Does Unemployment Significantly Impact on Economic Growth in Nigeria?

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Abstract- This study examines the impact of unemployment on the economic growth of Nigeria from 1985 to 2010. The Ordinary Least Squares (OLS) and Augmented Dickey-Fuller methods are used to estimate the model of one dependent variable (Real GDP growth rate) and two explanatory variables (inflation and unemployment). It was found that unemployment does not have a significant impact on the economic growth of Nigeria. Inflation, however, was found to significantly impact on the economic growth of Nigeria. Recommendations are also made to help accelerate the rate of growth.

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I. Introduction

Achieving the macroeconomic goals of any country involves maintaining price stability, achieving full employment, and attaining the highest level of growth and development. The second goal, which is achieving full employment means maintaining a zero unemployment level. This is because full employment is the absence of unemployment of any kind. But it is a clear fact that zero unemployment cannot be achieved by any country, because there is always a level of voluntary unemployment (that is, people who are able to work but decide to be unemployed).

Unemployment is an important determinant of the level of growth and development which a country can attain. According to Seer (1969), a country cannot claim to be developing and yet experience a high level of poverty, unemployment, and inequality. This shows the important role unemployment plays in the process of economic growth.

Seer’s assertion is exactly what is obtained in Nigeria today. It is said that Nigeria is the ‘Giant of Africa’. Nigeria is well endowed with natural resources. These resources if well harnessed could make Nigeria the most developed country in the world. But high level of unemployment, poverty and economic inequality continues to mar actions of the government to develop the country.

Every year, over 90 universities in Nigeria produce thousands of graduates. This is a good thing to hear, except that they linger in the labour market without jobs. Employers chalk it up to them not being qualified for the available jobs. Out of frustration, most of them end up engaging in various social vices such as robbery, kidnapping, drug trafficking, etc just to earn a living.

II. Problem and Objective

One of the major problems facing Nigeria today is the problem of unemployment. In fact, unemployment in Nigeria has assumed an upward trend over the years. According to Bello (2003), the problem of unemployment has always been an issue of great concern to the economists, policy makers and economic managers alike; given the devastating effect on individuals, the society and the economy at large. A look at the unemployment and economic growth trend of Nigeria will show that high unemployment hinders growth.

The government, however, has employed different policy measures to combat unemployment in order to encourage growth. They range from increases in government expenditure, giving industrialists tax holiday to encourage industrialization and even the use of monetary policy instrument such as reducing commercial bank lending rate to encourage investment through borrowing.

Recently, the idea of self-employment (Entrepreneurship) is gaining popularity. This, the government encourages by giving young entrepreneurs funds to start up their own business. Despite all these efforts, unemployment continues to be on the increase and hinders growth. It is against this background that this paper seeks to investigate how unemployment impacts on economic growth, in order to offer solutions as to how to accelerate the rate of growth of the Nigerian economy.

III. Literature Review

Selective authors are reviewed here to see what they have said concerning unemployment and economic growth.

Ogunrinola and Sodipe (2011) estimated a simple regression model using the Ordinary Least Square (OLS) method. The result showed that a positive and statistically significant relationship exists between employment level and GDP growth in Nigeria.

Freeman (2001) used new developments in trend cycle decomposition to test Okun’s Law for a panel of ten industrial countries, that Okun’s original estimate for the U.S. of three points for each one percent reduction in the unemployment rate now averages at just under two points or real GDP growth for the sample countries. Pooled estimates for Europe are
smaller than estimates for the rest of the sample. He concluded that the law is still capable of proving estimates of the effects of unemployment on GDP.

Khan, Khattak and Hussain (2012) investigated the inter-relationship of GDP growth and unemployment in Pakistan. They used time series data from 1960 to 2005. They initially used the Augmented Dickey-Fuller (ADF) test and the results were stationary at first difference. Then they used the Johansen Co-integration test. Their results showed that 1% increase in GDP reduced unemployment by 0.63% on the one hand, and that 1% decrease in unemployment increased GDP by 7.25% on the other hand. Their results also showed that GDP in the long run had a negative relationship with unemployment.

Jaradat (2013) examined the impact of unemployment and inflation on Jordanian GDP using time series data from 2000 to 2010. He used the OLS method to estimate his model, and the result showed that increase in inflation by 0.906% raised GDP by 1%. The results further showed that a decrease in unemployment by 0.697% increased GDP by 1%. He then concluded that GDP and unemployment have negative significant relationship, but GDP and inflation have a strong positive significant relationship.

Hussain, Siddiqi and Iqbal (2010) investigated the relationship between economic growth and unemployment in Pakistan using times series data from 1972 to 2006. They employed the ADF test for unit root and all variables were stationary at first difference. As a result, they used the Johansen Co-integration to check for long run relationship between the variables. The result showed that GDP growth, unemployment, labour, capital, and openness to trade have long run relationship. The overall result showed that GDP growth rate has negative relationship with unemployment.

