Cost Implications of Unemployment on the Nigerian Economy

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Abstract

Unemployment is like cankerworm and cancer that has plagued and which has eaten deep into the fabric of the economy. The study examines the menace of unemployment and its cost implications in relation to the activities of the Militants, the nefarious activities of Boko Haram sect and infrastructural vandalization by the unemployed youths on the economy. Survey research method was employed and data were collected from the sampled population with the aid of questionnaire and relevant secondary sources of data were also used. Chi square was used to test the hypotheses at 5% level of significance. Multiple regression analysis was employed to analyse the time series data used in the study. Findings show that unemployment has negative cost implications on Nigerian economy. It was recommended that a policy that will reduce unemployment to the bearest minimum be introduced.

Key words: Unemployment; Cost Implication; Nigerian Economy.

1. Introduction

It becomes obvious that unemployment in Nigeria has attained unacceptable level. The labour market in Nigeria according to Central Bank of Nigeria CBN (2002) is dangerously close to saturation. Ekpo (2011) in Adawo, Essien and Ekpo (2012) supports the fact that Nigeria unemployment situation is unacceptable. A lot of circumstances engender this social evil and menace and which include among others rapidly growing urban labour force arising from rural–urban migration, rapid population growth, outdated school curricula and lack of employable skills, rapid expansion of the education system which directly leads to increase in the supply of education manpower above the corresponding demand for them, no vibrant manufacturing sector which has the capacity to absorb unemployed youths in Nigeria, corruption which has become incurable cancer in the social economic structure of the nation.

The cost of unemployment had impacted the economy negatively that crime had almost turned to culture. This can be attested to by the cost implications of unemployment on the loss of life and property, vandalisation of the nation’s infrastructure e.g oil pipelines, PHCN equipment, bombing, kidnapping, international negative image of the nation. Crime is an offence against the values system of a society. The cost implications of crime vary among the various segments of the population and touch almost everyone by some degrees and in general, but as economic growth and development of countries increase, it would be expected that crime rate reduces. The various cost of crime to victims and society include loss of income, property and loss in community productivity (Odumosu, 1999, Akpotu and Jike, 2004, Egunjobi, 2007) in Douglasson (2009).

Upon all the aforementioned assertions, the paper seeks to outline and give suggestions that can reduce the sting of unemployment on the nation’s economy.

2. Literature Review

Alalana (2003) opines that unemployment is potentially dangerous as it sends disturbing signal to all segments of the Nigeria society. He further posits that the rate of youth unemployment in Nigeria is high even at the period of economic normalcy i.e. the oil boom of the 1970s (6.2%), 1980s (9.8%) and the 1990s (11.5%). EcoWatch (2005) reports that unemployment in Nigeria is one of the most critical problems the country is facing. The years of corruption; civil war, military rule, and mismanagement have hindered economic growth of the country. World Bank report (2005) indicated that the GDP at purchasing power parity of Nigeria was$170.7billion. Unemployment is a major problem both economically and socially. Unemployment in Nigeria has resulted in more and more people who do not have purchasing power. It further reported that unemployment has social consequences as it increases the rate of crime. The secondary school graduates consist of principal fraction of the unemployed accounting for 35% to 50%. The rate of unemployment within the age group 20 to 24 years is 40% and between 15 to 19 years is 31%.

A more encompassing definition is provided by the international labour organization (ILO) as cited by Akintoye (2008) thus: “the unemployed is a member of the economically active population who are without work but available for and seeking for work including people who have lost their jobs and those who have voluntarily left

33
work”. Unemployment assumed a doomsday scenario in Nigeria a decade after political independence. Account by Akintoye (op.cit) shows that between 1970 and 1980, national unemployment rose from 4.3% to 6.4% and further rose to 7.1% in 1987. The author attributed this development to the economic depression which engulfed the nation from 1980, resulting in massive closing of businesses and retrenchment of workers.

Boateng (2004) posits that unemployment generates low income or no income and therefore results in low or poor living standard. Unemployment represents wasted resources according to Mankiw (1994). The claim of Mankiw (op.cit) shows that unemployment is costly to the economy.

Awogbenle and Iwuamadi (2010) point out that the statistics from Manpower Board and National Bureau of Statistics show that Nigeria has a youth population of 80 million, representing 60% of the total population of the country. Also 64 million of them are unemployed, when 1.6 million are under employed.


