that affect output, the finding of the impact of unemployment will likely reflect the true relationship in India in the period under review. The paper has also carried out Karl Person's correlation test (an extensively used mathematical method in which the numerical representation is applied to measure the level of relation between linearly related variables) to establish the nature of the relationship among the variables to see how the variables are statistically related to know the nature of their correlation, apart from the nature of impact one has over the other (their regression coefficients and their t-ratios). Moreover, the knowledge of correlation gives us information about the likely presence of multi-colinearity and how to avoid it. This has the potency of improving the quality of regression outcomes.

Government undertakes various forms of expenditure with the purpose to meet the aspirations and economic well-being of its citizens as well as ensure rapid social and economic development. It constitutes all categories of resources

used for the provision of pure and merits public goods and services as well as economic services. As far as the causal linkage between public expenditure and national income is concerned, there are broadly two theories, viz., Wagner's law and Kuznets' law. Wagner's law suggests that growth in national income causes growth in public expenditure whereas, on the other hand, Kuznets's law supports the view that growth in government expenditure causes growth in national income. Still some studies hold the view that there is no causal linkage between the two variables. This paper attempts to (a) measurement of the speed of growth and structural changes in India's Government Final Consumption Expenditure and Income (at aggregated and disaggregated levels), and (b) an identification of the presence, and nature of causal behavior between the two macro-variables. A knowledge of such behavior would expectedly help in two ways: (i) in identifying which of the two variables is the causal and which is affected; and (ii) in identifying the homogeneity and endogeneity among government expenditure and national income. This would subsequently help in the development of a suitable macroeconomic simultaneous equations model for the economy involving government expenditure and income as the study variables. Besides, the assertion that government expenditure contributes positively to economic growth has become an accepted premise in most economies (Prasetyo&Zuhdi, 2013 (5)). Recently, unemployment is viewed as one of the most intractable problems facing developing countries. Over the years, unemployment has increased in India. According to International Labour Organization(2019)(6), unemployment in India has increased from 6.4% in 2008 to 6.7% in 2010 and 6.9% in 2017 respectively. It has been seen as a social and economic malady. It affects the standard of living of people in the economy. National income has been on the rise without improvement in the level of unemployment. Hence, in an attempt to reduce unemployment, increase income and encourage employment generation, fiscal policy tool such as government spending has been used by most developing countries. It is against this background that this study examines the asymmetric impact of government spending behavior on the growth of national income and unemployment in India. This is to account for the exact impact of positive and negative changes in government spending in India on national income and unemployment. The objective of this study, therefore, is to provide a framework that will fill the existing empirical gap and assess the exact impact of negative and positive changes in government spending on national income & unemployment and their consequence on private consumption in India.

4. MODEL SPECIFICATION AND METHODOLOGY

The model used for the present study was as follows:

$$RGDP = \alpha_0 + \beta_1 UMP + \beta_2 INF + \beta_3 HHC + \beta_4 PCE + \beta_5 CPI + \beta_6 PCI + \beta_7 SAV + \varepsilon \quad (1)$$

Where

RGDP: Real Gross Domestic Product;

UMP: Unemployment rate

HHC: Household Consumption;

PCE: Government Expenditure

CPI: Consumer Price index;

PCI: Per Capita income

SAV: Savings; α_0 = Slope parameter; β_1 = Co-efficient of the seven independent variables representing their behavior; and ε = Error term.

Ordinary Least Square (OLS) was adopted as the method of estimation as it has numerous advantages which include – i) its residual has zero mean, constant variance, and is not correlated with themselves and other variables; ii) produces BLUE estimates; iii) with increased sample size, the co-efficient estimates converge on the actual population parameters as compared to the other methods. However, reservations of the OLS model need to be considered which states that the regression model is linear in parameters; explanatory variables are non-stochastic; disturbance terms have zero mean, identical variance, and no autocorrelations; the number of terms must be greater than the number of parameters to be estimated; the variables must be finite positive numbers; 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. The OLS model represented by equation(1) has RGDP as the dependent or predictor variable and UMP, HHC, PCE, CPI, PCI, and SAV are as the independent or explanatory variables. The null hypothesis against the alternative hypothesis is:

$H_0: \beta_i$ are equal to 0; against $H_1: \beta_i$ are not equal to 0.

If the P-value is greater than 5%, the null hypothesis is rejected implying that the explanatory variables have no impact on the dependent variables. However, if P-value is less than 5%, the null hypothesis is not rejected implying that the explanatory variables have an impact on the dependent variables.

