

# **HIGH RATE OF UNEMPLOYMENT IN NIGERIA: THE CONSEQUENCE ON HUMAN RESOURCE MANAGEMENT**

**BY**

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### ***ABSTRACT***

The level of unemployment is a mirror image of the state of a nation's economy. Unemployment is the most exigent question facing policy makers and governments in recent times. Lack of gainful employment ranked high in the list of socio-political problems confronting Nigeria at present.

In Nigeria, over-dependence of the economy on oil brought a boom in the 1970s while economic recession set in since 1981. The recession has since had a very significant implication for the utilization of the country's human resources, leading to high level of unemployment. The problem has aggravated in the nation to the extent that many university graduates could not secure jobs, let alone school leavers.

According to the Federal Office of Statistics survey carried out in 1984, graduates from tertiary institutions formed 3.8% of the unemployed persons for urban areas, this rose to 9.9%, 16.5% and 20.8% in 1995, 1996 and 1998 respectively. Information from the survey also shows that out of the present output from the educational system entering the labour market as at 1996 which was 2.8 million, only 0.3 million were absorbed into the labour market.

The problem seems to be two-fold showing both demand and supply side. On the demand side, not only are there inadequate jobs for youths but also the increasing decline in quality of education and training, thus making many youths unemployed. On the supply side, the inability of the government to adequately finance the nation's educational enterprise has led to deteriorating infrastructural facilities and discouraging personal emoluments for teachers.

(Though the situation has improved a bit in recent times). It was discovered that despite various government policies and programmes aimed at reducing unemployment among the youths and adults, the problem of unemployment remains unabated.

Further, economic analysis shows that low real wage among other things will induce employment – this situation seems to be otherwise in the case of Nigeria. Despite the relatively low real wage, the economy cannot still create employment for considerable part of manpower resources.

Generally, this study is meant to examine the pervasiveness of unemployment problem in the Nigerian economy. Unemployment has been found to reduce national wealth. Increase in crime waves and socio-political violence can also be attributed to the high level of unemployment especially among the youths. The growing incidence of poverty in Nigeria can also be linked to the worsening unemployment situation. This study is therefore necessary to give insight into how unemployment can be reduced to the barest minimum.

## INTRODUCTION

The problem of unemployment has posed a great challenge to many countries (both developed and developing). In recent times, the incidence of unemployment in Nigeria has been deep and widespread, cutting across all facets of age groups, educational strata and geographical entities. Nigeria's unemployment problem is a post-independence phenomenon. According to the 1952/53 Census, the country experienced over-employment rather than unemployment during the early 1950s. This does not imply that all the people who were willing to work were employed; it only means that the unemployed were few and mainly structurally unemployed. They were either only temporarily out of employment or in the process of changing jobs. It also implies that the total number of people gainfully employed at the time exceeded the size of the potential labour force. Such a phenomenon can be explained in terms of the prevalence of child labour – persons aged less than 15 years being gainfully employed (Ojo, 1997).

Since the attainment of independence in 1960, the unemployment rate has been on the upward trend and infact, the rate attained in the 1990s are almost unprecedented in the history of a country that is supposed to be undergoing a development process. For instance in 1990, the national unemployment level was estimated at 3.2 percent (CBN, 1991), subsequently, the rate started declining and it fell to as low as 1.8 percent in 1995, but by 2000, the rate had risen to as high as 4.0 percent. According to the CBN 2003 report, the national unemployment rate was 2.3 percent. The observed decline could actually be attributed to increased informal sector activities, even though most of the people involved in such activities are actually underemployed. These declines may not truly reflect the situation in the labour market, as many of the unemployed are disenchanted and, therefore, may have no confidence in the employment exchanges to find them suitable jobs (Uniamikogbo, 1997).

## **LITERATURE REVIEW**

### **Concept of Unemployment**

This is the state of joblessness experienced by persons who as members of the labour force perceive themselves and are perceived by others as being able and willing to work but cannot find any. They are actively looking for paid employment without success under the prevailing economic circumstances. The International Labour Organization (ILO, 2000) defined the concept of unemployment as the proportion of labour force who are available for work, but did not do any work in the week preceding the survey period for at least one hour.

The Federal Office of Statistics (1996) defines the unemployed persons as including those that are aged 15 and over, who are actively looking for work but fail to find one during a particular reference period.

### **Categories of the Unemployed**

The actively unemployed people are those seriously looking for jobs but are unable to secure any. They not only registered in the Employment Exchanges but are always visiting the Exchanges for invitations to interviews (which often do not come). The partially unemployed refers to the group in the labour force, who because there are no suitable/adequate jobs, are involuntarily working part-time. They have the capacities to work full-time, but since full-time jobs are not available, they accept whatever job they can secure since "half loaf of bread is better than none".

