

Unemployment Challenges and Economic Growth in Nigeria

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Abstract

This study investigates the impact of unemployment on economic growth in Nigeria for a period of 41 years (1970-2010). The study focuses on determining the causes and impacts of unemployment, and how the problem of unemployment in Nigeria can be reduced minimally. It determines the relationship between unemployment and economic growth in Nigeria (GDP). The method of analysis used in testing the hypothesis was the T-test, F-test etc. the major findings was that unemployment has a negative impact on the gross domestic product (GDP) of the Nigerian economy. Some suggestions and policy recommendations were made based on the findings

Introduction

Unemployment is generally agreed to be one of the macro Economic ills affecting the Nigerian nation. This issue of Unemployment could be classified into voluntary and involuntary, voluntary is a situation where some people have some work but because they have other means of livelihood, they refuse to take up employment. On the other hand involuntary unemployment exists when persons are willing to work at the prevailing rate of pay but unable to find work. (Anyanwu 1995). It represents the number of people in the workforce who wants to work but do not have a job. Balogun, ed et al (2003) also defined unemployed as the proportion of the percentage of the labour force that is without job, but is able and willing to work. In Nigeria however the ability and willingness to work is not sufficient. It is necessary for the unemployed to be registered with an employment bureau in order to be recognized as unemployed. Yet, from an economic viewpoint, the unregistered unemployed are part of the labour force and are, therefore, technically unemployed. In Nigeria, unemployment data are obtained through labour force sample surveys which ask if the respondent has worked in the week preceding the survey. However, the international labour organization (ILO), realizing the shortcomings of the labour survey as it affects developing economies, such as Nigeria, with a large informal sector, has encouraged a review of the methodology to incorporate further disaggregation of respondent responses to bring out the true rate of unemployment.

Unemployment could be frictional, seasonal, structural and cyclical. In Nigeria, unemployment is regarded as one of the most challenging economic problem facing the Nation in both the urban and rural sectors of the economy. From the data, the 1985 figure shows the percentage of the national urban and rural unemployment as follows: national 6.10%, urban 9.8% and rural 5.2% and in year figure is as follows: national 3% urban 3.8% rural 2.7% (CBN 2004).

The rising population of the country which is faster than the job opportunities, a situation in which birth rate is rising, death rate falling and the population growth rate is between 2.5% and 3% unemployment is bound to exist. There is also a total neglect of the agricultural sectors and consequent mass exodus of able bodied youths from the rural to urban areas in search of white collar jobs. This further reduces employment in agriculture and puts pressure on existing urban jobs (Anyanwu 1995)

Theoretical Review

Keynesian Economist see unemployment as a situation in which the number of people able and are

willing to work at prevailing wage exceeds the number of job available and at the same time, firms are unable to sell all the goods they would like to sell (Bannock et al 1998). When carefully analyzed, the Keynesian unemployment largely applies to situations in Nigeria (Bello 2003)

Here, unemployment can result to a situation where many Nigeria consumers including the government prefers foreign goods than domestic goods, thereby causing the domestic producers to face with the problems of low demand that naturally forces them to lower Output and of course reduces work force. This experience continues in some firm specially the small scale ones till they are pushed out of the market resulting in the loss of more jobs, the long-term unemployment remains in the market for too long and thereby reducing his cause of job finding. Virtually, all countries exhibit negative direction dependence. That is, if one takes two unemployed people at random, one would expect that one with shorter unemployment duration to leave unemployment more quickly (Machine and manning 1998). According to Olueye (2006) classical economist argued that unemployment exist when unions maintain wages above their equilibrium level. When this happens, we have a situation of involuntary unemployment.