5. DATABASE

The data were compiled in the form of time series for thirty-one years from 1990-91 to 2020-21 on Gross Domestic Product, Per Capita Income, Savings, Consumer Price Index, Unemployment, Household Consumption, and Government Expenditure. GDP at current prices is the sum of gross value added by all resident producers in the economy plus any product taxes and minus any subsidies not included in the value of the products. Household final consumption expenditure is the market value of all goods and services, including durable products (such as cars, washing machines, and home computers), purchased by households. It excludes purchases of dwellings but includes imputed rent for owner-occupied dwellings, payments, and fees to governments to obtain permits and licenses.

Unemployment refers to the share of the labor force that is without work but available for and seeking employment. This is measured in percentage. Compilation of data was made primarily from various issues of National Accounts Statistics of the Central Statistical Office, Government of India, and other related Offices.

6. DESCRIPTIVE STATISTICS

The basic features of the data are described in Table 1. It provides a quantitative description of the variables used in the model for this study.

Table 1: Descriptive statistics of the variables used in the model

<i>Descriptive Statistics</i>	<i>RGDP</i>	<i>UMP</i>	<i>INF</i>	<i>HHC</i>	<i>GCE</i>	<i>CPI</i>	<i>PCI</i>	<i>SAV</i>
Mean	0.0733	0.9729	0.1443	0.8276	-0.6475	0.0685	0.1398	0.4543
Median	-0.0216	1.0124	0.1317	0.5198	-0.9111	0.0182	0.1129	0.4628
Max.	0.8625	1.8211	0.2468	9.6855	0.5653	0.5628	0.3111	1.7816
Min.	-0.4465	0.0036	0.0843	0.0224	-1.6516	0.0019	0.0183	-0.1329
Std. Dev.	0.4465	0.5515	0.0477	1.6944	0.7932	0.1318	0.0878	0.4514
Skewness	0.5125	-0.3626	1.1658	4.9906	0.5012	2.5205	0.2326	0.6769
Kurtosis	1.6507	2.0906	3.3765	26.6482	1.7078	8.5894	1.8084	3.4502
Jarque-Bera	13.591	21.910	60.974	823.577	33.327	70.816	29.045	52.544
Sum Sq. Dev.	5.6752	8.8221	0.0661	83.2623	18.2972	0.5041	0.2238	5.9097

Source: Author's computation.

It is observed from Table 1 that the minimum and the maximum coefficients are -1.6516 and 9.6855 respectively, which is the least value and highest value of the coefficients. The coefficients of the Jarque-Bera statistics are statistically significant at 1% for all the variables implying that the model is normally distributed.

7. UNIT ROOT TEST

The variables were subjected to a unit root test to avoid the spuriousness of the estimates in the regression. The augmented Dickey-Fuller (ADF) test complemented by Philips-Perron (PP) test was adopted for this purpose, and the result is provided in Table 2. The rationale for complementing the two tests lies in the fact that while ADF assumes that the error term is homoscedastic, the Philips-Perron test makes a non-parametric correction of the statistic when compared to the Kwiatkowski-Phillips-Schmidt-Shin (KPSS) test.

Table 2: ADF and PP unit root tests.

<i>Variables</i>	<i>ADF</i>	<i>Order of Integration</i>		<i>PP</i>	<i>Order of Integration</i>	
		<i>Level</i>	<i>First Difference</i>		<i>Level</i>	<i>First Difference</i>
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)
GCE	-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

Augmented Dickey-Fuller (ADF) complemented by Phillips-Perron (PP) test suggests in Table 2 reveals the null hypothesis “has a unit root” that could be rejected for all the variables. The outcome of the ADF test suggests that all the variables are integrated in the order I(1) apart from INF. Similarly, all the variables were found to be integrated in the order I(1). When variables are statistically significant and integrated in the same order, it is conventional to move on with finding the cointegration since the assumptions of OLS are justified.

8. CORRELATION TESTS

The strength of the relationship between the variables in the model was studied through correlation analysis. The result of the correlation analysis is presented in Table 3 below.

Table 3: Correlation among the variables

<i>Variables</i>	<i>RGDP</i>	<i>INF</i>	<i>UMP</i>	<i>HHC</i>	<i>GCE</i>	<i>CPI</i>	<i>PCI</i>	<i>SAV</i>
RGDP	1.000							
INF	-0.342	1.000						
UMP	-0.180	-0.231	1.000					
HHC	0.590	-0.334	0.203	1.000				
GCE	0.548	0.636	-0.487	0.351	1.000			
CPI	0.507	-0.891	0.717	-0.322	-0.405	1.000		
PCI	-0.689	-0.932	0.878	-0.391	0.273	-0.518	1.000	
SAV	-0.209	-0.717	0.131	-0.833	-0.552	0.401	0.802	1.000

Source: Author’s computation.

The inflation rate, unemployment, per capita income, and savings depicted a negative relationship with real gross domestic product. Household consumption, government expenditure, and consumer price index depicted a positive relationship with real gross domestic product. The outcomes of INF and UMP are consistent with theory, while the behavior of PCI and SAV is not consistent with apriori economic expectations. The reason for the violation of the apriori expectation may be attributed to poor governance and institutional quality which encourage corruption. However, the government of India needs to pursue policies aimed to enhance the well-being of its populace.

