

Effect of Macroeconomic Variables on Human Capital Development Proxy by Unemployment Rate in Nigeria: 1986-2018

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Abstract: This study examined the effect of macroeconomic variables on human capital development in Nigeria between 1986-2018 proxy by unemployment. Time series data on unemployment and macroeconomic variables in Nigeria obtained from Central Bank of Nigeria (CBN) statistical bulletin was used. Employing an econometric data analysis techniques on Ordinary Least Square (OLS) using E-View Version 7. IT was found among others that money supply, exchange rate and government expenditure have significant effect on unemployment in Nigeria. This call for a policy shift and political will on the part of our leaders especially in the area of infrastructural development and increase productive base on the nation in order to improve the stability of macroeconomic variables investigated. This will not only help in generating employment for its citizens but also improve the standard of living of the Nigeria people.

Key words: Macroeconomic variables, Unemployment, Fiscal Policies, Monetary Policies.

INTRODUCTION

Nations all over the world have realized the crucial role people play in the process of advancement and attaining economic growth and development (Akanbi, 2017). Modern development is measured in terms of the absorptive capacity of that nation which is the extent the working populations are actively engaged in productive endeavours. People are considered the most important assets available to any nation, because the productivity of all other resources available is predicated on them (Egbe&Awogbemi, 2015).

Therefore, they must be at the heart of development strategies for major economic goals to be achieved. It is noticed that when development is based solely on physical infrastructures and the people neglected, the result is that people are patiently unable to put those structures to the appropriate use and the economy would be working below its potentials (Akintoye, 2008).

Jingan (1990) referring to Everyman's dictionary of economics, defined unemployment as "involuntary idleness of a person willing to work at the prevailing rate of pay, but unable to find work". Also unemployment according to Encarta

Encyclopedia is defined as "enforced idleness of wage earners that are unable and willing to work but cannot find jobs". In societies, where most workers can earn a living only by working for others being unable to find a job would have economic and human implications (Cascio, 2016). Unemployment is synonymous with economic waste, since the actual GNP is below its potentials. There is bound to be a reduction in the production of goods and services or income and aggregate demand, An economy with a high level of unemployment would be in her recessionary state (Dorgan, 2012). The absorptive capacity would be below its potential and this could affect other social and macroeconomic indicators.

Unemployment as a national economic problem is common to all modern economies. However, it becomes an issue of national concern when the proportion of people unemployed is high and the duration of getting the job is long. In Nigeria, unemployment rates have continued to increase annually because of the inability of the government to enact well-articulated macroeconomic policies that would bring about far reaching results. Also, the general downturn of the economy in the past years has contributed immensely to the massive unemployment in the nation.

Statement of Problem

No topic has generated more controversy among Nigerians than the reasons why unemployment persists in the local economy. For two decades after independence, (1960s-1970s), unemployment was not an issue of national concern as it is today. Prior to our independence, we had already been integrated into the world's capitalist system as exporters of raw materials and importers of finished goods. The nation's agricultural, industrial and the public sectors were able to absorb most of the labour force. However, it is believed that the agricultural sector accounted for about 70% of the nation's employment opportunities, hence contributing about 80% of the Gross Domestic Product (GDP). (CBN Statistical Bulletin, 2005) Abuja. The advent of petroleum in the 1970s further elevated the employment situation to about 11% yearly (Ademola, 2016). Meanwhile microeconomic policies were able to achieve the needed linkages effects between national and human needs.

However, the ensuring political instability and inconsistencies in the macroeconomic policies of successive government have emerged as a major factor that led to the manifestation of high level of joblessness in Nigeria over the years. Presently, the Nigerian economy is dominated by severe unemployment, which has proved to be one of the most unmanageable and persistent problems facing the country in the last few years. Different government since 1980, have tried different strategies in solving the problem, but the result still remain persistent, and has led to some social and economic problems like crime, destitution, corruption, etc. The monstrous phenomenon (unemployment) is fast becoming a threat that could consume the whole nations if proper policies are not put in place. Among programmes introduced by governments in Nigeria to tackle unemployment problems are: National Directorate of Employment (NDE); Special Public Works Programme; Poverty Alleviation Programme (PAP). These programmes are however, filled with uncertainties, both in conception and implementation. Therefore, this study centers around the effect of macroeconomic variables on unemployment proxy for human capital development in Nigeria. Giving this background, this study is

therefore focused on finding out the effect of macroeconomic variables on unemployment in Nigeria over the period 1986-2018.

Objectives of the Study

The main objective of this study is to investigate the effect of macroeconomic variables on human capital development rate in Nigeria. However, other specific objectives include

1. Evaluate the effect of interest rate on unemployment rate in Nigeria proxy for human capital development.
2. Analyze the effect of inflation rate on unemployment rate in Nigeria proxy for human capital development.
3. Determine the effect of government expenditure on unemployment rate in Nigeria proxy for human capital development.
4. Ascertain the effect of money supply on unemployment rate in Nigeria proxy for human capital development.
5. Examine the effect of exchange rate on unemployment rate in Nigeria proxy for human capital development.

Research Questions

The following research questions are raised in the course of this study:

- i) How does interest rate affect unemployment rate in Nigeria proxy for human capital development?
- ii) What are the effects of inflation rate on unemployment rate in Nigeria proxy for human capital development?
- iii) How does money supply affect unemployment rate in Nigeria proxy for human capital development?
- iv) What are the effects of exchange rate on unemployment rate in Nigeria proxy for human capital development?

Research Hypotheses

The following are the research hypotheses for the study stated in their null form.

Ho₁: Interest rate has no significant effect on unemployment rate in Nigeria

Ho₂: Inflation rate has no significant effect on unemployment rate in Nigeria

Ho₃: Government expenditure has no significant effect on unemployment rate in Nigeria

Ho₄: Money supply has no significant effect on unemployment rate in Nigeria

Ho₅: Exchange rate has no significant effect on unemployment rate in Nigeria

Significance of the Study

Findings from the study will be of immense benefits in a number of ways and to different groups of persons.

Public: The understanding of the study will enhance the ability of the public to see reasons while unemployment remains abated despite government various grant policies and programmes towards reducing unemployment.

Government: It would also be of paramount significance to the government for policy formulation purpose in the quest for sustainable investment growth and reducing unemployment in Nigeria. Government will definitely find this research work useful as it tends to proffer solutions or recommendation that is capable of helping her in nation

building.

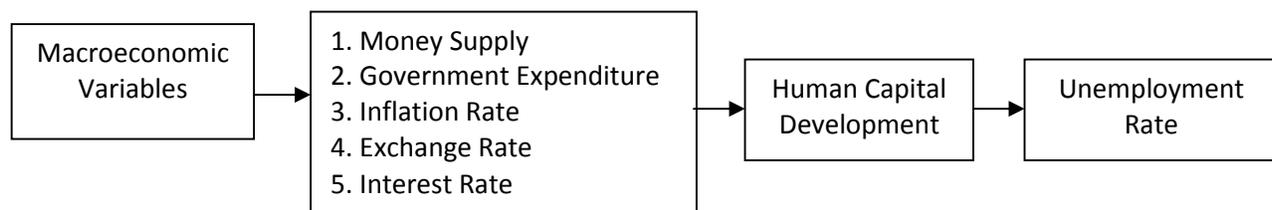
Academics/Future Research:Both academic and other future researchers in this subject matter will find it useful source of research material.