The hidden unemployed are people who have become discouraged in their search for work and could not get any. They stop searching for work, as their ultimate feeling is that they will not find work no matter how hard they search.

The missing unemployed are categorized as those who are not available to be enumerated by the Survey Office. This can arise from a situation where people are not aware that it is necessary to make themselves available to the labour authorities for registration and enumeration.

Structural unemployment occurs as a result of changes in the structure of consumer demand and its technology, which alters the structure of demand for labour.

### **Causes of Unemployment**

Generally, labour unemployment is a disequilibrium phenomenon, which may arise because labour supply is in excess of its optimal level or because demand for labour is lower than it ought to be.

Bairoch (1976) argues that excessive supply of labour cannot be dissociated from the issue of the rate of growth of the population in that size and growth rate of labour force is said to depend primarily on the size and growth rate of the population. He further added that both have been growing too rapidly in developing countries, to the extent that employment expansion could not keep pace, thus resulting in growing unemployment.

Diejomah & Orimalade (1971) were of the opinion that in the situation of limited labour demand, the acceleration in the growth of labour force has led to increased unemployment problem in Nigeria and will continue to do so in the future unless corrective measures are taken. Another factor responsible for excessive labour supply is the rapidly growing urban labour force. This arises from rural-urban migration which generally transforms rural unemployment into open-unemployment in the urban centers. Edwards (1979) explains the rural-urban migration in terms of push - pull factors although the dividing line is quite thin.

The push factors are said to include the pressure resulting from a rising man-land ratio in the rural areas. In his own contribution, Todaro (1989) attributes rural-urban migration to the relative unattractiveness of rural life due to lack of basic amenities. He asserts that the pull factors include a constantly widening rural-urban income gap in favour of urban dwellers and a presumed higher probability of securing wage employment in the cities.

Ojebile (1986) reveals that the more cogent explanation of the growing unemployment especially in Nigeria is the neglect of the agricultural sector, which could have provided gainful employment for job seekers. Inadequate educational facilities such as non provision for thorough vocational training in the schools academic curricula and the entrepreneur's preference for capital intensive rather than labour intensive techniques of production have also contributed to growing unemployment.

Williams (1988) posits that our early development planners focused on maximum growth as being essential to full employment. They assumed that if all efforts were devoted to production, then unemployment could take care of itself. Consequently, employment oriented programmes were not formulated. On the demand side of the labour market, conventional explanations of low demand for labour and unemployment in less developed countries include shortage of complementary factors of production e.g. capital and materials. Others are technical rigidity arising from low factor substitution possibility, deficiency of aggregate demand and excessive capital intensity of the production process.

Todaro (2000) asserts that the downward wage inflexibility caused by various unions prevented the forces of labour supply and demand from clearing the labour market of excess labour supply, thus accelerating the problem of unemployment in the urban sector.

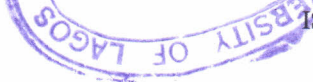
Rama (1998) shows that cultural factors also increases the length of time that job seekers spend on the job queue. Many first time job seekers take advantage of family support to wait for the suitable job opening thus rejecting existing work opportunities that are as at then unattractive to them – a case of voluntary unemployment.

Yesufu (2000) discovered that a new and profound cause of unemployment also derives from attempt to manage the economy with policy instruments that are irrelevant, ill advised and/or far in advance of the stage of development. Curiously, these policy instruments are fashioned and insisted upon by some international organizations notably the International Monetary Fund (IMF) and the World Bank (IBRD). The enforcement of the type of Structural Adjustment Programme (SAP) that was imposed upon Nigerian in 1986 is typical. The insistence, for example on rationalization of employment levels in the public service (i.e. a massive reduction in staff strength) without first addressing the issue of alternative job possibilities caused tremendous unemployment in the most important employment sector and threw into the entire national job market, the nation's most educated and most articulated manpower. The failure to pay their due retrenchment benefits for upward of three or more years greatly pauperized this class of unemployed to the extreme and also deprived them of the little they would have invested to build up their own businesses.

### **Unemployment and Real Wage**

Wage rate is crucial in the analysis of unemployment problem as it simultaneously influences the amount of labour to be demanded and supplied.