Keynesian unemployment is the part of total unemployment could help mop up by using fiscal and monetary policy to boost aggregate demand (Olueye 2006). Cyclical unemployment differs from structure and frictional (Lindbeck et al 1999). It is an unemployment result from lack of aggregate demand in a down swing in the business cycle (Bannock et al 1998). For instance in Nigeria, since the collapse of oil boom in the late seventies, the economic has generally remained in a passive state even though some other period of oil price surge were later experienced (Bello 2003). What sound like cyclical unemployment in the most sub-Saharan Africa economist is the seasonal unemployment that is inherent in the agricultural sector then it may be best described as the very long Kondratieff cycle which lasts for over a period of fifty years (Bello 2003). This implies that to solve unemployment problem, it is simply to remove the artificial critical ceiling placed by the union. The demand deficit or cyclical unemployment is the disequilibrium level of involuntary unemployment caused by the combination of low aggregate demand and sluggish wage adjustment.

The classical case of unemployment is premised on the inflexibility of wages. Unemployment result because labour, due to organize activities, do not allow wage to decline for the accommodation of

excess labour force, when there is incidence of unemployment. Given-wage-price flexibility, there are automatic forces in the economic system that tends to draw the economy into equilibrium state. (Jhingan, 2000).

Unemployment incidence from classical perspective cannot really be situated in most sub- Sahara Africa economies. Although, price flexibility is not actually feasible due to trade union activities, but its existence wouldn't have efficient claim of unemployment. This is because for instance, in Nigeria, most sector if not all especially the public sector enterprise have the problem of labour redundancy due to over staffing (Bello 2003).

Macro-economic model of structural employment assume that unemployed workers are not able or willing to get jobs by underbidding the prevailing wages of incumbent workers.

The most obvious microeconomic explanation of the absence of wage underbidding is perhaps the minimum wage laws. But there seems to be rather general agreement among labour market economist that minimum wages have not been high enough in recent decades in developed countries to explain much of aggregate structural unemployment (Lindbeck 1999). So the problem is not that of wage price inflexibility or wage under binding declination but that of poor economic growth that is unable to sustain the population and labour supply growth rates.

Thirlwall (1983) referred to the concept of disguised unemployment which he defined as the Gap between the actual numbers of workers available for employment and the level of employment at which the marginal product is below the institutional or subsistence wage. He was of the opinion that since there are many reasons, particularly in developing countries, why labour may be fulfilling its potentials and why small changes may release substantial quantities of labour, we should be concerned with dynamic rather than static surplus. Parkin (1998) added that unemployment rate is the percentage of the people in the labour force who are employed. According to him, the unemployment rate is the best available measure of under those who do not have a job, are available for work and are willing to work but do not have the efforts to find work and measure unemployed people rather than unemployed labour hours as a result excluding part time workers who want full time jobs. He however noted that unemployment is a persistent feature of economic life.

Begg (1994) classified unemployment into frictional,

structural demand deficient (Keynesian) and (classical). He saw frictional unemployment in a dynamic society which includes people whose physical or mental handicaps make them almost unemployable and those who are temporally unemployed as a result of changing jobs. Structural unemployment arises because there is a mismatch of skills and job opportunities when the pattern of demand failing and wage is deliberately maintained above the level at which the labour demand schedule intersect. He held that behavioural implication of types of unemployment and the consequences for government policy have necessitated different classification of modern analysis of unemployment. A worker is involuntary employed if he or she would accept job offer at the going wage rate. Employment and unemployment in developing countries have been the concern in recent years to the extent that international labour force has sponsored missions to several countries to undertake detailed analysis as part of world employment programmed (Olueye 2006).

Theoretical Link Between Unemployment and Economic Growth.

The market search theory imply that increase rate of job turnover is higher in natural rate of employment (Prescott and Lucas 1974). There some empirical audience to show negative long-run relationship been rates of Davis et al (1997) show that period of unemployment are periods of high firm level job turnover.

The source of unemployment in the model is the relocation of labours across firms. That is the unemployment is of transitory nature. Reallocation is triggered by the fixed overhead cost of human capital growth of rate (g) but technology of plan is fixed, that at some of plant is shut down by the firm (Mass 2005).

Empirical Literature

Tabeuina (2000) found empirical support by raising a hypothesis that unemployment has a negative effect on economic growth while Layard and Nickell (1999) cannot find the labour market institution that increase unemployment also lower economic growth. It is quite possible that some institutions that affect unemployment also affect economic growth and the level of output in Nigeria.