9. ESTIMATED RESULTS

The model was subjected to pre and posts econometric estimation tests which include the 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, 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 the joint impact of unemployment, inflation rate, and household consumption with the 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 test results (see Table 2) indicate that all the variables are integrated in the same order as the dependent variable. This suggests the likelihood of all the variables moving together in the long run. To confirm if there exists a long-run relationship between the variables, the residual of the model was generated and subjected to a unit root test at levels (see Table 4).

Table- 4: Residual test

	<i>t- statistics</i>	<i>1% level</i>	<i>5% level</i>	<i>10% level</i>	<i>Probability</i>
ADF test statistics	-9.352598	-2.604746	-1.946447	-1.613268	0.0000

The results discovered that truly there exists a long-run relationship between the variables. In light of this, we corrected the long-run relationship (ECM-1) as indicated in the main OLS estimation. Moreso, the Durbin-Watson Stat result shows 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 out. Thus, during the estimation, the model was estimated using the 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) has a negative and insignificant impact on RGDP. This suggests that a percentage increase in UMP may cause a 1.1% decrease in RGDP *centers' Paribus*. Similarly, the inflation rate (INF) exerts a positive and significant influence on RGDP at a 5% critical level, its coefficient suggests that a unit increase in 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, a one percent rise in HHC would lead to about a 3.1% decrease in RGDP. We also observed that personal consumption expenditure (PCE) influence on RGDP is negatively related, though not significant. This suggests that a one percent increase in the PCE would exert about a 1.5% decrease in the RGDP. The outcome of the CPI, PCI and SAV exerted a positive relationship with RGDP. While DCPI's significant impact on RGDP, PCI, and SAV was insignificant. In addition, the result of the (ECM-1) is -1.296131 suggesting that -12.9% of the long run is being accounted for in the short run. The measure of the goodness of fit, R², shows that variations in the explanatory variables explain more than 62% of total variations in the RGDP in India. These findings were consistent with the results elsewhere.

Table 5: OLS Estimated Result

<i>Variable</i>	<i>Coefficient</i>	<i>Std. Error</i>	<i>t- statistic</i>	<i>Probability</i>
DL_UMP	-0.011413	0.146862	2.401747	0.9451
INF	8.6189675	1.775689	-3.850316	0.0399
DL_HHC	0.030699	0.042431	-3.707633	0.5445
DL_GCE	-0.153400	0.237447	2.776283	0.5845
DCPI	5.188397	1.137679	5.169216	0.0449
DLPCI	0.245685	0.130709	6.235347	0.2009
DL_SAV	0.054300	0.130860	8.465941	0.7185
ECM(-1)	-1.206131			
	-1.923214			
Constant	R- Squared		0.622095	
	Adj. R-Squared		0.576952	
	F-Statistics		308.5839	
	D-W Statistics		2.749978	
	Normality test		887.7813	
	Serial Correlation Test		0.343527(0.7132)	
	Ramsey Reset Test		0.177975(0.0000)	
	Heteroscedastic Test		1.643656(0.1779)	

10. CONCLUSION AND RECOMMENDATIONS

This study focuses on the impact of government expenditure, unemployment, inflation rate, and household consumption on economic growth in India. Thus, economic growth is proxied with the real gross domestic product (RGDP). The explanatory variables include; government expenditure (GCE), unemployment (UMP), household consumption (HHC), inflation rate (INF), and personal consumption expenditure (PCE). The 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 were 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. It was observed that unemployment, inflation rate, and household consumption move together in the long run. However, inflation (INF) and the consumer price index (CPI) are important determinants of economic growth in India. Therefore, it is suggested that effective policy thrust should be implemented to control its influence on economic growth. Hence, the study recommends efficient and effective institutionalization of processes that may respond to challenges bothering macroeconomic indicators which inhibit the attainment of economic growth in India.

