Effect of Small and Medium Enterprises on Employment Generation in Nigeria

Edoko, Tonna David1, Agbasi, Obianuju Emmanuela (Ph.D).2, Ezeanolue Uju Scholastica3

1Department of Business Administration, Tansian University, Umunya, Anambra State, Nigeria
2Department of Cooperative Economics and Mgt, Nnamdi Azikiwe University (NAU), Awka, Nigeria
3Department of Business Administration, Anambra State Polytechnic, Mgbakwu, Nigeria

ABSTRACT

Employing the regression model, this study examines the effect of small and medium enterprises on employment generation in Nigeria. The findings revealed that small and medium enterprise development and per capita income are statistically significant in explaining employment generation in Nigeria while commercial bank credits to SMEs, infrastructure, foreign aids and human capital development are statistically insignificant in explaining employment generation in Nigeria. The study recommends among others that the government should adopt high import tariff and low import quotas to encourage our local industries grow and create adequate employment thereby reducing dependence on imported goods.

Keywords: Regression Model, Small and Medium Enterprises (SMEs), Employment Generation, Infrastructure, Foreign Aids

1. INTRODUCTION

The contribution of Small and Medium Enterprises to employment generation has been variously documented in extant literature. According to Safiriyu and Njogo (2012), Small and medium scale enterprises are strategic to attainment of economic prosperity objective of any government. Evidences abound that in regions or economies where enterprises have been actively promoted and encouraged, their poverty rates have declined. According to Abubakar and Yahaya (2013), an important feature of the SME Sector is its ability to create jobs. Therefore, vibrant SMEs are considered crucial in solving multivariate socio-economic problems in developing economies including unemployment, low growth and poverty. Abubakar and Yahya (2013) further asserted that since productive employment is the key to achieving sustainable reduction in poverty and the fact that SMEs have potential of creating mass employment, it is imperative that with a large employment creation potential any government efforts to reduce poverty could achieve more success if they are given the required attention they deserve. Available statistics as cited by Abubakar and Yahya (2013), shows that the total number of persons employed by the Micro, Small and Medium enterprises (MSME) sector in Nigeria as at December 2010 stood at 32,414,884 (NBS, 2012).

The statistical evidence notwithstanding, the unemployment and the attendant poverty rate in Nigeria is still soaring. Kareem (2015) succinctly puts it this way "high rate of unemployment, unimpressive growth rates and poverty among other miseries of the populace, are the order of the day". Thus, suggesting that in spite of SMEs contribution and other policy strands to create employment, not much impact has been made as there is a wide gap between the jobs available and the number of job seekers actively seeking work in the country. According to Abaukaka (2014), this is manifested in the rates of national and graduates unemployment in Nigeria. The national
unemployment rate reduced slightly from 14.8 percent in 2003 to 13.4 percent in 2004, 11.9 percent in 2005 and increased to 14.6 percent in 2006, decreased slightly again to 12.7 percent in 2007. However, it has maintained upward trend from 2008 till date (NBS, 2008, 2011; NBS, 2011; Hudson, Andrew and Ibrahim, 2014).

Successive governments in Nigeria have come up with one policy or the other aimed at promoting SMEs in Nigeria in order to increase employment and consequently reduce poverty in Nigeria but the failure of the Government policies on SMEs development has continued to raise doubts in the mind of the citizens about the sincerity of the government in the implementation of the SMEs development policies (Tijani, Oyeniyi and Ogunyomi, 2012). It is however believed and also attested to in the literature that the SMEs have the potentials as “the engine of growth” and “catalysts for socio-economic transformation of any country.” (Onugu, 2005). SMEs represent a veritable vehicle for the achievement of national economic objectives of employment generation and poverty reduction at a low investment cost as well as the development of entrepreneurial capabilities including indigenous technology. Other intrinsic benefits of vibrant SMEs include access to the infrastructural facilities occasioned by the existence of such SMEs in their surroundings, the stimulation of economic activities such as suppliers of various items and distributive trades for items produced and or needed by the SMEs, stemming from rural urban migration, enhancement of standard of living of the employees of the SMEs and their dependents as well as those who are directly or indirectly associated with them (Onugu, 2005). It is therefore imperative to promote the sector so as to tap into the sectors great potentials that have helped in transforming developed economies.