Lindbeck (1999) found that structural unemployment by not disappearing in cyclical booms. Using the(PSvs.uds model as the analytical framework for the paper). The model are also related to search model for labour market in which unemployment equilibrium is defined as a situation where the number of individual finding jobs equals to the

number of individual who are separated from jobs. It points various factors that influence the level of structural employment which is different in time and place. Olson (1984) argues that democratic societies tend gradually to become more organized in strong pressure groups that for income distribution reasons have an interest in blocking the changes necessary for high growth.

Downes (1998) investigated the necessary condition for reducing the unemployment rate in Trinidad and Tobago from the period 1971-1996. Using the error correction model estimated by OLS (ordinary least square) instrumental variables, he found that in both long and short runs, changes in Real Gross Domestic product (RGDP) and Real Average Earning (RAE) have a statistical impact on changes in the unemployment rate. While increase in GDP reduces the unemployment rate in both short and long terms but lower it in the short-run. Increase in real average earning increase the unemployment rate on the long-run.

Levin and Wright (2000) find that it is important but difficult to distinguish between desirable effects of unemployment insurance that are observationaly equivalent when designing optimal unemployment insurance cause“ permanently higher involuntary unemployment by raising the reservation wage. The paper avoids the problem by regarding the trade-off between the unemployment insurance replacement rate and unemployment as an intermediate relationship that matters only as far as it impacts economic growth. Using annual panel data finds that unemployment insurance replacement rate is associated with higher unemployment. However they find no significant relationship between unemployment insurance, related on employment and the real growth rate of domestic product. Nigeria has been bedeviled with poverty and unemployment. Economic growth which is supposed to be a solution to the problem of unemployment appears not to be so in Nigeria.

Simbowale (2003) empirically evaluated macroeconomics policies vis-à-vis pro-poor economic growth in Nigeria using secondary data covering the period of 1960-2000. The study found among others that growth was actually weakly pro-poor. Also, those that are far below the poverty line have not really been enjoying the benefits of economic growth. In fact, the benefit getting to them has been decreasing or reducing at an increasing rate. And that economic growth in rural areas will be slightly more pro-poor than in urban

areas. Overall, economic growth in Nigeria is not necessarily always pro-poor.

Bello (2003) investigated the phenomenon of unemployment in the sub-Saharan Africa with special reference to the Nigerian experience. Having diagnosed the nature of this episode in this sub-Saharan region, the study unfolds a number of factors that account for this phenomenon and of course the great threat it poses the economies involved. Assessment of past and the present anti unemployment policy measures in Nigeria was made and the result shows that a number of economic factors inhibit their performance.

Methodology

The work is conducted using multiple regressions, statistical and econometric tools in analysis.

Model Specification

To determine the relationship between unemployment and output we specify the model as:

Mathematical form

$$GDPGRT = f(UNEMP, GEXP, MS)$$

Statistical form

$$GDPGRT = \beta_0 + \beta_1 UNEMP + \beta_2 GEXP + \beta_3 MS$$

Econometric form

$$GDPGRT = \beta_0 + \beta_1 UNEMP + \beta_2 GEXP + \beta_3 MS + \mu$$

MS=Money supply

UNEMP= Unemployment rate

GDPGRT= Growth rate of gross domestic product

GEXP= Government expenditure

β_0 = the interception of the model

β_1 & β_2 & β_3 = the coefficient of the independent variables

μ = error term that is used to capture other variables, that are not included in the model.

It is expected to be purely random.

Results and Discussion of Findings

TABLE 1
Dependent variable: Growth Rate of Gross Domestic Product.

Method: Ordinary Least Square. Period of study: 1970 –2010 Included Observations: 41					
Variable	Coefficient	Standard error	t-statistics	t-prob.	{95% CI}
Constant	1.64733	0.5149781	3.20	0.003	0.6038853 2.690775
GEXP	0.3706984	0.3157561	1.17	0.248	-0.2690842 1.010481
LM2	0.6660841	0.2957697	2.25	0.030	0.0667978 1.265371
UNEMP	-0.054259	0.0266592	-2.04	0.049	-0.1082757 0.0002423
$R^2 = 0.9509$ $F(3,37) = 238.85$ {0.0000} $Adj R^2 = 0.9469$ $DW = 2.144141$ $Root MSE = 0.62294$ for 4 variables and 41 observations.					