Classical economists attribute unemployment to a situation where labour market does not equilibrate because real wage is set at an inappropriate level. They gave two conceptually separate reasons why the real wage may fail to adjust the competitive equilibrium level. First,



the institution of the economy may not correspond to those of a competitive market, information may be costly and there may be traces of monopoly. Within the institutional context, markets are assumed to be uncleared and the associated level of unemployment is termed National Rate of Unemployment (rate of unemployment at which the economy normally settles because of its structural imperfections). Another reason for inappropriate real wage according to neo-classical economists is because workers hold incorrect expectations about the rate of inflation. They bargain over money wage to settle for a real wage, which unintentionally deviates from the equilibrium level. Further in their analysis, the demand for labour emanates from the profit maximizing intentions of firms under perfect competition. This leads firms to equate the real wage with marginal physical product of labour hence the demand for labour is a direct reflection of marginal physical product of labour function. The marginal physical product of labour will then be a decreasing function of the level of unemployment and so the demand for labour varies inversely with the real wage. Consequently, if the supply of labour exceeds the demand, there arises the problem of unemployment.

Keynes (1936) in his theory of employment disputed the classical analysis of employment and insisted on nominal wage flexibility. He argued that inadequate demand in the commodity market leads to involuntary unemployment. He however submits that once an economy moves into a situation of high unemployment, the price mechanism will not adjust the economy back to a high level of employment instead, government's qualitative policy will need to raise the demand for output by increasing public expenditure. Once demand has increased, firms would supply more output and employ more people, which in turn would further increase demand.

Levy & Newman (1989) submit that three reasons have been advanced as to why real wages may not be sufficiently flexible to clear the labour market. First, there may be legal reasons against the lowering of wages; second, if workers are unable to detect whether a firm is accurately presenting the demand for its products, they may resist wage cuts and prefer lay-offs and firings. Since an employer may want to decrease his employment level when times are bad, a lay-off may be a more credible indication of true demand conditions. Third, a firm's management might however resist wage cuts if it envisaged that resignations would reduce the efficiency of its work force.

### **Unemployment and Output**

In his "*Theory of Unemployment*", Pigou (1933) used the presumption that what was true of the individual market was true of the economy as a whole. The level of aggregate output and employment are found to be inversely related to real wage. It then follows that unemployment is directly related to real wage and inversely related to aggregate output.

Don Pantinkin (1949) opines that inability of firms to sell the quantity of output given by their supply schedules causes them to demand a smaller quantity of labour than that given by their National Demand Schedule. On the aggregate, as the effective aggregate demand for output increases, the level of unemployment will be reduced irrespective of whether real wage is fixed or not.

In his own contribution, Okun (1962) reveals that there is an inverse relationship between unemployment and domestic output. He came out with a theory that 1% decrease in the unemployment rate is associated with a 3% increase in output. This can also affect the

macroeconomic indicators such as foreign reserves and balance of payment position of the country.

Edwards (1979) contributes that government economists measure the cost of unemployment in terms of Gross National Product gap. The gap is the amount by which the actual Gross National Product falls short of potential Gross National Product. Unemployment creates divergence between the actual and potential Gross National Product as a result of loss in output from the unemployed manpower resources in the economy. According to Jhingan (2000) it is theoretically argued that given a technique of partial capital intensity, the growth rate of output and employment will be the same. But technical changes, which may be due to education, improved training and better management techniques, takes place over time. This tends to increase labour productivity. If labour productivity then increases, fewer workers are needed to produce the same level of output, thus causing unemployment in the economy. The apparent conflict between output and employment in the less developed countries arises from the fact that such economies have been using capital intensive techniques of production in major sectors. Since the use of imported, expensive and inappropriate capital intensive machines and equipments cannot be put to full capacity in such countries due to lack of technical personnel and infrastructural facilities like power, transport, raw materials, etc., then the average cost of production as a result of output cannot be maximized. Thus such capital-intensive technique leads to prevalence of unemployment in the economy.

### **Unemployment Situation in Nigeria**

There has been no consistent trend in unemployment rates in Nigeria. An increase in one or two years is sometimes followed by a decline in the subsequent years. For instance, in 1976, the unemployment rate was 4.3% and it rose to 6.4% in 1980. By 1983, it declined to 3.4% and by

1986 and 1987, it had risen again to 5.6% and 6.2% respectively (FOS, 1996). After the introduction of the Structural Adjustment Programme (SAP) in 1986, labour statistics recorded that the unemployment rate declined compared with the pre-SAP era. Evidence shows that unemployment rate fell from 6.2% in 1987 to a minimal level of 3.2% in 1990 and 1993. Between 1994 and 1995 the unemployment rate fell drastically below 2% but rose up again to 3.8% in 1996 until 2003 when it fell again to 2.3%. Available data suggest that unemployment rates vary by urban-rural residence, age, education and state of residence of the labour force participants (FOS, 1996).