LITERATURE REVIEW

Conceptual Framework

Macroeconomic Variables

According to Oliver (2000) Macroeconomic factors are such factors that are pertinent to broad economy at the regional or national level and affect a large population rather than a few select individuals. The following Macroeconomic factors such as inflation, money supply, government expenditure, exchange rate and interest rates are employed and deeply explain in this study.



The relationship between macroeconomic variables and human capital development

Human Capital Development

Human capital development is a worldwide wonder which involves guaranteeing ideal performance of individuals by empowering a feeling of proprietorship and responsibility among specialists. Chidi(2012). The earth under which organizations work today is normally portrayed as unpredictable, dubious, dynamic, or complex because of broad changes and changes. In the present very focused work showcase working with others profitably drives individual and organizational adequacy; employees work in groups framed to handle ventures, virtual groups and customers or in specially appointed mixes. Regardless of the groups' incredible esteem, numerous organizations still support practices that undermine collaboration or participation (Wukan, 2014).

Instruction that reflects satisfactory pragmatic and mechanical training parts holds the way to Nigeria winding up innovatively applicable and universally aggressive It is likewise the best methods for engaging the citizenry to animate a supported national development, upgrade work enhance the nature of lives, diminish destitution, restrain the frequency of social indecencies due to joblessness and advance a culture of peace, opportunity and serenity. Targets of occupation creation must be accomplished through suitable training which engages results of the instruction framework with aptitudes and capabilities to end up independently employed. Without change in the nature of human capital, no advance is conceivable in an immature nation. The monetary nature of Nigerian populace still stays low since the existing economic situations don't support fast proficient progression of subjects. Mass migration of experts from Nigeria is only an indication of presence of 4ürplus work which is to a significant degree because of deficiency of basic

aptitudes. With every one of these issues and insufficiencies, individuals who frantically long for proficient progression would dependably be enticed to join the movement prepare.

Unemployment

According to Balami (2014) unemployment is conceptualized as a situation where in a worker or workers are involuntarily out of work. This means that workers are willing and able to work but cannot find any work. Unemployment has been defined by the classical economists as the excess supply of labour over the demand for labour which is cause by adjustment in real wage. The Classical or real-wage unemployment occurs when real wages for job are set above the market-clearing level, causing number of job-seekers to exceed the number of vacancies.

Unemployment was defined by International Labour Organization (2009) as a state of joblessness which occurs when people are without jobs and they have actively sought for work within the past four weeks. The unemployment rate is a measure of the prevalence of unemployment and it is calculated as a percentage by dividing the number of unemployed individuals by individuals currently in the labour force. In a 2011, Business Week Reported, "More than two hundred million (200) people globally are out of work, a record high, as almost two-third of advanced economies and half of developing economies are experiencing a slowdown in employment growth. According to Jhingan (2001) unemployment can be conceived as the number of people who are unemployed in an economy, often given as a percentage of the labour force. Unemployment was also defined as numbers of people who are willing and able to work as well make themselves available for work at the prevailing wage but no work for them. According to Aminu and Anono (2012) Unemployment can be conceptualized as total number of people who are willing and able to work, and make themselves available for job at the prevailing wage but no work for them. This therefore, implies that unemployment is a state of joblessness in the country. Unemployment can be measured using this formula Unemployment Rate = number of unemployed people/labour force X 100 (UR = UN/L X 100)

Labour force = No. of employed + No. of unemployed (L = EM + UN).

Interest Rate

Interest rate is the charge a borrower pays for the money lend to him for business or other transaction motives. Investors borrow money from banks and other financial institutions. The response of investment expenses changes keenly with interest rate which is at the mind of money-making analysis Acha &Acha, (2011). Interest rates is the other strong factors that affect financial policies as well as weaker financial payments in guiding principles of investors.It facilitate investment if the high interest rate is applicable on savings. The negative influence of higher investment rate inhibits the macroeconomic effect of interest rate policy. In New York, borrow and cash offers money as a guarantee to the lender of collateral. This is the most common form of investment in business performance. This program takes the type of customized term loan of a portfolio of securities. Because the transaction is customized, it is difficult to make general statement regarding its use. That said borrowers may negotiate an annual free for rights to borrow securities from beneficial owners entire portfolio.

The net result is a government spending on GNP which has been the remains to

single significant source of difference in excess of stabilization interest rate policy. The purpose of interest rate is in response to money investment to look forward in narrowing the divergence concerning the effects of cost and interest rates in the commercial banks. The reactions of interest rates depend on the fundamental substitutability of capital for other factors in investment to take place.

Inflation

It is the persistent increase in the general price level within the economy which affects the value of the domestic currency (Fatukasi, 2012). It is not once and for all upward price movement but has to be sustained over time and affect all goods and services within the economy. Several factors are responsible for inflation in Nigeria. The inflation which results from excess aggregate demand is called the demand fall inflation, the cost push inflation results from upward movement in the cost of production while the structure inflation arises from some constraints such as inefficient production, marketing and distribution systems in the productive sectors of the economy. Other forms of inflation in developing country could be imported, open and seasonal inflation. The imported inflation comes as a result of transmission of inflation through internationally traded goods and services. This is when the economy imports goods from countries already, experiencing inflation. The open inflation comes as a result of uninterrupted market mechanisms and seasonal inflation is associated off season in production when supply constraints permeates the economy as a result of fall in production especially farming produce. In Nigeria, other factors can be attributed to inflation such as the nature of the economy, its history, and fiscal and monetary policy direction. Inflation is defined as a generalized increase in the level of price sustained over a long period in an economy (Lipsev and Chrystal, 2015), that is, a persistent rise in the price levels of commodities and services, leading to a fall in the currency's purchasing power. Although inflation is a household word in many market-oriented economies, and there exist a compendium of empirical studies on the over-arching problem of inflation, yet only selected few seem to know about the determinants, mechanics, and the real impact of inflation on national economic growth.

Government Expenditure

Government expenditure is the total in cash terms of the federal, state and the local government spending including transfers to the parastatals and the three levels of the government (Anyato, 2016). The allocation function becomes necessary so as to provide both private and public goods in particular social goods in appropriate mix with available resources. The provision of social and physical infrastructure through public investment and expenditure on some goods and services theoretical can directly improve productivity in the private sector through more efficient allocation of resources due to the special characteristics of social goods Kellick (2009). It is the responsibility of the state through expenditure to provide the desirable services which the price mechanism cannot provide or produce at all or would only do so at high cost and with smaller social benefit. The recurrent expenditure is government expenditure made regularly from year to year. Some examples includes personnel cost overhead cost utility services telephones, furniture and equipment.