2. STATEMENT OF THE PROBLEMS
This study was informed by perceived raising level of unemployment in Nigeria despite the expected role of SMEs in generating employment in the country. According to Akinmulegun (2014), the unemployment situation in Nigeria is on an increase and in a geometric trend. The SMEs sector is believed to have helped in transforming the developed economies. Unfortunately, the SME sector seems not to have been performing in Nigeria in terms of generating the expected employment needed to reduced the poverty level in the country. Akinmulegun (2014), averred that despite the laudable programmes of government, and the urge scarce resources devoted to poverty alleviation, the level of poverty and unemployment and the general wellbeing of many Nigerians have failed to improve. Obadan (2002) in Akinmulegun (2014) referred to the situation as embarrassing paradox of poverty in the midst of plenty in Nigeria. Describing the ineffectiveness of the Nigeria SMEs sector in generating employment, Onugu (2005), stated that Small and Medium Enterprises (SMEs) in Nigeria have not performed creditably well and hence have not played the expected vital and vibrant role in the economic growth and development of Nigeria. This situation has been of great concern to the government, citizenry, operators, practitioners and the organised private sector groups. Onugu (2005), further stated that year in year out, the governments at federal, state and even local levels through budgetary allocations, policies and pronouncements have signified interest and acknowledgement of the crucial role of the SME sub-sector of the economy and hence made policies for energizing the same. There have also been fiscal incentives, grants, bilateral and multilateral agencies support and aids as well as specialized institutions all geared towards making the SME sub-sector vibrant. In the light of the above problems affecting the SMEs in Nigeria this study sets out to examine the effect of small and medium enterprises on employment generation in Nigeria while investigating the impact of selected macroeconomic environmental factor that affect SMEs in generating employment.

3. OBJECTIVES OF THE STUDY
The main objective of the study is to examine the effect of small and medium enterprises on employment generation in Nigeria. Specifically, the study intends to:

i. Examine the effect of SME industrial output on employment generation in Nigeria.
ii. Ascertain the effect of commercial banks credit to SME on employment generation in Nigeria.
iii. Examine the effect of infrastructure and foreign aids on employment generation in Nigeria.
iv. Ascertain the effect of human capital development and per capita income on employment generation in Nigeria.
4. HYPOTHESIS OF THE STUDY

\( H_0_1: \) SME industrial output have no significant impact on employment generation in Nigeria.

\( H_0_2: \) Commercial banks credit to SME have no significant relationship to employment generation in Nigeria.

\( H_0_3: \) Infrastructure and foreign aids have no significant impact on employment generation in Nigeria.

\( H_0_4: \) Human capital development and per capita income have no significant impact on employment generation in Nigeria.

5. LITERATURE REVIEW

Concept and Performance of SMEs in Nigeria

The concept of SMEs has been variously defined by scholars from different stand points (Bamidele, 2012). However, one clear point is that the conceptualization of SMEs is country specific. In Nigeria for instance SMEs as defined by Small and Medium Industries Equity Investment Scheme (SMIEIS), are enterprises with a total capital employed not less than N1.5 million, but not exceeding N200 million, including working capital, but excluding cost of land and/or with a staff strength of not less than 10 and not more than 300 (Imoughele and Ismaila, 2014). This conceptualization will be adopted for the purpose of this study bearing in mind that that there are numerous definitions of SMEs by different scholars in the literature.