The table below shows the average annual rates of unemployment for the years 1990 – 2004 by rural – urban place of residence.

**Table 1: National Unemployment Rates, Nigeria: 1990 – 2004**

<b>Year</b>	<b>Urban</b>	<b>Rural</b>	<b>Composite</b>
1990	5.73	2.85	3.38
1991	5.18	3.20	3.58
1992	4.83	2.98	3.50
1993	4.03	3.23	3.37
1994	3.03	1.83	1.95
1995	3.35	1.60	1.90
1996	5.90	3.40	3.80
1997	3.80	2.40	2.60
1998	5.50	3.50	3.90
1999	10.8	13.4	13.0
2000	14.2	19.8	18.1
2001	10.3	15.1	13.7
2002	9.5	13.3	12.2
2003	17.1	13.8	14.8
2004	11.0	12.1	11.8

**Source:** Federal Office of statistics (FOS), Lagos.

The table shows that the average annual rate of unemployment was higher in the urban areas than in the rural areas for each year between 1990 and 2004. In addition, the table also shows that, except for the 1991 rate which was slightly higher than that of 1990, unemployment rate seem to be on the decline since 1986. The observed downward trend may be attributed partly to the activities of the National Directorate of Employment (NDE), the Directorate of Food, Roads and Rural Infrastructure (DFRRI), the Better life for Rural Women Porgramme and the Peoples Bank. The general overall growth in the activities of small – scale enterprises, increased use of local raw materials, improved internal terms of trade between agriculture and the urban based activities that has resulted from enhanced producer prices of agricultural products are other important factors.

It has been observed that unemployment rate is usually highest among secondary school leavers, irrespective of place of residence. For instance, the Labour Force Survey of June 1996 indicated that unemployment rate was 52% among secondary school leavers. Among non-educated people, primary school leavers and post-secondary school graduates, the rates were 8%, 32% and 8% respectively (FOS, 1996)

Unemployment rate also varies by age. It is usually highest among the youths aged 15 – 24 years. The table below corroborates this finding.

**Table 2: Percentage Distribution of Unemployed Persons by Educational Level in the Urban Sector**

<b>YEAR</b>	<b>NO SCHOOLING</b>	<b>PRIMARY</b>	<b>SECONDARY</b>	<b>POST SECONDARY</b>	<b>ALL PERSONS</b>
1990	12.2	22.9	60.9	4.0	100
1991	15.1	15.5	65.0	4.4	100
1992	19.1	10.4	60.6	4.9	100
1993	15.3	17.7	60.0	7.0	100
1994	16.3	17.2	71.8	4.7	100
1995	4.2	14.9	68.1	12.8	100
1996	16.1	9.6	65.0	9.3	100
1997	18.1	11.0	64.7	2.2	100
1998	8.6	9.9	64.0	17.5	100
1999	16.1	8.4	65.3	10.2	100
2000	10.2	8.6	69.4	11.8	100

*Source: Federal Office of Statistics*

**Table 2** reveals that the level of unemployment is highest among secondary school leavers while it is lowest among post secondary school graduates. Persons with no schooling have relatively lower levels of unemployment than primary school leavers. It is assumed that persons with no schooling can easily take up apprenticeship in some artisan jobs that require no formal education. The high rate of unemployment among secondary school leavers may be attributed to the fact that many of them may be aspiring to further their education and in the process may be unemployed. In addition, having tasted education to that level, they may not want to take up artisan jobs. Most of them may be searching for white-collar jobs, which are not readily available. Relatively low levels of unemployment observed among post secondary school graduates may be due to the fact that they possess enough skills that can make them qualify for employment in the urban areas.

**Table 3: *Percentage Distribution of Unemployed by Educational Level in the Rural Sector***

YEAR	EDUCATIONAL LEVEL				
	NO SCHOOLING	PRIMARY	SECONDARY	POST SECONDARY	ALL PERSONS
1990	24.1	27.6	47.8	0.5	100
1991	19.5	26.4	52.4	1.7	100
1992	19.0	16.0	57.8	7.2	100
1993	17.6	17.9	61.1	3.4	100
1994	14.8	12.3	68.0	14.9	100
1995	21.8	41.4	31.0	5.8	100
1996	23.0	11.9	48.4	16.7	100
1997	21.1	11.8	46.2	20.9	100
1998	28.2	15.8	49.5	6.5	100
1999	20.7	12.9	59.4	7.0	100
2000	11.9	26.2	52.8	9.1	100

**Source: Federal Office of Statistics**

**Table 3** demonstrates the extent of unemployment in the rural sector of the economy. Just as it was in the urban sector, level of unemployment is highest among secondary school leavers. The proportion of unemployed secondary school leavers was 47.85% of the total unemployed in 1990 and 68% in 1994 but fell to 31.0% in 1995 but rose again to 59.4% in 1999 and slightly declined to 52.8% in the year 2000.