The intercept value of 1.64733, shows that the Nigerian economy will experience a 1.64733 increase when all other variables are held constant.

The estimated coefficients of 0.3706984 {GEXP} shows that a unit change in GEXP will cause a 0.3706984% increase in GDPGRT, 0.660841 {LM2} shows that a unit change in LM2 will cause a 0.660841% increase in GDPGRT and -0.054259 {UNEMP} shows that a unit change in UNEMP will cause a 0.054259% decrease in GDPGRT.

Economic A priori Criteria:

The test is aimed at determining whether the signs and sizes of the results are in line with economic theory. Thus, economic a priori has it that the coefficients are positively related to the dependent variable, if an increase in any of the explanatory variables leads to a decrease in the dependent variable. Therefore, the variable under consideration and their parameter exhibition of a priori signs have been summarized in the table below.

This table will be guarded by these criteria
 When $\beta > 0$ = conform.
 When $\beta < 0$ = not conform.

TABLE 2

Variables	Expected signs	Estimate	Remark
GEXP	+	$\beta > 0$	Conform
LM2	+	$\beta > 0$	Conform
UNEMP	-	$\beta < 0$	Conform

From the above table, it is observed that all the signs of the parameters actually conform to the economic a priori.

The positive relationship which exists between GEXP, LM2 and GDPGRT indicates that an increase in either GEXP and/or LM2 will result in a positive change in the Growth Rate of Gross Domestic Product. This conforms to the a priori criteria because an increase or high GEXP and LM2 over the years will increase GDPGRT in the economy.

**Statistical Criteria {first order test}
 Coefficient of Multiple Determinants {R²}:**

The R² {R-Squared} which measures the overall goodness of fit of the entire regression, shows the value as 0.9509 which is approximately 95%.

This indicates that the independent variables accounts for about 95% of the variation in the dependent variable.

The Student's T- test:

The test is carried out, to check for the individual significance of the variables. Statistically, the t-statistics of the variables under consideration is interpreted based on the following statement of hypothesis.

H₀: The individual parameters are not significant.

H₁: The individual parameters are significant.

Decision Rule:

If t-calculated > t-tabulated, we reject the null hypothesis {H₀} and accept the alternative hypothesis {H₁}, and if otherwise, we select the null hypothesis {H₀} and reject the alternative hypothesis {H₁}.

Level of significance = 0.025 = α at 5% =

Degree of freedom: n-k

Where n: sample size.

K: Number of parameter.

The t-test is summarized in the table below:

TABLE 3

Variables {t-value}	t-tab	Remark
GEXP {1.17}	± 1.960	Insignificant
LM2 {2.25}	± 1.960	Significant
UNEMP {-2.04}	± 1.960	Significant

The t-statistics is used to test for individual significance of the estimated parameters, β_1, β_2 and

F-Statistics:

The F-statistics is used to test for simultaneous significance of all the estimated parameters.

The hypothesis is stated;

$$H_0: \beta_i = 0 \quad (i= 0, 1, \dots, n)$$

$$H_1: \beta_i \neq 0 \quad (i= 0, 1, \dots, n)$$

Level of significance: α at 5%

Degree of freedom: 2

Decision Rule:

If the f-calculated is greater than the f-tabulated {f-cal > f-tab} reject the null hypothesis {H₀} that the overall estimate is not significant and conclude that the overall estimate is statistically significant.

From the result, f-calculated {238.85} is greater than the f-tabulated {2.84}, that is, f-cal > f-tab. Hence, we reject the null hypothesis {H₀} that the overall estimate has a good fit which implies that our independent variables are simultaneously significant.

Econometrics Criteria

Test for Autocorrelation:

One of the underlying assumptions of the ordinary least regression is that the successive values of the random variables are temporarily independent. In the context of the series analysis, this means that an error {U_t} is not correlated with one or more of previous errors {U_{t-1}}. The problem is usually detected with Durbin-Watson {DW} statistics.