Extant literature has revealed that the performance of SMEs in Nigeria is relatively low (Gbandi and Amissah, 2014; Adeloye, 2012; Kauffmann, 2005; SMEDAN, 2006). Gbandi and Amissah (2014), the SMEs in Nigeria have underperformed despite the fact that the SMEs in Nigeria constitute more than 90% of Nigerian businesses, their contribution to the nation’s GDP is below 10%. This very low percentage contribution of the SMEs to Nigeria’s GDP could be attributed to amongst others; unfriendly business environment, poor funding, low management skills and lack of access to modern technology. The low performance notwithstanding, SMEs in Nigeria constitute the most viable and veritable vehicle for self-sustaining industrial development. It possesses enormous capability to grow an indigenous enterprise culture more than any other strategy (Duru. and Kehinde, 2012). As cited by Imoughele and Ismaila (2014) SMEs serve as a catalyst for employment generation, national growth, poverty reduction and economic development. SMEs world over can boast of being the major employers of labour if compared to the major industries including the multinationals. The contribution of SMEs to an economy, especially developing ones include: Greater utilization of raw materials, employment generation, encourage of rural development, development of entrepreneurship, mobilization of local savings, linkages with bigger industries, provision of regional balance by spreading investments more evenly, provision of avenue for self-employment and provision of opportunity for training managers and semi-skilled workers (Kadiri, 2012). The aforementioned roles and contributions of SMEs suggest that with origination and mediation in the sector, SMEs will perform creditably in terms of its contribution to GDP and survival rate.

6. RELATED EMPIRICAL LITERATURE

Related empirical literature on effect of small and medium enterprises on employment generation in Nigeria were reviewed in this section. For example, Nwagwu (2014) investigate the relationship between unemployment, poverty and insecurity of lives and properties in the country. Using secondary data obtained from the Central Bank of Nigeria. Findings revealed that unemployment and poverty have direct link to security challenges in Nigeria. Arosanyin, Olowosulu and Oyeyemi (2011) examined employment generation and determinants of earnings in the informal transport sector in Nigeria using a case study using an adapted Mincerian equation and logistic models. It was found that the informal sector is a source of employment for 21.7 per cent of jobless people; and 72.3 per cent of those who switched jobs from an informal activity to transport business. Household size, experience and operating hours were found to be significant determinants of earnings. The probability that a motorcyclist would earn at least the informal average in the Okada business when the operator has a driver license, owns the motorcycle, works on full time basis and also a member of the okada union is 0.8018, which is higher than that of an operator with the reverse attributes at 0.2849. The probability of earning at least the industry average by an educated operator was found to be higher than less educated operators. Eze and Okpala (2015) investigated the quantitative impact of Small and medium scale enterprises (SMEs) on Nigeria’s economic growth performance for the sample period 1993 to 2011 using econometric technique of the multiple regression method based on ordinary least squares technique. Findings revealed that the output
of SMEs does not make any significant contribution to Nigeria’s economic growth performance.

Hudson, Andrew and Ibrahim (2014) provide empirical findings on small and medium scale enterprises and employment generation in Borno State, Nigeria. Using univariate analysis, measure of central tendency, pearson product moment correlation. The findings of the study clearly showed that small scale industries do consistently contribute to employment generation in Borno state, it also found out that there is a significant difference between ratings of the employment quality provided by the SMEs in Borno state, which implies that the quality of employment provided by the SMEs are of low quality and that most of the employees of Small and Medium Enterprises in Borno State are young men with low/intermediate educational qualifications. It further showed that there is no relationship between Enterprise characteristics and quality of employment generated by SMEs in Borno State. Afolabi (2013) employed Ordinary Least Square (OLS) method to estimate the Growth effect of Small and Medium Enterprises (SMEs) Financing in Nigeria. The estimated model results revealed that SMEs output exert positive influence on economic development while lending rate is found to exert negative effects on economic growth. Ogunrinola and Osabuohien (2010) examined the effects of globalisation on employment level in the manufacturing sector in Nigeria. Using time series data for the period 1990-2006. The result of the analysis showed that several employment and globalisation-related variables are positively related in the Nigerian manufacturing. Tijani, Oyeniyi and Ogunyomi (2012) examined the impact of technical entrepreneurial skills on employment generation in small and medium scale enterprises in Lagos State, Nigeria using t-test statistics and simple regression analysis respectively. Results from the three hypotheses tested revealed that technical entrepreneurial skills generate employment in Small and Medium Scales Enterprises in Nigeria than the commercial entrepreneurial activities. Furthermore, the study revealed that the growth of Small and Medium Scale Enterpries (SMEs) in Nigeria had no significant contribution to the Gross Domestic Product (GDP) of the Nigeria due to the identified variables as well as other stochastic variables.