On the other hand capital expenditures are spend on new construction, land and building acquisition, fixed assets which have expected working life more than one year.

This divides total expenditure into transfer and non-transfer expenditure. Generally, there is certain expenditure which does not result in corresponding of the transfer of real resources to the government, the payment of debt and unemployment benefit are example of this expenditure. Here the governments usually transfer additional financial resources to some sections of the society.

Money Supply

Money is a collection of liquid assets that is generally accepted as a medium of exchange and for repayment of debt. In that role, it serves to economize on the use of scarce resources devoted to exchange, expands resources for production, facilitates trade, promotes specialization, and contributes to a society's welfare (Singh et al, 2011). The supply of money at any moment is the total amount of money in the economy at a point in time (Jhingan, 2006). In Nigeria, the narrow money supply (M1) is defined as currency outside bank plus demand deposits of commercial banks plus domestic deposits with the central banks less Federal Government deposits at commercial banks.

Exchange Rate

Conceptually, an exchange rate implies the price of one currency in terms of another. Exchange rate is the ratio between a unit of one currency and the amount of another currency for which that unit can be exchanged at a particular time (Ngerebo-a and Ibe, 2013). In other words, exchange rate is the price of one currency vis-à-vis another and is the number of units of a currency required to buy another currency (Mordi, 2006). Exchange rate of currency is the link between domestic and foreign prices of goods and services. Also, exchange rate can either appreciate or depreciate. Appreciation in the exchange rate occurs if less unit of domestic currency exchanges for a unit of foreign currency while depreciation in exchange rate occurs if more unit of domestic currency exchanges for a unit of foreign currency..

Theoretical Framework

This study is anchored on Keynesian theory of unemployment. The emergence of the Keynesian theory of unemployment emanated as a result of the fall of the classical economic school of thought. The classicalist could not explain the great depression which occurred between 1929 and 1933 which led to persistent unemployment, they had no policy prescription to solve the menace. So, in 1936, John Maynard Keynes published his book on "The General Theory of Employment, Interest and Money". Keynes therefore, attributed unemployment to insufficient aggregate demand. He assumed that workers are unwilling to accept a cut in money wages in order to secure more employment. Even though they would accept an equivalent reduction in the real wage rate brought about by an increase in the price level while money wage rate remained unchanged. Keynes did not attribute this to the rationality on the part of workers but to a desire to preserve their wage relativities. Workers are concerned with the real wage they receive and not just its money value. Given the fact that single market workers can only bargain directly for money and not real wages.

Thus, to Keynes, employment level is determined at a point where aggregate supply equates aggregate demand. Any deviation will lead to involuntary unemployment. He further posited that where the demand and supply of labour schedule are equal, any

wage rate increase above the equilibrium wage rate either as a result of union activities will lead to retrenchment in the economy. Keynesian theory is criticized based on the cyclical unemployment, which occurs during depression. But the nature of unemployment in an underdeveloped economy is quite different from the economic environment Keynes was. The unemployment situation in developing economics is chronic and caused by various factors, instead of cyclical on which Keynes based his theory.

Empirical Review

Inflation and Unemployment

Gylych, Olanrewaju, and Abdurahman (2016) analyze the effect of inflation on unemployment, in ten (10) selected members of ECOWAS and assess the effects of unemployment in the selected members states. Secondary data obtained from the Member's State National Statistics offices was used for the paper. The study used a model in which inflation and unemployment were the dependent variable and independent variables. The analytical technique used includes ordinary least square (OLS) technique, F-test. The study showed that monetary and fiscal policy were effective in the control of the inflation and unemployment since the coefficient of determination ($R^2 = 0.50$ or 50%) was significant. This was re-confirmed by the F-test value (4.91). The study recommends a policy redirection to improve output in the ten (10) selected member's states; this will occur by making efforts to increase productivity, which will lead to reduction in unemployment and inflation. To curb the surging rate of unemployment, efforts must be put in place to achieve a labour intensive method of production instead of concentrating on the capital intensive method which will take away jobs that individuals can do. Furthermore, there must be concrete efforts to ensure that the porous borders in the ten (10) selected members states are well managed to increase volume of economic activities among the members' States, which is very pivotal for the reduction of unemployment and inflation; thereby improving the level of local production.

Aminu (2014) investigates the effects of unemployment and inflation on economic growth in Nigeria between 1986-2012 through the application of Ordinary Least Square (OLS) technique in estimating the effects of unemployment and inflation on growth, Augmented Dickey-Fuller test and Phillip's-Perron test statistics were employed to test the presence of unit root in the series, after which Johansen co-integration test was employed to test the existence of long-run relationship between economic growth and the independent variables. The variables were on real gross domestic product, unemployment rate and inflation rate. The results also reveal that unemployment impacts negatively on economic growth while inflation rate impacts positively on economic growth. However,, only the coefficient of unemployment was found to be significant. Based on the coefficients of unemployment -4.6727 and inflation 0.0246 in model III, it follows that 1 percent reduction in unemployment would increase economic growth by 4.6727 percent, while 1 percent increase in inflation would increase economic growth by 0.0246 percent; hence a major policy implication is that concerted effort should be made to reduce unemployment and stabilize the prices of goods and services (inflation) so as to achieve high, rapid and sustained economic growth rate in Nigeria.

Mohammed, Okoroafor & Awe, Omoniyi (2015) analyzed of the relationship between unemployment, inflation and economic growth in Nigeria: 1987-2012. The study utilizes

secondary data to analyze the relationship between unemployment, inflation and economic growth. The methodology used for the study was ordinary least squares. The results confirm that in the long run, interest rate and total public expenditure have significant impact on economic growth in Nigeria, while inflation and unemployment has inverse effects on growth in Nigeria. The possible justification for the inverse effect of inflation on price level is that inflation may not be due to aggregate demand pressure but rather due to hiccups in the supply chain of goods both from the domestic and foreign supply outlets. The study recommended that the government must as a matter of necessity to improve or continue to fine-tune macroeconomic policy instruments to achieve a sustainable and enable environment that will enhance increase in domestic output.

Holden and Sparrman (2013) examined the effect of government purchases on unemployment in 20 OECD countries. The study made use of ex post facto methodology based on ordinary least square (OLS). The study revealed that an increase in government purchases which equals one percent of GDP reduced unemployment by about 0.3 percentage point in the same year. This effect was observed to be greater in downturns than in booms, and also greater under a fixed exchange rate regime than a floating regime. The gap in this study is that it did not consider relationship between government expenditure and level of employment in Nigerian situation since it is not related to the country.