Adebayo (1999), Alalana (2003), Awogbenle and Iwuamadi (2005) identified the following causes of unemployment in Nigeria:

- Rapidly growing urban labour force arising from rural-urban migration.
- Rapid population growth. Going by the 2006 census in Nigeria, the nation’s population was put at 140,431,790. Projection for the future indicates over 180 million by 2020 given the annual growth rate of 3.2% (National Population Commission and ICF macro, 2009)
- The outdated school curricula and lack of employable skills.
- Rapid expansion of the education system which directly leads to increase in the supply of educated manpower above the corresponding demand for them.
- There is no vibrant manufacturing sector which has the capacity to absorb unemployed youths in Nigeria.
- Corruption, which has permeated the entire social structure of Nigeria, has robbed the country of developing a Vibrant economic base.

Adejumobi (2011) opines that it is a misplaced priority for anyone to argue that one of the greatest threats to democratic stability in Nigeria is unemployment. Utilisation and manipulation of mostly unemployed and ignorant youths to perpetrate post election violence during 2011 presidential election adjudged to be free, fair transparent and credible by both local and international observers that claimed over five hundred lives in especially states like Kaduna, Kano, Bauchi and Gombe (including over nine youth Corps members on national assignment) and displaced over fifteen thousand persons in the northern part of Nigeria is a clear indicator of an attempt to use category of unemployed people to destabilize the nation( Adepegba, 2011).

Unemployment is one of the causes of the incessant killing in the North by members of Islamic sects called “Boko Haram” which means western Education is sin” the Business day Newspaper of Jan. 2012 reports that over 900 people have been killed since 2009 by this group.

Unemployed youths have been used (as local militants) to attack, bomb, vandalise and destroy oil pipelines, lives and properties in the Niger Delta region of Nigeria (Gilbert and Ojakorotu 2010). In addition, there has been increase in the involvement of unemployed persons in various anti-social activities and offences as a result of unemployment, such offences include, arson, assault, murder, abduction, terrorism, stealing, armed robbery, sex offences, unlawful possession of arms and so on.( Mathew, 2013). According to National Bureau of statistics (2009), persons admitted into prison by age group between 2004 and 2008 show that as regards the youths between ages 16 and 20 years, 31,700 youths were admitted in 2004, others include, 40,170 in 2005, 19,122 in 2006, 16,236 in 2007 and 25,317 in 2008. Age between 21 and 25 years, 39,045 youths were admitted in 2004, 34,600 in 2005, 28,705 in 2008. Also, between ages 25 and 50 years, 63,200 persons in 2004, 65,140 in 2005, 75,491 in 2006, 80,134 in 2007, 73,071 in 2008. The fact is that the major reason of the anti-social act that led to their imprisonment is unemployment.

3. Method and Materials

3.1 Model Specification

With reference to Douglasson (2009), the model for this study is specified as follows:

\[
CRM_t = f(INF_t, LGDP_t, LITSEC_t, UNEMP_t, LPOP_t)
\]

\[
CRM_t = \lambda t + aINF_t + BLGDP_t + \gamma LITSEC_t + \delta UNEMP_t + \omega LPOP_t + \epsilon_t
\]

Where:

- \(CRM_t\) = Crime rate in Nigeria
- \(INF_t\) = Inflation rate in Nigeria
- \(LGDP_t\) = Gross domestic product
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LITSEC = Literacy rate
UNEMP = Unemployment rate
LPOP = Labour productivity
\( \varepsilon_t = \) Error term
\( \alpha, \beta, \gamma, \theta, \omega = \) Parameters to be estimated
\( \lambda = \) Intercept

3.2 A Priori Expectations

\( \delta_{CRM} / \delta_{INF} > 0, \quad \delta_{CRM} / \delta_{LGDP} < 0, \quad \delta_{CRM} / \delta_{LITSEC} > 0, \quad \delta_{CRM} / \delta_{UNEMP} > 0, \)
\( \delta_{CRM} / \delta_{LPOP} < 0. \)

i.e \( \alpha > 0, \quad 1 < 0, \quad \gamma > 0, \quad \theta > 0, \quad \omega < 0 \)

3.3 Estimation Technique.

- Chi-square statistical tool was employed in the analysis of the primary data gathered with aid of questionnaire administered on two hundred (200) respondents using random sampling techniques.
- In order to analyse the time series data in this study, the multiple regression analysis was used to estimate the parameters. The coefficient of determination was estimated to determine the goodness of fit of the regression model. The t-test was also conducted to determine the significance of the coefficients of the explanatory variables.
- Durbin Watson test was also conducted to detect the presence of serial autocorrelation problem in the model.