On the average, half of the unemployed persons are secondary school leavers. The striking feature of the unemployed in the rural sector is the increasing proportion of unemployed graduates. The proportion rose from 0.5% in 1990 to 20.9% in 1997. This may be due to increasing number of higher institutions in rural areas where most of their turn-out consist of rural dwellers with no jobs in the rural areas to cater for them after leaving school.

### **Specification of the Model**

High rate of unemployment in Nigeria has been attributed to educational expansion, increasing number of graduate turn-out from various educational institutions and failure of the economy to absorb all these graduates who have made the labour market to be over-saturated, thus culminating into unemployment problem.

A model showing the relationship between the level of unemployment and factors influencing it shall be specified. In order to avoid spurious inferences, the simple log-linear regression model will be employed. The variables will be expressed in logarithm to generate elasticities. Thus the model is specified as:

$$\log U = a_0 + a_1 \log \text{RGDP} + a_2 \log \text{RW} + a_3 \log \text{GT} + a_4 \log \text{CPI}_t + a_5 \log \text{POP} + E_t \text{-----}(1)$$

Where;

$a_1$  to  $a_5$  = Coefficients of the independent variables

log	=	Natural logarithm
RGDP	=	Real Gross Domestic Product @ 1984 current price
RW	=	Real Minimum Wage
GT	=	Graduate turn-out from various higher institutions
POP	=	Active Population
CPI <sub>t</sub>	=	Consumer Price Index with 1985 as base year
E <sub>t</sub>	=	Stochastic Term.

Equation (1) shows that various factors affecting unemployment are inflation rate, Gross Domestic Product, active population, real wage and graduate turn-out. Real Gross Domestic Product (Y) being one of the major economic indicators is included to capture the effect of unemployment on the economy. The inflation term (P<sub>t</sub>) is used to capture the unanticipated inflation effects on unemployment, while population and graduate turn-out (POP & GOT) are used to capture the intensity of the unemployment problem in the economy. Real wage (price in the labour market) is also expected to give significant information about unemployment.

### Theoretical Expectation

Theoretical expectations of the parameter estimates are as follows:

$$a_1 < 0; a_2 > 0; a_3 > 0; a_4 < 0; a_5 > 0$$

Real Gross Domestic Product is expected to have a negative relationship with the level of unemployment. If Real Gross Domestic Product increases, there is a tendency that more people will be employed, thus reducing the level of unemployment. Real wage, Graduate turn-out and population are expected to have positive relationship with unemployment. As population increases, the labour force is expected to rise, but if jobs are not available to match this increase in labour force, then the level of unemployment rises. Increase in graduate turn-out can also expand the labour force and if the absorptive capacity of the economy is too low to absorb these graduates, then the level of unemployment will increase. As real wage rises, demand for

labour falls hence level of unemployment increases. Inverse relationship is expected between inflation rate and unemployment. If inflation is maintained at low level, unemployment cannot be simultaneously kept at such low level.

### **Sources of Data**

The data for this study, which span between 1985 and 2005 were obtained from the Central Bank of Nigeria Statistical Bulletin Vol. 16 Dec 2005 and the Federal Office of Statistics Annual Abstract of Statistics, Lagos (2005).

### **Empirical Analysis**

This section seeks to investigate the magnitude of unemployment in Nigeria, using the following factors as parameters, real wage rate, inflation rate, graduate turnout, population and real gross domestic product.

A co-integration technique is used to determine these relationships while unit root test is conducted to determine the stationarity of the variables, using Augmented Dickey Fuller (ADF) and Phillips-Peron (PP) tests.

Table 4: Results of Model 1

<b>Dependent Variable: LUM</b> <b>Method: Least Squares</b> <b>Sample: 1985 - 2005</b>				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
lnRW	-1.567863	0.621162	-2.524081	0.0450
lnRGDP	-0.368237	0.138925	-2.650625	0.0380
lnPOP	5.867303	3.023111	1.940817	0.1003
lnGT	0.331357	0.107063	3.094979	0.0213
lnCPI	0.009336	0.268098	0.034822	0.9734
C	-3.819291	10.50455	-0.363585	0.7286
R-Squared	0.728693	Mean dependent var →		11.68949
Adjusted R-Squared	0.502603	S.D. dependent var →		0.224751
S.E. of regression	0.158509	Akaike info criterion →		-0.539160
Sum squared resid	0.150750	Schwarz criterion →		-0.296706
Log likelihood	9.234959	F-statistic →		3.223030
Durbin-Watson stat	2.939830	Prob (F-statistic) →		0.093315

**Source:** Own computations

Note: ln = log

### **The Significance of the Variables**

The individual significance of the explanatory variables (which includes Real Wages, Real Gross Domestic Product, Population, Graduate Turnout and Consumer Price Index) reveal that population and consumer price index are not relevant to explain the unemployment situation in the long run in Nigeria.