Philip (2014) investigated impact of government expenditure on unemployment and poverty rates in Nigeria. The study made use of ex post facto research design based on Ordinary Least Square (OLS). The study revealed that government expenditure has positive and significant impact on unemployment rate in Nigeria while government expenditure has a negative and insignificant impact on poverty rate. The study recommended that urgent attention should be giving to rising unemployment and high poverty rates in Nigeria so as to achieve the objectives of being among the 20 economics of the world by the year 2020. The gap in this study is that it used two dependent variables (unemployment and poverty rates) and did not disaggregate government expenditure into functional variables.

Raskin (2011) analyzed the effect monetary policy on unemployment rate in Pakistan from 1987-2009. The analysis was done using ordinary least square. The included variables were on money supply, interest rate, exchange rate and unemployment rate. To modify the near-term path of interest rates, including reduction in current short-term rates and a corresponding downward shift in private-sector expectations about the future path of such, in order to reduce borrowing rates for households and businesses. The study finds that monetary policy has a significant effect on unemployment in Nigeria.

Loganathan *et al.* (2012) analyze the integration and dynamic interaction between monetary shock and overall unemployment in Malaysia for the period of 1980-2010. The study applied various unit root tests, Gregory-Hansen cointegration test, VECM and Granger causality test with considering the possibility of the structural break. The results show a structural break in the middle of 1990s with along run co-integration between monetary shock and unemployment. However, there was no causality relation between both variables.

RESEARCH METHODOLOGY

Research Design and Sources of Data.

The study use the ex-post facto research design to examine macroeconomic variables dynamic and unemployment rates in Nigeria. The data for the study was generated from the official publications of financial institutions such as CBN Statistical Bulletin, CBN Annual Report and Accounts. The data were extracted from the soft copies of the named sources as made available by the authorities on their websites. The time frame is expected to cover thirty seven (32) years from 1986 to 2018.

Model Specification

The model used in this research work is a modification of the model used by Osigwe and Ahamba (2016), who studied the effect of macroeconomic conditions on unemployment in Nigeria. His model specified that $UNE = F(INF, RGDP, MS_2, EXR, LR, GEXP, OPEN)$

The above model is modified in line with the objectives of this study; mathematically the model is shown below as:

$$UNE = F(INT, INF, GOE, MS_2, EXCH) \dots \quad 3.1$$

Where

UNE = Unemployment rate

INT = Interest rate

INF = Inflation rate

GOE = Government expenditure

MS = Money supply

EXCH = Exchange rate

F = functional notation

Our model can be restated in an econometric form

$$UNE = b_0 + b_1 INT + b_2 INF + b_3 GOE + b_4 MS_2 + b_5 Exch + \mu \dots \dots \dots \quad 3.2$$

Where

b₀ = Autonomous or intercept

b₁ = coefficient of parameter INT

b₂ = coefficient of parameter INF

b₃ = coefficient of parameter GOE

b₄ = coefficient of parameter MS

b₅ = coefficient of parameter EXCH

μ = stochastic error term

Method of Data Analysis

The multiple regression model was employed in the study for the purposes of analyzing data and drawing conclusions. The following analytical techniques and steps shall be followed:

- i. Diagnostic/Standard Tests
- ii. Test for Stationarity (Unit Root Test)
- iii. Regression Analyses

DATA PRESENTATION AND ANALYSIS

Data Presentation

The logged data for this study was presented in the appendix . The data was logged to present the data in the same base before it was use for the analysis. Another reason is to achieve normality.

Analysis of Data

Table 1: Descriptive Statistics

Macroeconomic Variables and Unemployment Rate						
	UNE	LMS	INF	EXR	LGOVT	INT
Mean	22.89474	6.547237	68.07474	90.09474	11.67463	17.61579
Median	22.00000	6.611111	70.18000	97.40000	11.81725	17.68500
Maximum	49.00000	10.12982	85.66000	360.5000	14.53615	29.80000
Minimum	4.800000	2.672078	37.97000	0.610000	8.431766	7.750000
Std. Dev.	12.29577	2.555846	12.61960	91.21405	2.287401	4.626646
Observations	32	32	32	32	32	32

The summary statistics show that the average mean of unemployment rate is about 22.8. The average mean for money supply is 6.54, while averages mean of inflation rate, exchange rate, government expenditure and interest rate are 6.547237, 68.07474, 90.09474, 11.67463 and 17.61579 respectively. The standard deviations of macroeconomic variables such as money supply inflation rate, exchange rate, government expenditure and interest rate are 2.971298, 2.555846, 12.61960, 91.21405, 2.287401 and 4.626646. The values of the standard deviations indicates that there is wide spread in the unemployment in Nigeria. This is also evident in the wide gap between the maximum and minimum values. For example, the maximum value unemployment is 49,000 while the minimum is 4.8000, with difference of 44.2000. Similarly, the maximum of money supply is 10.12982 while the minimum is 2.672078. These performance variations are rather on the high side. Even in the case of inflation rate the maximum is 85.66 and the minimum is 37.97. It is equally observed that exchange rate varied widely over time. For instance, exchange rate is 360.5 while its minimum value is 0.61. The wide variation over time indicates high level of fluctuation of Macroeconomic Variables which affects unemployment rate in Nigeria.

Unit Root Test

The tests employed are the Augmented Dickey Fuller (ADF) test and the Phillips-Perron test (PP) Test. The null in both the ADF and PP is the presence of unit root.

Table 2: Augmented Dickey Fuller Test (ADF)

Variables	At Level		First Difference		Order of Integration
	t-Statistics	Prob.	t-Statistics	Prob.	
MS	-2.264016	0.1892	-2.425122	0.1437	1(2)
INT	-4.656213	0.0007			1(0)
INF	-4.323464	0,0025			1(0)
EXR	1.753328	0,9995	-4.934566	0.0004	1(1)
GOVTEXP	-2.046787	0,2665	-4.355259	0.0050	1(1)
UNE		0,9867	-6.749883	0.0000	1(1)

Table 3: Phillips-PerronTest (PP)

Variables	At Level		First Difference		Order of Integration
	t-Statistics	Prob.	t-Statistics	Prob.	
MS	-2.264016	0.1893	-4.575709	0.0010	1(2)
INT	-4.774825	0.0005			1(0)
INF	-2.775847	0.730			1(0)
EXR	1.753328	0.9995	-4.927991	0.0004	1(1)
GOVT EXP	-1.995253	0.2873	-3.355259	0.0150	1(1)
UNE	0.364829	0.9781	-7.309901	0.0000	1(1)

The analyses of the stationarity of the variables were performed using the ADF and PP tests. Both tests showed similar result outcomes. The ADF result are shown on Table 3 while the PP results were in Table 4. From both Tables, the results for INT and INF were integrated at levels. This suggests that the variables are stationary at their level forms. However, MS, EXR, GOVT, and UNE, and were not stationary in their levels [1(0)], but were found stationary in the first differences 1(1). It is worthy of note that MS was not stationary at 1(0) and 1(1) using the ADF but was found stationary at 1(1) using the Pp. Thus the result of the PP was taken to imply that MS is stationary at 1(1).