Shua Li and Zi-Juan Liu (2012) conducted a study to determine the relationship among Chinese unemployment rate, economic growth and inflation. They employed Granger causality test, unit root, co-integration, VAR and VEC model. The study showed that unemployment impacted negatively on economic growth while inflation impacted positively on growth in China. Their study also showed that no causation existed between unemployment and inflation, but there was causation between unemployment and growth, while two-way causality existed between inflation and growth.

From the selective review carried out, it can be seen that one thing is common to all of them, and it is that a negative significant relationship exists between unemployment and economic growth. This means that economic growth could be accelerated effectively by reducing the level of unemployment in the economy.

### IV. Research Methodology

This work effectively captures the effect of unemployment on economic growth of Nigeria using the OLS method together with the ADF test for unit root. The framework of this study is based on the unbalanced growth theory of economic growth. The theory attributes underdevelopment to factors such as widespread poverty, low levels of productivity, unemployment, backward industrial structure, great dependence on agriculture, a high proportion of consumption and low savings, high rates of population growth and the existence of dualism in the economy.

This study models Real GDP Growth Rate (RGGR) as a function of Inflation Rate (INF) and Unemployment Rate (UNEMP). The model is specified below as

$$\text{RGGR} = B_0 + B_1\text{INF} + B_2\text{UNEMP} + U_i \quad (1)$$

### V. A Priori Expectations

This shows whether or not the explanatory variables conform to the postulations of economic theory in terms of their signs and magnitudes. According to economic theory, inflation has a positive relationship with economic growth while unemployment has a negative relationship with economic growth. If the estimates do not conform to what we have above then they must be rejected unless there are strong reason that will lead to their acceptance.

### VI. Data and Sources

Secondary time series data from 1985 to 2010 obtained from the Central Bank of Nigeria (CBN) Statistical Bulletin are used in this study.

### VII. Results

The result of the unit root test shows that the dependent variable is stationary at level while the explanatory variables are stationary at first difference. As a result, there is no need to perform co-integration test to test for long run relationship between the variables of the model. The estimated result is shown below.
Table 1: Regression Result

Dependent Variable: RGGR
Method: Least Squares
Date: 09/26/15   Time: 08:59
Sample: 1985 2010
Included observations: 26

HAC standard errors & covariance (Bartlett kernel, Newey-West fixed bandwidth = 3.0000)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>5.275398</td>
<td>0.741156</td>
<td>7.117800</td>
<td>0.0000</td>
</tr>
<tr>
<td>INF</td>
<td>-0.166416</td>
<td>0.020706</td>
<td>-8.037043</td>
<td>0.0000</td>
</tr>
<tr>
<td>UNEMP</td>
<td>-0.191311</td>
<td>0.111410</td>
<td>-1.717177</td>
<td>0.0994</td>
</tr>
</tbody>
</table>

R-squared 0.463349   Mean dependent var 2.583454
Adjusted R-squared 0.416684   S.D. dependent var 5.941012
S.E. of regression 4.537455   Akaike info criterion 5.970777
Sum squared resid 473.5355   Schwarz criterion 6.115942
Log likelihood -74.62010   Hannan-Quinn criter. 6.012579
Prob(F-statistic) 0.000779

The R² shows that inflation and unemployment explain only 46.33% of the variations in growth rate in Nigeria for the period under study. Inflation has a significant negative impact on growth given that it is negatively signed with a probability value of 0.0000. Unemployment on the other hand is correctly signed but it does not have significant impact on economic growth in Nigeria given a probability value of 0.0994. The F-statistic of 9.9292 shows the overall significant of the model. The Durbin-Watson of 3.108294 shows the presence of negative autocorrelation. However, this was corrected by estimating the model with the Newey-West HAC standard errors.

The fact that unemployment does not impact significantly on economic growth could be because though efforts have been made to reduce unemployment, the employed work force do not contribute enough to the GDP growth. This could be because of lack of the necessary skills and training. Again, there is high incidence of ghost workers in the economy. Though they are counted among the employed citizens, they end up not adding a single quota to the output of Nigeria, because they are ‘ghosts’ that work.

Again, in Nigeria, we see people who have reached the retirement age, but they don’t want to pave way for younger population to get employed. Given that they are already old, they don’t contribute anything reasonable towards the GDP of Nigeria.

VIII. Conclusion

Given the findings of this study, the following recommendations are made. The government should set up organizations all over the country and charge them with the responsibility of fishing out the people that bring about the issue of ghost workers. Those that have reached the retirement age and yet don’t want to retire should be forced to leave office to give way for the unemployed youths.

References Références Referencias

Macroeconomic Variables: Evidence from Pakistan (1960-2005).