At 5% significance level, 100% increase in the real wage will reduce unemployment rate by 157% in the long run. We shall therefore reject the null hypothesis and conclude that real wage is significant to explain unemployment rate in Nigeria. At 5% significance level, 1% increase in national income will reduce unemployment rate by 0.37% in the long run. The null hypothesis will be rejected in favour of the alternative hypothesis which indicates the impact of national income on unemployment. At 5% significance level on the other hand, 100% increase in graduate turnout will lead to an increase in unemployment rate by 33.1% in the long run. The null hypothesis shall be rejected and we shall conclude that graduate turnout is significant to explain unemployment rate in Nigeria.

Considering the  $R^2$  (Co-efficient of determination), this indicates that 73% of the variations in unemployment is actually explained by Real Wages, Real Gross Domestic Product, Population, Graduate Turnout and Consumer Price Index, this is a good fit.  $R^2$  (Adjusted Co-efficient of determination) shows that even if all the missing variables are included, 50.2% of the variations in unemployment rate will still be explained by Real Wages, Real Gross Domestic Product, Population, Graduate Turnout and Consumer Price Index, this is also a good fit. The D.W. statistic on the other hand, which is above 2, shows the existence of negative autocorrelation

among the variables. This indicates that there is no correlation among the error terms, therefore the power of forecasting of the model is increased. The results of Akaike and Schwarz criterion reveal that the model is a good one, the lower the value of these criteria the better the model. The significance of the model using the indicators reveal that it is not a spurious model, another evidence of non spuriousity of the regression will be captured in the cointegration. The longrun relationship among variables can be revealed in the regression written below :

$$\ln UM = -3.82 - 1.57 \ln RW - 0.37 \ln RGDP + 5.87 \ln POP + 0.33 \ln GT + 0.009 \ln CPI$$

### Unit Root Test

The result of ADF unit root test is shown in Table 1 below. The tests show that all the variables have unit roots, and stationarity is obtained by differencing the variables once or twice. While the auto regression distribution lag (ADL) series of CPI is integrated of order 2 (i.e. 1(2), that of GT is integrated of order 1(1), POP is integrated of order 1(1), RW is integrated of order 1(2) as well as UM.



**Table 5: Augmented Dickey Fuller Unit Root Test (1985-2005)**

Variables	At Level	1 <sup>st</sup> Difference	Order Of Integration
CPI	- 0.3412	-2.44	1(2)
GT	-3.133	-4.41**	1(1)
POP	0.2064	-3.62***	1(1)
RW	-2.5236	-3.23	1(2)
UM	-1.0928	-23357	1(2)
RGDP	0.3875	-2.9038	-

*Source:* Own Computation

*For (CPI, POP, RW, UM, RGDP) , the critical value at 1, 5, and 10% respectively are -4.53, -3.67 and -3.28*

*For GT the critical value at 1, 5, and 10% respectively are -5.27, -3.99 and -3.44.*

*\* Significant at 1%*

*\*\* Significant at 5%*

*\*\*\* Significant at 10%*

**Table 6: Phillips-Peron Unit Root Test**

Variables	At Level	1 <sup>st</sup> Difference	Order Of Integration
CPI	- 0.1958	- 1.9886	1(2)
GT	-3.729***	-5.29*	1(0)
POP	0.5214	-4.77*	1(1)
RW	-2.55	-4.469**	1(1)
UM	-2.043	-4.29**	1(1)
RGDP	1.4911	-2.71	-

**Source:** Own Computation

*For (CPI, POP, RW, UM, RGDP), the critical value at 1, 5, and 10% respectively are -4.53, -3.67 and -3.28*

*For GT the critical value at 1, 5, and 10% respectively are -5.1152, -3.927 and -3.1044.*

*\* Significant at 1%*

*\*\* Significant at 5%*

*\*\*\* Significant at 10%*

To confirm co-integration in the model (among the variables) co-integration test was carried out using both residuals test and Johansen co-integration test. Co-integration is the linear combination of non-stationary variables, this aims to test the stability position of each of the variables in the long-run. Co-integration test also indicates the analysis of the regression in the long-run. The residuals co-integration test was done by making residuals from the regression in Table 7, then unit root test was conducted on the residuals. The rule is that if the absolute value of ADF statistics is greater than the critical values at level (i.e. stationarity of residuals) we shall conclude that the residuals does not have unit root, therefore, co-integration exists among the variables. From Table below, the absolute value of ADF statistics -4.04 is greater than the critical values -3.857, -3.04 and -2.66, therefore, we can conclude that co-integration exists at 1%. This explains that these variables in focus can reach equilibrium in the long-run. Another test of co-integration is Johansen co-integration test and this shown in Table 8.