Estimation of the Specified Models

The Autoregressive Distributive Lag (ARDL) technique was used to investigate the effect of macroeconomic variables on human capital development in Nigeria. The two forms of regression conducted are the Bound test and ARDL Short run regression estimation.

Estimation of Long Run Effect

The estimation of long run relationship are shown in Table 4. The analysis is the Bound test to determine the long run relationship between macroeconomic variable and unemployment rate.

Tab4c 4: ARDL Bounds Test for long run effect of Macroeconomic variables and unemployment rate

Models	F-Statistics	Lower Capital Value Bound at 5% Level	Upper Critical Value Bound at 5% Level
Unemployment	12.5194*	2.62	3.70

*Significant at 5%

Source: Extracts from Eviews 9 Output on Appendix

From the results in Table 4, the critical bound values were computed at 5% level of significance. The lower critical bound value is 2.62 while the upper critical value is 3.79. The F-statistics for unemployment is 12.5194, The results showed that unemployment rate has F-statistics greater than the Upper (3.79) and Lower (2.62) critical bound values. This model with F-statistics that fall outside the critical bound values, suggest rejection of the null hypotheses. The result is summarised as follows:

Macroeconomic variables (money supply, exchange rate, inflation rate, government expenditure and interest rate) have significant long-run effect on unemployment in Niger

Analyses of ARDL Long Run Coefficients and Error Correction

The model proved to have long run relationships in a macroeconomic variables and human capital development nexus. Thus, unemployment receives long run macroeconomic shocks within the periods under study.

Table5: Model of the Long Run Relationship between Macroeconomic Variables and unemployment in Nigeria

Cointegrating Form				
Variables	Coefficient	Std. Error	t-Statistics	Prob.
D(LXP(-1))	0.840206	0.289288	2.904392	0.2111
D(LMS)	-18.159701	10.056054	-1.805848	0.3220
D(LMS(-2))	-43.798253	9.702237	-4.514243	0.1388
D(INF)	19.779996	13.729692	1.440673	0.3863
D(INF)	-5.659598	10.177196	-0.556106	0.6769
D(INF)	-0.670401	0.382112	-1.754461	0.3298
D(EXR)	0.213164	0.144147	1.478796	0.3785
D(EXR(-1))	-0.072840	0.102242	-0.712424	0.6059
D(EXR(-2))	0.145270	0.184061	0.789251	0.5746

D(EXR(-3))	0.191685	0.059109	3.242911	0.1904
D(LGOVT)	0.194384	0.117255	1.657787	0.3455
D(LGOVT(-1))	0.228649	0.104352	2.191129	0.2726
D(LGOVT(-2))	-0.286043	0.107654	-2.657065	0.2292
D(ENT)	8.199634	3.222484	2.544507	0.2384
D(INT(-1))	18.725092	8.389823	2.23 1882	0.2682
D(INT(-2))	17.254495	7.374911	2.339621	0.2571
D(INT(-3))	1.766390	5.540292	0.318826	0.8035
D(INT)	0.570045	0.410399	-1.389000	0.3972
D(INT(-2))	17.254495	0.410399	-1.389000	0.3972
D(INT(-1))	0.991915	0.683361	-1.451525	0.3840
D(INT(-2))	-2.649941	1.440791	-1.839226	0.3170
D(INT(-3))	-0.467728	0.300384	-1.555437	0.3637
CoinEq(-1)	-0.415703	0.425748	-5.674025	0.0111
Long-Run Coefficients				
Variables	Coefficient	Std. Error	t-Statistics	Prob.
LMS	13.875320	5.936126	6.337437	0.0004
INF	-0.323569	0.198327	-1.631492	0.3501
EXR	0.017261	0.052686	0.327627	0.7984
LGOVT	-9.698105	5.028775	-1.928522	0.3045
INT	1.277289	1.127026	1.133327	0.4603
C	21.882555	26.718601	0.81900!	0.5631

Table 5 has a coefficient of error correction of -0.415703 and the corresponding probability value of 0.0111. The coefficient is rightly signed (negative) with a p.value less than 0.05 level, indicating a statistically significant speed of adjustment. This means that changes in unemployment will eventually return on a normal trend in the long run. The coefficient indicates about 42% of the deviations of the unemployment in Nigeria due to macroeconomic instability can be corrected within a year. This implies that the selected macroeconomic variables (MS, INFL, EXR, GOVT and IND) can be used to stabilize the unemployment in Nigeria.

The nature of the long run relationship is explained by the coefficient of the long run model as shown:

$UNE = 13.8753LMS - 0.03236INF + 0.0173EXR - 9.6981 LGOVT + 1.2773 INT$ and interest rate (INT) have a positive relationship with unemployment while inflation rate (INF) and Government expenditure (GOVT) showed negative relationships in Nigeria. The probability values for MI is less than 0.05 while that of INFL, EXR, GOVT and INT are greater than 0.05. This study shows that money supply has a statistically significant positive relationship with unemployment in Nigeria. However, inflation rate, government expenditure have negative but insignificant relationships while exchange rate and interest rate are positive and significant on long run relationship with unemployment in Nigeria.

Hypotheses Testing

HYPOTHESIS: Ho - Macroeconomic variables (money supply, interest rate, exchange rate, government expenditure, inflation rate) have no significant effect on unemployment rate in Nigeria.

Table 6: Short Run Model of the Relationship between Macroeconomic Variables and Unemployment in Nigeria

Dependent Variable: UNE

Method: ARDL

Sample (adjusted): 1990 2018

Dynamic regressors (4 lags, automatic): LMS INF EXR LGOVT TNT

Variables	Coefficient	Std. Error	t-Statistics	Prob.*
LEXP(-1)	-0.575498	0.237079	-2.427455	0,2488
LEXP(-2)	-0.840206	0.289288	-2.904392	0.2111
LMS	-18.15970	10.05605	-1.805848	0.3220
LMS(-1)	22.00050	14.14106	1.555789	0.3637
LMS(-2)	43.79825	9.702237	4.514243	0 1388
LMS(-3)	- 19.78000	13.72969	- 1.440673	0:3863
INF	5.659598	10.17720	0.556106	0.6769
INF(-1)	-0.670401	0.382112	-1.754461	0.3298
INF(-2)	0.174350	.0.134278	1.298425	0.4178
INF(-3)	-0.213164	0.144147	-1.478796	0.3785
EXR	' 0.072840	0.102242	0.712424	0.6059
EXR(-1)	-0.145270	0.184061	-0.789251	0.5746
EXR(-2)	0.191685	0.059109	3.242911	Q.1904
EXR(-3)	-0.0 12997	0.059743	-0.217557	v.8636
EXR(-4)	-0.194384	0.117255	- 1.657787	0.3455
LGOVT	8.199634	3.222484	2.544507	0.2384
LGOVT(-1)	6.118601	6.393508	0.957002	05140
LGOVT(-2)	-18.72509	8.389823	-2.231882	0.2682
LGOVT(-3)	-17.25449	7.374911	-2.339621	0.2571
LGOVT(-4)	-1.766390	5.540292	-0.318826	0.8035
INT	-0.570045	0.410399	-1.389000	0.3972
INT(-1)	-0.453488	0.580877	-0.780696	0,5780
UST(-2)	0.991915	0.683361	1.451525	0.3840
INT(-3)	2.649941	1,440791	1.839226	0.3,170
INT(-4)	0.467228	0.300384	1.555437	0.3637
C	52.86176	61.39677	0.860986	0.5475
P-squared	0.698996			
F-statistics	36.86636	Durbin-Watson Stat		2.019116