4 Data Analysis and Discussion

4.1 Primary Data Analysis

The primary data collected in this study was analysed with the aid of chi-square statistical tool as presented below:

Research Hypothesis i: There is no significant relationship between unemployment and crime rate in Nigeria.

Table 4.1: \( x^2 \) result on nexus between crime rate and unemployment in Nigeria

<table>
<thead>
<tr>
<th>Degree of freedom</th>
<th>Level of significance</th>
<th>( X^2 ) critical value</th>
<th>( X^2 ) calculated value</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>0.05</td>
<td>7.81</td>
<td>482.25</td>
</tr>
</tbody>
</table>

Source: Authors’ computation

Since \( x^2 \) calculated value is 482.25 which is greater than \( x^2 \) critical value of 7.81. The alternative/research hypothesis is accepted which implies that there is significant relationship between crime rate and unemployment in Nigeria

Research Hypothesis ii: There is no significant relationship between unemployment and militancy in the Niger Delta region.

Table 4.2: \( x^2 \) result on nexus between unemployment and militancy in the Niger delta

<table>
<thead>
<tr>
<th>Degree of freedom</th>
<th>Level of significance</th>
<th>( X^2 ) critical value</th>
<th>( X^2 ) calculated value</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>0.05</td>
<td>7.81</td>
<td>483.85</td>
</tr>
</tbody>
</table>

Source: Authors’ computation

Since \( x^2 \) calculated value is 483.85 which is greater than \( x^2 \) critical value of 7.81. The alternative/research hypothesis is accepted which implies that there is significant relationship between unemployment and militancy in the Niger delta region of Nigeria

Research Hypothesis iii: Unemployment is not a major determinant of insurgency in the Northern region of Nigeria.

Table 4.3: \( x^2 \) result on unemployment and insurgency in the northern part of Nigeria

<table>
<thead>
<tr>
<th>Degree of freedom</th>
<th>Level of significance</th>
<th>( X^2 ) critical value</th>
<th>( X^2 ) calculated value</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>0.05</td>
<td>7.81</td>
<td>456.13</td>
</tr>
</tbody>
</table>

Source: Authors’ computation
Since $x^2$ calculated value is 456.13 which is greater than $x^2$ critical value of 7.81. The alternative/research hypothesis is accepted which implies that unemployment is a major determinant of insurgency in the Northern region of Nigeria.

Research Hypothesis iv: There is no significant relationship between high cost of living and unemployment in Nigeria.

Table 4.4: $x^2$ result on the nexus between unemployment and high cost of living in Nigeria

<table>
<thead>
<tr>
<th>Degree of freedom</th>
<th>Level of significance</th>
<th>$x^2$ critical value</th>
<th>$x^2$ calculated value</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>0.05</td>
<td>7.81</td>
<td>313.08</td>
</tr>
</tbody>
</table>

Source: Authors’ computation

Since $x^2$ calculated value is 313.08 which is greater than $x^2$ critical value of 7.81. The alternative/research hypothesis is accepted which implies that there is significant relationship between high cost of living and unemployment in Nigeria.

Research Hypothesis v: There is no significant relationship between productivity and unemployment in Nigeria.

Table 4.5 $x^2$ result on the nexus between unemployment rate and productivity in Nigeria

<table>
<thead>
<tr>
<th>Degree of freedom</th>
<th>Level of significance</th>
<th>$x^2$ critical value</th>
<th>$x^2$ calculated value</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>0.05</td>
<td>7.81</td>
<td>468.73</td>
</tr>
</tbody>
</table>

Source: Authors’ computation

Since $x^2$ calculated value is 468.73 which is greater than $x^2$ critical value of 7.81. The alternative/research hypothesis is accepted which implies that there is significant relationship between unemployment and level of output in Nigeria.

4.2 Econometric Analysis

This study examines the relationship between unemployment and crime rate using annual time series data set for the period 1996-2010. The result is presented below:

Time Series data set on short run basis for the period of 1996-2010 on CR, INF, RGDP, LTR, UNEMP, LPOP (15 years)