**Table 7:Residuals Test**

<b>ADF Test Statistic</b>	<b>-4.044761</b>	<b>1% Critical Value*</b>	<b>-3.8572</b>
		<b>5% Critical Value</b>	<b>-3.0400</b>
		<b>10% Critical Value</b>	<b>-2.6608</b>

\*MacKinnon critical values for rejection of hypothesis of a unit root.

### Augmented Dickey-Fuller Test Equation

**Dependent Variable: D(RESID02)**

**Method: Least Squares**

<b>Variable</b>	<b>Coefficient</b>	<b>Std. Error</b>	<b>t-Statistic</b>	<b>Prob.</b>
<b>RESID02(-1)</b>	-1.802867	0.445729	-4.044761	0.0011
<b>D(RESID02(-1))</b>	0.182096	0.276217	0.659249	0.5197
<b>C</b>	0.000682	0.041132	0.016571	0.9870
<b>R-squared</b>	0.741090	Mean dependent var		0.033547
<b>Adjusted R-squared</b>	0.706568	S.D. dependent var		0.318764
<b>S.E. of regression</b>	0.172673	Akaike info criterion		-0.523827
<b>Sum squared resid</b>	0.447237	Schwarz criterion		-0.375432
<b>Log likelihood</b>	7.714444	F-statistic		21.46755
<b>Durbin-Watson stat</b>	1.961501	Prob (F-statistic)		0.000040

**Source: Own Computations**

**Table 8: Johansen Cointegration**

Test assumption: Linear  
deterministic trend in the data  
Series: LUM LRW LPOP LCPI LRGDP  
Lags interval: 1 to 1

Eigen value	Likelihood Ratio	5 Percent Critical Value	1 Percent Critical Value	Hypothesized No. of CE(s)
0.840445	83.85896	68.52	76.07	None **
0.679348	50.82235	47.21	54.46	At most 1 *
0.618419	30.34918	29.68	35.65	At most 2 *
0.513891	13.00742	15.41	20.04	At most 3
0.001311	0.023620	3.76	6.65	At most 4

\*(\*\*) denotes rejection of the  
hypothesis at 5%(1%)  
significance level  
L.R. test indicates 3  
cointegrating equation(s) at  
5% significance level

Source: Own Computations

From the co co-integration test we can conclude that the regression is not spurious.

**Table 9: Granger Causality Tests****Pairwise Granger Causality Tests****Sample: 1985 2005****Lags: 2**

<b>Null Hypothesis:</b>	<b>Obs</b>	<b>F-Statistic</b>	<b>Probability</b>
RW does not Granger Cause UM	18	0.76338	0.48589
UM does not Granger Cause RW		4.58295	0.03117
RGDP does not Granger Cause UM	18	8.50593	0.00435
UM does not Granger Cause RGDP		0.40567	0.67468
POP does not Granger Cause UM	18	2.13444	0.15791
UM does not Granger Cause POP		3.96488	0.04525
GT does not Granger Cause UM	10	0.12723	0.88329
UM does not Granger Cause GT		2.32030	0.19372
CPI does not Granger Cause UM	18	5.02418	0.02418
UM does not Granger Cause CPI		1.06261	0.37374
RGDP does not Granger Cause RW	18	0.88440	0.43640
RW does not Granger Cause RGDP		0.25295	0.78024
POP does not Granger Cause RW	18	2.32204	0.13732
RW does not Granger Cause POP		0.31611	0.73443
GT does not Granger Cause RW	10	0.03999	0.96111
RW does not Granger Cause GT		0.67746	0.54910
CPI does not Granger Cause RW	18	1.53886	0.25129
RW does not Granger Cause CPI		2.63102	0.10979
POP does not Granger Cause RGDP	18	2.18005	0.15260
RGDP does not Granger Cause POP		4.22726	0.03853
GT does not Granger Cause RGDP	10	20.6071	0.00385