Prob. (F-statistics)	0.129590
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The result of the ARDL to analyze the short run effect of macroeconomic variables on unemployment in Nigeria. The endogenous coefficient of unemployment (UNE) showed negative relationships at lags 1 and 2. However, the probability values are greater than 0.05, which means that they are not statistically significant. This means that unemployment is not an endogenous variable in the model of the relationship between macroeconomic variables and unemployment nexus.

In another vein, the result showed that money supply (MS) have negative relationships in the current year and lag 3, and a positive relationship in lags 1, 2 and 4, respectively. However, the probability values of t-statistics are greater than 0.05 level at 411 the periods. This means that money supply does not have a significant short run effect on unemployment in Nigeria.

More so, the coefficient of inflation rate (INF) are negative in the current year, lags 2 and 4; and a positive relationship in lags 1 and 3, respectively. The p.values are greater than 0.05 indicating no significant short run effects. Thus the study posit that inflation rate does not have a significant short run effects on unemployment in Nigeria.

Likewise, exchange rate, government expenditure and interest rate have varying direction (negative and positive) of relationships with unemployment in Nigeria. In a similar note, the p.values are greater than 0.05 and thus the variables are seen to have no significant effect on unemployment in Nigeria. The study thus concluded that exchange rate, government expenditure and interest rate do not have a significant effect on unemployment in Nigeria.

The coefficient of determination shows the overall the explanatory power of the macroeconomic variables being the independent variables on unemployment as the dependent variable. Table 11 showed R² coefficient as 0.6989 which means that about 69% of the changes in unemployment dynamics in Nigerian can be explained by the selected macroeconomic variables (MS, INF, EXR, GOVT and 1NT) in Nigeria. The result of the F-statistics is 36.86636 which a corresponding p.value of 0.129590. Since the p.value is greater than 0.05, the study cannot reject the null hypothesis. Thus it posit that macroeconomic variables do not have significant short run effect on unemployment rate in Nigeria. The Durbin Watson of 2.019 suggests that the model is reliable.

Discussion of the Findings

This research examined the effect of macroeconomic variables on human capital development proxy by unemployment. Data were sourced from the Central Bank of Nigeria (CBN) statistical bulletin and World Bank development indicator 2018. The data generated were subjected to statistical analysis and the following output was ascertained.

Macroeconomic variables and Unemployment: The study found that Macroeconomic variables have a significant positive effect on Unemployment in Nigeria. The implication is that stable macroeconomic variables can reduce unemployment rate. The finding is in line with the study of Okafor (2014) which examine the effect of selected macroeconomic variables on unemployment rate in Nigeria using a battery co-integration tests. Results reveal a long run relationships between unemployment rate (UNER) and chosen

macroeconomic variables. This also agrees with the study of Zawojska (2010) who found positive significant relationship between macroeconomic variables and unemployment rate.

SUMMARY OF THE FINDINGS, CONCLUSION AND RECOMMENDATION

This study examined the effect of macroeconomic variables on the human capital development in Nigeria from the periods of 1986-2018. The result of the study are summarized as follows:

Macroeconomic variables including money supply, inflation rate, exchange rate, government expenditure and interest rate, were found to have significant long run effect but no significant short run effect on unemployment rate in Nigeria.

The study has shown that macroeconomic variables are authentic policy instruments for long run management of human capital development in Nigeria, especially in the areas of public health, unemployment. A combined management of money supply, inflation rate, exchange rate, government expenditure and interest rate has sufficient as short run policy instrument in managing the unemployment ratio of a developing economy as Nigeria. Money supply and government expenditure are the most powerful macroeconomic variable indicator in Nigeria.

- i. It is therefore recommended that 'relevant policy instruments be put in place to enhance job creation through the creation of favourable socio economic environment. This can be achieved by effective manipulation of the relevant policy instruments such as redistribution of income, employment drive, and diversification of the economy away from oil dependent.
- ii. Private sector investment should be encouraged by the government at all levels to create employment opportunities. Government should decrease trade restriction and this will result in an increase in openness of trade.
- iii. That government should ensure stable macroeconomic policies and also increase its expenditure in the area of infrastructural developments as a way to create more jobs and accelerate the growth of Nigerian economy.

REFERENCES

- Ademola, A (2016) Economics: A simplified approach oxford publisher, London
- Acha, I.A & Acha, C.K (2011). Interest rates in Nigeria: An analytical perspective. *Research Journal of Finance and Accounting*. 2. (3) 45-67
- Ajayi, I. (2008): "A portfolio approach to monetary supply determination in Nigeria", *Nigeria Journal of Economic and Social Studies*. 15(1):3-16
- Agbeyegbe R. (2004). Monetary policy, credit and aggregate supply: The Evidence from Italy. *Paper presented at the Royal Economic Society Conference, Nottingham, 29* (3) 1-4.
- Akanbi, O.B (2017) Impact of macroeconomic variables on Nigerian unemployment using the vector autoregressive approach, *International Journal of Research in Humanities and Social Studies* 2, (12)65-76