<table>
<thead>
<tr>
<th>Year</th>
<th>TEAR</th>
<th>CR</th>
<th>INF</th>
<th>RGDP</th>
<th>LTR</th>
<th>UNEMP</th>
<th>LPOP</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1996</td>
<td>.69</td>
<td>35.43</td>
<td>14.81</td>
<td>98.35</td>
<td>11.94</td>
<td>18.54</td>
</tr>
<tr>
<td>2</td>
<td>1997</td>
<td>1.76</td>
<td>38.45</td>
<td>14.85</td>
<td>101.93</td>
<td>11.93</td>
<td>18.56</td>
</tr>
<tr>
<td>3</td>
<td>1998</td>
<td>1.90</td>
<td>42.29</td>
<td>14.81</td>
<td>109.77</td>
<td>12.12</td>
<td>18.59</td>
</tr>
<tr>
<td>4</td>
<td>1999</td>
<td>1.60</td>
<td>45.09</td>
<td>14.98</td>
<td>116.25</td>
<td>11.92</td>
<td>18.61</td>
</tr>
<tr>
<td>5</td>
<td>2000</td>
<td>1.20</td>
<td>48.22</td>
<td>15.34</td>
<td>122.14</td>
<td>12.16</td>
<td>18.63</td>
</tr>
<tr>
<td>6</td>
<td>2001</td>
<td>1.00</td>
<td>57.32</td>
<td>15.37</td>
<td>122.58</td>
<td>12.05</td>
<td>18.66</td>
</tr>
<tr>
<td>7</td>
<td>2002</td>
<td>1.60</td>
<td>64.70</td>
<td>15.75</td>
<td>126.96</td>
<td>12.10</td>
<td>18.68</td>
</tr>
<tr>
<td>8</td>
<td>2003</td>
<td>1.40</td>
<td>73.78</td>
<td>15.95</td>
<td>131.34</td>
<td>12.15</td>
<td>18.71</td>
</tr>
<tr>
<td>9</td>
<td>2004</td>
<td>1.60</td>
<td>84.84</td>
<td>16.25</td>
<td>135.34</td>
<td>12.91</td>
<td>18.73</td>
</tr>
<tr>
<td>10</td>
<td>2005</td>
<td>1.90</td>
<td>100.00</td>
<td>16.49</td>
<td>136.26</td>
<td>12.96</td>
<td>18.76</td>
</tr>
<tr>
<td>11</td>
<td>2006</td>
<td>2.20</td>
<td>108.24</td>
<td>16.74</td>
<td>136.86</td>
<td>13.09</td>
<td>18.78</td>
</tr>
<tr>
<td>12</td>
<td>2007</td>
<td>2.20</td>
<td>114.07</td>
<td>16.84</td>
<td>125.71</td>
<td>13.27</td>
<td>18.81</td>
</tr>
<tr>
<td>13</td>
<td>2008</td>
<td>2.70</td>
<td>127.27</td>
<td>17.01</td>
<td>120.12</td>
<td>13.51</td>
<td>18.83</td>
</tr>
<tr>
<td>14</td>
<td>2009</td>
<td>2.50</td>
<td>141.96</td>
<td>17.03</td>
<td>122.09</td>
<td>13.75</td>
<td>18.86</td>
</tr>
<tr>
<td>15</td>
<td>2010</td>
<td>2.40</td>
<td>161.43</td>
<td>17.19</td>
<td>127.33</td>
<td>13.94</td>
<td>18.88</td>
</tr>
</tbody>
</table>

Source: Central Bank of Nigeria statistical bulletin (Various issues)
Regression Analysis

<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>-139.4033</td>
<td>162.2569</td>
<td>-0.859152</td>
<td>0.4126</td>
</tr>
<tr>
<td>INF</td>
<td>-0.012063</td>
<td>0.023914</td>
<td>-0.504446</td>
<td>0.6261</td>
</tr>
<tr>
<td>RGDP</td>
<td>-0.257472</td>
<td>0.788808</td>
<td>-0.326406</td>
<td>0.7516</td>
</tr>
<tr>
<td>LTR</td>
<td>-0.013954</td>
<td>0.018294</td>
<td>-0.762791</td>
<td>0.4651</td>
</tr>
<tr>
<td>UNEMP</td>
<td>0.636964</td>
<td>0.747206</td>
<td>0.852461</td>
<td>0.4161</td>
</tr>
<tr>
<td>LPOP</td>
<td>7.479669</td>
<td>8.998424</td>
<td>0.831220</td>
<td>0.4274</td>
</tr>
</tbody>
</table>

R-squared 0.703879     Mean dependent var 1.776667
Adjusted R-squared 0.539367     S.D. dependent var 0.567295
S.E. of regression 0.385023     Akaike info criteri on 1.218146
Sum squared resid 1.334183     Schwarz criterion 1.501366
Log likelihood -3.136094     F-statistic 4.278597
Durbin-Watson stat 1.830044     Prob(F-statistic) 0.028594