Abaukaka (2014) examined the relationship between foreign direct investment and employment generation in Nigeria using multiple linear regression model for data which covered the period from 2002 to 2012. From the empirical results, FDI exhibit negative relationship with the level of employment in Nigeria while GDP, interest rate are positively related with the level of employment but none of the explanatory variables significantly impact on the level of employment in Nigeria within the period of the study. Kareem (2015) adopted regression analysis and causality tests to investigate employment level and the economic growth of Nigeria. The results showed that foreign direct investment, inflation, interest rate have positive relationship with Employment level. The result of granger causality also showed that GDP granger cause Inflation at 1% level of significant, FDI Granger cause GDP with a 5% level significant, Interest rate Granger cause GDP at 10% level of significant, FDI Granger cause Interest rate with a 10% level of significant. The result concluded that Gross domestic product (GDP), interest rate were factors that contributed to those Employment level in Nigeria. Simple percentage and chi-square were used by Safiriyu and Njogo (2012) to examine Financing Small and Medium Scale Enterprises (SMEs): A challenge for Entrepreneurial Development in Gombe state. The results showed that small and medium scale enterprises and sustainable development of the Nigerian economy are related, just as promotion of SMEs and improvement in employment generation are related.

In the final analysis, researchers have approached and investigated effect of small and medium enterprises on employment generation from different standpoint and varying literally perspectives. However, there is a paucity of research on effect of small and medium enterprises on employment generation in Nigeria. Similar studies on the topic were carried out by Hudson, Andrew and Ibrahim (2014) and Tijani, Oyeniyi and Ogunyomi (2012) but they were carried out in Borno State and Lagos State respectively. However, as a missing gap in the literature, which this study intends to fill. The study investigates the effect of small and medium enterprises on employment generation in Nigeria as a whole using aggregate data elicited from Central Bank of Nigeria Statistical Bulletin.

7. THEORETICAL FRAMEWORK
This study is anchored on National and Circumstantial theories. Extant literature applying National and Circumstantial theories abound. Tella (1997), outlined a number of theories of unemployment that results in
poverty which include the; the Functional theory; the Capitalist Entrepreneurial theory; the Individual Attribute theory; the National and Circumstantial theories; and the Power theory. The National and Circumstantial theories identify factors in the matrix of poverty induced equation as the geographical location and the natural endowment of the environment in which person lives, unemployment and old age, and physical disabilities. This better explain the case of Nigeria; even though the nation’s natural resources endowment is highly commendable as the nation is well endowed with a huge amount of resources. In addition, the power theory which posits that the structure of political powers in society determines the extent and distribution of poverty among the populace describes more importantly the situation in the nation Nigeria to the extent that a few ruling class establishes and legitimizes an exploitative property system with the use of state power. As corruption is rooted in poverty, so has unemployment enhanced the spate of poverty with over 75% of the populace caught up in one type of unemployment or the other.

In this study, therefore, accentuation will be given to effect of small and medium enterprises on employment generation in Nigeria by investigating the influence of various macroeconomic indicators like SME industrial output, commercial banks credit, infrastructure and foreign aids, human capital development and per capita income on employment generation in Nigeria. The variables have in different context explain some variance in stimulating growth. Thus their inclusion in the model.