- Auwal A. M. Sa'idu, B.M, Nwokobia, O.J & Yakubu, K.M (2015), Effect of unemployment and inflation on wages in Nigeria, *Journal of Emerging Trends in Economics and Management Sciences* 4(2): 181-188
- Akintoye, I. R. (2008). "Enhancing the performance of the informal sector for the development of Nigeria: a case study of Lagos State" *International Journal of Social Sciences*, 5 (2) 56-67.
- Asari, F. F. A. H., Baharuddin, N. S., Jusoh, N., Mohamad, Z., Shamsudin, N., and Jusoff, K. (2011). A Vector Error Correction Model (Vecm) approach in explaining the relationship between interest rate and inflation towards exchange rate volatility in Malaysia. *World Applied Sciences Journal*, 12(3), 49-56.
- Aqil, M., Qureshi, M. A., Ahmed, R. R., and Qadeer, S. (2014). Determinants of unemployment in Pakistan. *International Journal of Physical and Social Sciences*, 4(4), 676-682.
- Akhtar, S., and Shahnaz, L. (2016). Understanding the youth unemployment conundrum in Pakistan: a Macro-Micro Analysis. *Indian Journal of Labour Economics*, 49(2), 233-248.
- Aminu, U (2014) Effects of unemployment and inflation on economic growth in Nigeria, published thesis submitted to the school of postgraduate studies, Ahmadu Bello University, Zaria
- Attahir B. A. (2016) Dynamic effects of fiscal policy on output and unemployment in Nigeria: An Econometric Investigation, *CBN Journal of Applied Statistics* 7 (2) 89-96
- Aliero, H.M., Ibrahim, S.S. and Shuaibu, M. (2013). "An empirical investigation into the relationship between financial sector development and unemployment in Nigeria". *Asian Economic and Financial Review*, 3(10):1361-1370
- Anyanwu, J. C., and Oaikheran (1995). *Modern macroeconomics: Theory and applications in Nigeria*. Onitsha: Joanee Educational Publishers Limited, Onitsha.
- Anyato, O (2016). Government expenditure effect on economic growth; the case of Sweden, 1960-2001. Department of business administrate and social sciences, Lulea university of technology Sweden
- Aminu, T. & Anono T (2012). Inflation - unemployment trade-off in less developed countries (LDCs): The case study of Nigeria. *Unpublished M.Sc. Thesis, Economics Department, Ahmadu Bello University (ABU), Zaria*
- Anyanwu, J.C. (1997). *Nigerian Public Finance*, Onitsha: Joanne Educational Publishers Ltd, Onitsha.
- Arshad, S. and Ali, A (2016). *Trade-off between Inflation, Interest and Unemployment Rate of Pakistan: Revisited*. *Bulletin of Business and Economics*, 5(4), 193-209.
- Babalola, O. O., Danladi, J. D. Akomolafe, K. J., Ajiboye, O.P. (2017) Inflation, interest rates and economic growth in Nigeria, *European Journal of Business and Management*, .7, (3) 91-104
- Bajomo (1996) in Ogbosi A.N. (2005). The Dynamic of Managing Chronic Unemployment
- Balami, G. (2014). Innovation and growth in developing countries. *Journal of Development Economics, July; Growth in Developing Countries, Journal of Economic Literature, September: Growth in the Global Economy. Cambridge, Mass: MIT Press*, 33(3)
- Bakare A,S (2017) Stabilization policy unemployment crisis and economic growth in Nigeria, *Universal Journal of Management and Social Science*, 2 (9) 23-33

- Benita, G. and Lauterback, B. (2014). Policy factors and exchange rate volatility: A Panel Data versus a Specific Country Analysis. *International Research Journal of Finance and Economics*. 5 (6) 34-45
- Cambazoğlu, B. and Karaalp, H.S. (2017). The Effect of monetary policy shock on employment and output: The Case of Turkey. *International Journal of Emerging Sciences*, 2(1), 23-29
- Cascio, A. (2016). An empirical analysis of the relationship between unemployment and inflation in Nigeria from 1977-2009. *Economics and Finance Review* 1 (8) 345-357
- Central Bank of Nigeria (2018). "Official Bulletin" Occasional Paper No. 32
- Chang-Shuai, L., & Zi-Juan, L. (2012). Study on the relationship among Chinese unemployment rate, Economic growth and Inflation. *Advances in Applied Economics and Finance*, Vol.1, No.1. World Science Publishers, United States
- Choudhri, E. U., and Khan, M. S. (2002). The exchange rate and consumer prices in Pakistan: Is Rupee Devaluation Inflationary? *The Pakistan Development Review*, 41(2), 107-120.
- Choudhry, M. (2013). Linking interest rates to unemployment: logical or dangerous? <http://www.cnbc.com/id/>.
- Doğrul H. G. and Soytaş, U. (2010). Relationship between oil prices, interest rate, and unemployment: Evidence from an Emerging Market. *Energy Economics*, 32 (6) 1523-1528
- Egbe, G & Awogbemi, C (2015) The impact of macroeconomic policies and programs on poverty problems, *Journal of Economics and Sustainable Development* .2 (9) 67-77
- Egbulonu K. G. & Amadi K. W. (2016) Effect of fiscal policy on unemployment in the Nigerian Economy, *International Journal of Innovative Finance and Economics Research* 4(3):1-7,
- Emeka E.O. (2013), Youth unemployment and implications for stability of democracy in Nigeria. *Journal for Sustainable Development in Africa* 13,(1) 125-136.
- Engler, P. (2011). "Monetary policy and unemployment in open economies". NCER Working Paper Series, No. 77.
- Euglama, J (2013) The issue of unemployment in Nigeria, university press Ibadan, international labour organization (ILO) world labour report 2 ILO office Geneva
- Ewubare, D.B. & Obayori, J.B. (2015). Fiscal policy measures and balance of payments in Nigeria. *Scholar Journal of Economics, Business and Management*, 2(9); 921-929
- Eze (1983) in Ogbosi A.N. (2005). The Dynamics of Managing Chronic Unemployment.
- Fatukasi B (2012). Determinants of inflation in Nigeria: An empirical Analysis. *Int. J. Humanit. Soc. Sci. Special issue Bus. Soc. Sci.* 8 (4) 262-271.
- Fasanya, I.O., Onakoya, A.B.O., and Agboluaje, M.A. (2013). Does monetary policy influence economic growth in Nigeria? *Asian Economic and Financial Review*, 3(5):635-646.
- Fashoyin (1987) in Ogbosi A.N. (2005). The Dynamic of Managing Chronic Unemployment.
- Faramariz, A.A, Awazalipour D. Khaleghi, K. & Hakimipur, Z.C (2014) Policy effect of financial deepening on economic augmentation in Ghana: a co-integration analysis, *Public Policy and Administration Research*, 7, (3), 27-36
- Fredric, O., & Izuchukwu (2013). The crowding out effect of budget deficits on private investment in Nigeria, *Journal for Sustainable Development in Africa* 13,(1) 125-136.
- Gbosi, A. N. (2015). *The dynamics of productivity and unemployment nexus: implications for employment generation in Nigeria*. Ibadan: The Nigerian Economic Society