Source: Authors’ computation

Interpretation of Result of Time Series Data

From the above result, R² shows that the independent variables explain 70% of the variation in the dependent variable which implies that all the explanatory variables explain 70% variation in the dependent variable i.e. crime rate in Nigeria. This shows that the model has good fit. The adjusted R² value is about 54% which indicated a strong significance of observed explanatory variables which contribute significantly to the variation of the dependent variable. Therefore all the independent variables employed in the study, inflation rate, gross domestic product, literacy rate, unemployment rate, labour productivity influence crime rate in Nigeria. In addition to this F-statistics value of 4.28 which is greater than F- critical value of 3.70 shows that the overall model is statistically significant at 5% which implies that the entire style coefficient i.e. independent variables are simultaneously significant. The coefficient of inflation is negative indicating that inflation is inversely related to Nigeria crime rate in Nigeria. The coefficient of GDP also has negative impact on Nigeria crime rate in Nigeria. The result reveals that 10 units change in GDP will result to 2.57 units reduction in crime rate. Therefore, gross domestic product has inverse impact on Nigeria crime rate which implies that the higher the GDP, the lower the crime rate in Nigeria. The result shows that 10% increase in literacy rate will cause crime rate to fall by 0.14%. This reveals that literacy rate has inverse relationship with Nigeria crime rate. This implies that increase in literacy rate will reduce crime rate in Nigeria. The coefficient of unemployment is 0.637. This shows that 10% increase in unemployment in Nigeria will lead to an increase of 6.37% in crime rate in Nigeria. Therefore, there is direct relationship between Nigeria unemployment and crime rate. This implies the higher the unemployment rate, the higher the crime rate in Nigeria. In the estimation, it is revealed that all the explanatory variables do not exhibit significant impact on crime rate in Nigeria using t test statistics.

Durbin-Watson test result is 1.83 which is very close to 2 shows that there is no problem of serial autocorrelation detected in the regression analysis. Finally though the result obtained from t-test statistics reveals non significance but the result from both R² and F-statistics agreed that independent variables have significant impact on crime rate in Nigeria. This is an indication that when these variables are considered collectively, they influence crime rate rather than viewing them individually in Nigeria.

4.3 Discussion of Findings

Based on the result of the chi-square and R² of the multiple regression analysis presented, there is significant relationship among unemployment rate, inflation rate, labour productivity, economic growth, literacy rate and crime rate in Nigeria. This finding is in congruence with the views of Odunmosu (1999), Akpotu and Jike (2004) and Egunjobi (2007).
This study also revealed that crime rate has direct and positive relationship with unemployment rate in Nigeria which implies that the higher the unemployment rate, the higher the crime rate in Nigeria. This result is supported by World Bank (2005), Gilbert (2010), Ojakorotu (2010), Adepegba (2011) and Adejumobi (2011). The study also revealed a significant relationship between unemployment and high cost of living in Nigeria. This result is in consonance with the view of Boateng (2004) who posited that unemployment generates low income or no income and therefore results in low or poor living standard.

5 Conclusion
Both empirical and theoretical considerations indicate that substantial benefit will accrue to Nigeria if it can move from high crime rate to low level of crime rate which can be achieved by reducing unemployment to very low level. Based on the findings, this study is hereby logically concluded as follows:
- Reducing unemployment rate to the bearest minimum will definitely reduce crime rate in Nigeria based on the negative relationship revealed by regression analysis of the time series data spanning from 1970 to 2010 and chi-square statistical tool used to analyse the primary data in the study.
- Increasing literacy rate in Nigeria will go long a way in reducing crime rate in form of insurgency in the northern part of Nigeria and militancy in the Niger Delta region of Nigeria.
- Improvement in Nigerian economy i.e. gross domestic product will help to reduce crime rate to the bearest minimum.

6 Policy Recommendations
Based on the findings of this study, it is therefore recommended that:
(i) Government should increase her budgetary allocation to enhance the establishment of manufacturing industries and boosting of agriculture since Nigeria has the accommodating resources.
(ii) Government should make concerted efforts towards ensuring that the entrepreneurial education is emphasized in our educational Institutions thereby shifting the orientation of the graduates from job seekers to employers of labour and consequently reducing unemployment rate in Nigeria.
(iii) Government should introduce the policy that will create jobs for the Nigerian teeming population of unemployed graduates as this will in no small measure help to improve their standard of living and without mincing words reduce crime rate, social vices, nefarious activities and vandalisation of infrastructural facilities associated with high rate of unemployment in Nigeria.
(iv) Government should ensure that the school curriculum is designed to ensure that scholars will see education beyond seeking for white Colar Job after graduation.

REFERENCES
Business day newspaper, January (2012).
Economy watch (2005).
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