RGDP does not Granger Cause GT		3.59530	0.10774
CPI does not Granger Cause RGDP	18	1.48173	0.26321
RGDP does not Granger Cause CPI		0.13185	0.87763
GT does not Granger Cause POP	10	340.667	4.5E-06
POP does not Granger Cause GT		2.76628	0.15527
CPI does not Granger Cause POP	18	2.40494	0.12922
POP does not Granger Cause CPI		3.46731	0.06211
CPI does not Granger Cause GT	10	0.65393	0.55940
GT does not Granger Cause CPI		20.9912	0.00369

**Source: *Own Computations***

From the granger causality Test in Table 9, we can conclude that there is a feedback mechanism among the variables, this indicates that as other variables explain unemployment, unemployment can also explain some macroeconomic problems.

### **Policy Implications and Recommendation**

The findings of this study have been seen to show important implication for economic development policy in Nigeria. For any economy especially a developing economy like Nigeria, there is a great and urgent need to vigorously tackle the problem of unemployment. Some of the means to this end are the adoption of:

#### **Population Policy**

The study reveals that population has significant influence on unemployment. The unemployment nightmare has been traced to high population growth rate. There is therefore the need to intensify efforts on population control policy so as to prevent the population from exploding/growing beyond the absorptive capacity of the economy. A situation where the labour force has been growing at 2.5% - 3% per annum calls for due attention by the government. The role of the Planned Parenthood Federation of Nigeria (PPFN) should be strengthened to enhance the acceptability of family planning as a part of population policy implementation strategy. Censuses should be depoliticized while vital registration statistics should become a more reliable source of demographic data in Nigeria.

#### **Educational Policy**

The educational policy measure that was introduced to address the mis-step in educational planning was the 6-3-3-4 educational system. A critical analysis of the system reveals that since 1982, at its inception, it still places a lot of emphasis on academic-oriented education, there is the need to re-orient it towards technical and vocational education as well as towards self-

employment as against its current bias towards academic (university) education. This will promote labour market goals of the economic system.

The view that technical and vocational education is for “drop-outs” should be corrected by public enlightenment, adequate funding, appropriate reward and enhanced prospect for technicians. It is expected that this will minimize the undue emphasis currently placed on academic credentials. Moreover, the vocational and technical schools, University of Agriculture and Technology should be properly staffed, equipped and funded.

Emphasis should be placed on facilitating the acquisition of skills, competence and abilities which are required by employers of labour and which are likely to stand the graduates of Nigerian Universities in good stead in the likely event that they are required to be self employed.

Also, there is the need for curricular reforms to cope with the challenges of graduate unemployment. It is essential to produce graduates who are able to monitor technological trends, assess their relevance to the country's prospects and help develop an appropriate National technology strategy towards effectively harnessing the country's human and material resources for the establishment and maintenance of National economic prosperity.

### **Human Resource Management Policy**

The government should ensure that available human resources are used as effective agents of growth and modernization through general mobilization and purposeful motivation. Generation of full employment and job security should be central to the human development strategy. Special attention should be given to the promotion of gender equality in human resource development and in all employment practices. Governments' implementation of well articulated

population policies will go a long way towards enhancing both human capital formation and optimum utilization of human resources.

### **Agricultural Policy**

A well managed agricultural sector will also solve the nation's unemployment problem. This can be achieved by proper collaboration with employment agencies such as the National Directorate of Employment (since NDE has a range of rural employment training schemes targeted at graduates and school leavers). This will increase and improve the participation of youths and graduates in the agricultural sector, serve as catalyst in reversing the declining interest of youths and graduates in agriculture.

### **Production Policy**

There is need for direct policy to increase the domestic output in order to stimulate employment. Since more people will be employed as domestic output is increased, increase in government public expenditure will also stimulate aggregate demand thus producing consequent effect of stimulating employment.

The other policy options include:

- Payment of unemployment benefits
- Stemming the trend of inflation so as to enhance the real wage of workers
- Re-awakening of labour exchanges to yield a more realistic estimate of unemployed persons.
- A reversal of the uncoordinated trend towards more labour intensive rather than capital-intensive techniques of production.

## CONCLUSION

This study has tried to examine the effect of rising unemployment on human resource management of Nigeria. The findings show that unemployment has significant influence on the population, Gross Domestic Product, real wage, graduate turnout and inflation rate in Nigeria. There is therefore the strong need for institutional collaboration and improved co-ordination of policy measures for dealing with unemployment. While there are some discernible lapses, the overall policy direction for employment promotion appears to be adequate, what is required is the political will to pursue the policy measures backed by adequate allocation of resources, adequate steps to make the policies work as well as transparency in programme implementation.

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