- Göçer, I. (2013). Relation between bank loans and unemployment in the European countries. *European Academic Research*, 1, (6): 981 – 995
- Holden, S., & Sparrman, V. (2013). Do government purchases affect unemployment? <http://folk.uio.no/sholden/wp/fiscal-U.pdf> (Accessed October 20, 2018).
- Jhingan, M.L (2001). *Advanced Economics Theories*: Vrinda (P) Ltd, New Delhi
- Jhinghan, M.K (1990) *Macroeconomics theory* Vani Educational books, new Delhi
- Kamin, Steven B. (2007). A multi-country comparison of the linkages between inflation and exchange rate competitiveness, international finance discussion papers no. 603, board of governors of the federal reserve system, washington, DC.
- Khan, R. E. A., and Gill, A. R. (2010). Determinants of Inflation: A case of Pakistan (1970-2007). *Journal of Economics*, 1(1), 45-51.
- Layard R (2014) *The unemployment crisis* oxford university press, oxford
- Leahy J. (2013). "Investment in competitive equilibrium. the optimality of myopic behaviour". *Quantitative Journal. Economics*, 108: (3) 1105 – 1133
- Lipsey R. G. & Chrystal K. A. (2015), *An Introduction to Positive Economics* 8th Edition. Oxford: Oxford University Press, N.Y.
- Loganathan, N., Ishak, Y. and Mori, K. (2012). "Monetary shock and unstable unemployment in Malaysia: a dynamic interaction approach". *International Journal of Emerging Sciences* 2(2): 247-258.
- Mahmoud, A.J. (2013), "Impact of inflation and unemployment on Jordanian GDP". *Interdisciplinary Journal of Contemporary Research in Business*. 4(10) 78-84
- Mahmood, Y., Bokhari, R., and Aslam, M. (2013). Trade-Off between inflation, interest and unemployment rate of Pakistan: A Cointegration Analysis. *Pakistan Journal of Commerce and Social Sciences*, 7(3), 482-492.
- McCallum, B. T. (1989). *Monetary Economics Theory and Policy*. New York: Collier Macmillan Publishers.
- Miller, R.L and Pulsinelli (1989) *modern money and banking* 2nd edition, McGraw-Hill new York
- Mohammed, A., Okarafor, M., Awe, S. & Omoiye (2015). An empirical investigation into the effect of unemployment and inflation on economic growth in Nigeria. *Interdisciplinary Journal of Research in Business*, 2, (12) .01-14.
- Musgrave, R.A. & Musgrave, P.B. (1987). *Public Finance in Theory and Practice*. New Delhi: Tata McGraw Hill.
- Muhammad H. H. & Sahibzada M. H. (2017) The impact of interest rate on economic development: a study on Asian countries, *International Journal of Accounting & Business*, 5 (1) 56-77
- Muhammad U. & Raza U. (2013) Impact of GDP and inflation on unemployment rate: A Study of Pakistan Economy, *International Review of Management and Business Research* 2(2) 233-239
- Ngerebo-a., T.A & Ibe., R. C (2013). Exchange rate and macroeconomic performance in Nigeria: A Causal Post Structural Adjustment Programme Investigation. *Global Journal of Management and Business*
- Nwosa P. I (2014) "Government expenditure, unemployment and poverty rates in Nigeria" *JORIND* 12 (1) June, 2014.
- Nyahokwe, O., & Newadi (2013) Impact of exchange rate volatility on unemployment in South Africa, *Mediterranean Journal of Social Sciences*, 4 (3) 109-117

- Nwaokolo, J (2017) Problems of measuring unemployment in Nigeria, economics and financial review 26 (2) 39-45
- Obi (1980) in Ogbosi A.N. (2005). The Dynamic of Managing Chronic Unemployment.
- Ogbosi, A.N. (2005). "The dynamic of managing chronic unemployment in Nigeria depressed economy" A Paper Presented at the Inaugural Lectures Series No 42. June 3rd 2005 at the University of Port Harcourt.
- Okoth, N.M (2017), The effect of interest rate and inflation rate on exchange rates in Kenya, *International Review of Management and Business Research* 9(1) 133-139
- Obayori, J. B, (2016) Fiscal Policy and Unemployment in Nigeria, *The International Journal of Social Sciences and Humanities Invention* 3 (2) 2016: 2349-2031
- Orji, A. Anthony-Orji, Okafor, J.C (2015) inflation and unemployment nexus in nigeria: *another test of the phillip's curv*, *Asian Economic and Financial Review*, 5(5):766-778
- Oloye, D.O. (2012). Fiscal approach to balance of payments: a case of Nigeria. a published Ms.cthesis submitted to the department of economics and development studies, College of Development Studies Covenant University Ota, Nigeria, May, 2012.
- Onodugo, V.A, Obi, K.O . Anowor, O.F, Nwonye, N.G & Ofoegbu, G.N (2017) Does public spending affect unemployment in an emerging market, *Risk governance & control: financial markets & institutions* 7, (1), 20-32
- Onuoha I. P (2014) Impact of exchange rate variation and inflation on the economic growth of nigeria: An Empirical Approach, *Research Journal of Finance and Accounting*, 5, (2) 2- 16
- Okoli T. T., Mbah S. A. & Agu O. C. (2016) Exchange rate volatility and inflation: the nigerian experience, *Journal of Economics and Sustainable Development*, .7, (10), 6-10
- Osasohan, M.A. (2017). Does monetary policy influence economic growth in Nigeria? *Asian Economic and Financial Review*, 3(5):635-646.
- Obi, C (2007) Impact of foreign exchange volatility on foreign direct investment in Nigeria, *Global Journal of Management and Business Research*, 17 (6) 25-30
- Omotosho, P.A (2013) Theoretical and methodological issues relating to unemployment in Nigeria, *Nigeria stock exchange review* 4 (7) 12-19
- Philip I. N. (2014) Government expenditure, unemployment and poverty rates in Nigeria, *JORIND* 12 (1) 6-14
- Raphael, S., and Winter-Ebmer, R. (2011). Identifying the effect of unemployment on crime. *Journal of Law and Economics* 44 (1) , 259-283
- Raskin, S.B. (2011). Monetary policy and job creation. *A Paper Presented at the University of Maryland Smith School of Business Distinguished Speaker Series, Washington, D.C., September 26, 2011*
- Salam, M. A., Salam, S. (2016) Forecasting inflation in developing nations: The Case of Pakistan, *International Research Journal of Finance and Economics*, 3, (5). 138-159
- Samuelson P.A, & Nordhams W.A. (2010). *Macroeconomics*, 19th Edition, McGraw Hill, Boston.
- Singh, A., and B. Weisse, (2011). Corporate governance, competition, the new international financial architecture and large corporations in emerging markets. In: Publish in the Proceeding of United Nations Conference On Trade and Development. pp: 1-70.
- Sellon, G.H. (2014). "Expectations and the monetary policy transmission mechanism". economic review, *Federal Reserve Bank of Kansas City*; <https://www.kansascityfed.org/>

- Schiller, P. (2008). Unemployment in the european union: institutions, prices and growth. *CESifo Working Paper Series* 1247..
- Tairu Bello (2003) Attacking unemployment Hurdles in the fragile economics of the sub-Saharan African: the experience of Nigeria. A paper presented at the future-conferences, on the occasion of the celebration of 100 year of Cambridge, united kingdom
- Transparency International Nigeria (2018). Corruption Perception Index 2017 Report.
- Utile, B. J., Okwori, A. O. Ikpambese M. D. (2018) Effect of interest rate on economic growth in Nigeria, *International Journal of Advanced Academic Research | Social & Management Sciences*, . 4, (1) 66-74
- Yesufu, T.M (2014) The dynamics of industrial relations, the Nigerian Experience” university press LTD, Ibadan