Decision Rule:

- 1) If $d^* < d_L$, then we reject the null hypothesis of no correlation and accept that there is positive autocorrelation of first order.
- 2) If $d^* > \{4 - d_U\}$, we reject the null hypothesis and accept that there is negative autocorrelation of the first order.
- 3) If $d_L < d^* < \{4 - d_U\}$, we accept the null hypothesis of no autocorrelation.
- 4) If $d_L < d^* < d_U$ or if $\{4 - d_U\} < \{4 - d_L\}$, that test is inconclusive.

Where: d_L = Lower limit

d_U = Upper limit

d^* = Durbin Watson. From our regression result, we have; $d^* = 2.144141$, $d_L = 1.338$, $d_U = 1.6594$

$d_L = 2.6624d_U = 2.341$

Conclusion:

Since $d_U \{1.659\} < d^* \{2.144141\} < \{4 - d_U\} \{2.341\}$, we accept the null hypothesis of no autocorrelation positive or negative

Normality Test for Residual:

The Jarque-Bera test for normality is an asymptotic, or large-sample, test. It is also based on the ordinary least square residuals. This test first computes the skewness and kurtosis measures of the ordinary least square residuals and uses the chi-square distribution {Gujarati, 2004}.

The hypothesis is:

TABLE 4

	UNEMP	GEXP	LM2	REMARK
UNEMP	1.000			-
GEXP	0.6735	1.000		Nm
LM2	0.6940	0.9924	1.000	Nm, M

Where M = Presence of multicollinearity

Nm = No multicollinearity.

From the above table, we can conclude that multicollinearity exists only between LM2 and GE

Conclusion

From the study carried out on the impact of unemployment on economic growth in Nigeria from 1970 - 2010 using ordinary least square, data shows that unemployment is negatively related to the economic growth.

The economic analysis of the findings in table 2 shows that the variables under consideration conform to a priori expectation of economic theory. The statistical evaluation equally shows a higher level of statistical significance (table 2).

The evidence stems from the fact that the T- statistics on the variables shows that GEXP is insignificant while LM2 and UNEMP are significant as shown in table 3.

Based on this, the R², which had a value of 95% indicate that the entire regression had a good fit and also explains that 95% fluctuation in the dependent variable is expended by fluctuation in the regression.

More so the F-test showed that the entire regression was adequate. the summary of the whole regression has shown that overall regression is statistically significant implying a good fit. The econometric finding shows that from then Durbin Watson test (DW) that all the variables under consideration were stationary at order. That is, the absolute values of DW statistics are greater than various critical values at 5%. The normality test shows the residual is normally distributed at 5% level of significance. And the test for autocorrelation shows that there is no serial autocorrelation present in the model. The test for multicollinearity, in table 4 shows that there is multicollinearity between the regressors. But has noted by Blanchard quoted by Gujarati (2004) a good model cannot be discarded due to multicollinearity. As well as test for heteroscedasticity conclude that the error term has a constant variance and that in the test specification errors is not wrongly specified. From the evaluation of the forecasting performance of the model, it shows that the predictive power of the model is fairly robust and reliable. Finally GDP growth does not cause unemployment but rather unemployment causes GDP growth.

Recommendations

In the light of the above empirical findings the analysis carried out so far, the following recommendations are proposed to the government in the issue of unemployment in Nigeria would be minimized.

1. There is need for the government to revitalize the agricultural sector, modern equipment in agricultural facilities is likely to entice the youths into that sector, since the sector have been left in the hands of the old men.
2. Government should formulate policy that will aim at discouraging gender discrimination in the labour market since this will provide more opportunities for the females in the labour market participation final.
3. Government should embark on provision of social amenities in the rural areas so as to reduce the urban –rural drift which have consequences of reducing the rate of unemployment.
4. There is need for government to restructure the educational system in a way it will lead to the youths with capability of self-reliance and self-employment.
5. Government should formulate monitoring policy to check the channel of increase government spending to find out why the huge spending has not transmitted into a viable economics growth.
6. The government should embark on social security program that would help in elevating the unemployment condition of the people in Nigeria.

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