References

- Alhdiy, F. M. (2015). "Short and long term relationship between economic growth and unemployment in Egypt: An empirical analysis" *Mediterranean Journal of Social Sciences*, Vol. 6, No. 4S3.
- Andreas, (2018). "Household consumption patterns and the sectoral composition of growing economies" A review of the interlinkages, *UNIDO Report*.
- Hussain, A. *et al.*, (2016). "Impact of macroeconomic variables on GDP: Evidence from Pakistan" *European Journal of Business and Innovation Research*, Vol. 4, No. 3.
- Inyiama. O. I (2013). "Does inflation Weaken Economic Growth" Evidence from Nigerian; *European Journal of Accounting, Auditing, and Finance Research*, Vol. 1, No. 4.
- Prasetyo, A.D. & Zuhdi, U., (2013). The government expenditure efficiency towards human development. *Procedia Economics and Finance*, 5: 615–622.
- International Labour Organisation (2019). Unemployment rate — ILO modeled estimates, Nov. 2018. Retrieved from https://www.ilo.org/ilostat/faces/oracle/webcenter/portalapp/pagehierarchy/Page3.jspx?MBI_ID=2&_adf.ctrl-state=jfzmyg0h2_4&_afzLoop=641865911901905&_afzWindowMode=0&_afzWindowId=null#!%40%40%3F_afzWindowId%3Dnull%26_afzLoop%3D641865911901905%26MBI_ID%3D2%26_afzWindowMode%3D0%26_adf.ctrl-state%3Dex79sfofs_57 on 4th June 2019.
- Tenzin, U. (2019). The nexus among economic growth, inflation, and unemployment in Bhutan. *South Asia Economic Journal*, 20, 1, 94-105. DOI: 10.1177/1391561418822204.

- Muryani, P., and Pamungkas, A. (2018). The impact of unemployment rates, and labor growth in Indonesia. *American Journal of Engineering Research*, 7, 3, 109-119.
- Makaringe, S. C and Khobai, H. (2018). The effect of unemployment on economic growth in South Africa (1994-2016). MPRA Paper No. 85305, March 2018.
- Banda, H. Ngirande, H. and Hogwe, F. (2016). The impact of economic growth on unemployment in South Africa: 1994 – 2012. *Investment Management and Financial Innovations*, 13(2): 246 – 255, 4 July 2016.
- Saidu, B. M., and Muhammad, A. A. (2018). Do unemployment and inflation substantially affect economic growth? *Journal of Economics and Development Studies*, 3, 2, 132-139.
- Munyeka, W. (2014). The Relationship Between Economic Growth and Inflation in the South African Economy. *Mediterranean Journal of Social Sciences*, 5(15): 119 – 129, July 2014.
- Keynes, J. M. (1936). *The General Theory of Employment, Interest, and Money*. New York: Harcourt Brace Publishers.
- Bataineh, I. M. (2012). The impact of government expenditures on economic growth in Jordan. *Interdisciplinary Journal of Contemporary Research in Business*, 4(6): 1320-1338.
- Ahmad, U. G. & Loganathan, N. (2015). The causal nexus between government expenditure and economic growth in Nigeria: evidence from a bootstrap rolling window approach. *The American Journal of Innovative Research and Applied Sciences*, 2(1): 16-24.
- Kumar, S., Webber, D. J. & Fargher, S. (2012). Wagner's law revisited: cointegration and causality tests for New Zealand. *Applied Economics*, 44(5): 607-616.
- Kimaro, E. L., Keong, C. C. & Sea, L. L. (2017). Government Expenditure, Efficiency, and Economic Growth: A Panel Analysis of Sub-Saharan African Low-Income Countries. *African Journal of Economic Review*, 5(2): 34-54.
- Dudzevièiûtë, G., Dimelytë, A. & Liuèvaitienë, A. (2017). Government expenditure and economic growth in the European Union countries. *International Journal of Social Economics*, 2(11).
- Bojanic, A.N., (2013). The composition of government expenditures and economic growth in Bolivia. *Latin American Journal of Economics*, 50(1): 83-105.
- Kapunda, S.M. & Topera, J.S., (2013). Public expenditure composition and economic growth in Tanzania: Socio-economic policy implications. *Asian-African Journal of Economics and Econometrics*, 13(1): 61-70.
- Taiwo, M. & Abayomi, T. (2011). Government expenditure and economic development: empirical evidence from Nigeria. *European Journal of Business and Management*, 3: 18-29.
- Wang, K., (2011). Health care expenditure and economic growth: Quantile panel-type analysis. *Economic Modelling*, 28(4): 1536-1549.
- Beraldo, S., Montolio, D. & Turati, G., (2009). Healthy, educated and wealthy: A primer on the impact of public and private welfare expenditures on economic growth. *The Journal of Socio-Economics*, 38: 946-956.

- Sinha, J. K. (2022). "Government Expenditure and Its effect on national Income and Unemployment in India." *The Journal of Advanced Research in Economics and Business Management*, Vol. 9(1).
- Carter, J., Craigwell, R. & Lowe, S. (2013). Government expenditure and economic growth in a small open economy: A disaggregated approach., 1-28.
- Chang, H., Huang, B. & Wei, C. (2011). Military expenditure and economic growth across different groups.
- Nurudeen, A. & Usman, A. (2010). Government expenditure and economic growth in Nigeria 1970-2008: A disaggregated analysis. *Business and Economics Journal*, 1-11.
- Holden, S. & Sparrman, V. (2016). Do government purchases affect unemployment? 1-26.