8. METHODOLOGY

This chapter contains research method used to examine the impact of small and medium enterprises on employment generation in Nigeria by investigating the influence of various macroeconomic indicators like SME industrial output, commercial banks credit, infrastructure and foreign aids, human capital development and per capita income on employment generation in Nigeria. The variables have in different context explain some variance in stimulating growth. Thus their inclusion in the model.

Model Specification
The model for this study is stated as follow:

EMG = \beta_0 + \beta_1\text{SME} + \beta_2\text{CBC} + \beta_3\text{INFR} + \beta_4\text{FAID} + \beta_5\text{HCD} + \beta_6\text{PCI} + \mu_i \quad \ldots \quad (1)

The structural form of the model is:

The mathematical form of the model is:

EMG = \beta_0 + \beta_1\text{SME} + \beta_2\text{CBC} + \beta_3\text{INFR} + \beta_4\text{FAID} + \beta_5\text{HCD} + \beta_6\text{PCI} \quad \ldots \quad (2)

The econometric form of the model is:

EMG = \beta_0 + \beta_1\text{SME} + \beta_2\text{CBC} + \beta_3\text{INFR} + \beta_4\text{FAID} + \beta_5\text{HCD} + \beta_6\text{PCI} + \mu_i \quad \ldots \quad (3)

Where; EMG = Employment generation proxied by GDP growth rate

SME = Small and Medium enterprise captured by SME industrial output

CBC = Commercial Banks Credit to SME

INFR = Infrastructure proxied by government expenditure on INFR

FAID = Foreign Aids

HCD = Human capital development

PCI = Per capita income

\beta_0 = Intercept of the model

\beta_1 - \beta_6 = Parameters of the regression coefficients

\mu_i = Stochastic error term

Method of Data Analysis

The economic technique employed in the study is the ordinary least square (OLS). This is because the OLS computational procedure is fairly simple and it's also the best linear estimator among all unbiased estimation, it is efficient and has the smallest minimum variance. Thus, it become the best linear unbiased estimator (BLUE) in the classical linear regression (CLR) model. Basic assumptions of the OLS are related to the forms of the relationship among the distribution of the random variance (\mu_i).

OLS is a very popular method and in fact, one of the most powerful methods of regression analysis. It is used exclusively to estimate the unknown parameters of a linear regression model. The Economic views (E-views) software will be adopted for regression analysis.

9. PRESENTATION OF EMPIRICAL FINDINGS

Summary of Stationary Unit Root Test

Establishing stationarity is essential because if there is no stationarity, the processing of the data may produce biased result. The consequences are unreliable interpretation and conclusions. We test for stationarity using Augmented Dickey-Fuller (ADF) tests on the data. The ADF tests are done on level series, first and second order differenced series. The decision rule is to reject stationarity if ADF statistics is less than 5% critical value, otherwise, accept stationarity when ADF statistics is greater than 5% criteria value. The summary of the result is presented in table 1 below.
Table 1: Summary of ADF test results

<table>
<thead>
<tr>
<th>Variables</th>
<th>ADF Statistics</th>
<th>Lagged</th>
<th>1% Critical Value</th>
<th>5% Critical Value</th>
<th>10% Critical Value</th>
<th>Order of Integration</th>
</tr>
</thead>
<tbody>
<tr>
<td>EMG</td>
<td>-6.015868</td>
<td>1</td>
<td>-3.653730</td>
<td>-2.957110</td>
<td>-2.617434</td>
<td>I(1)</td>
</tr>
<tr>
<td>SME</td>
<td>3.741672</td>
<td>1</td>
<td>-3.653730</td>
<td>-2.957110</td>
<td>-2.617434</td>
<td>I(1)</td>
</tr>
<tr>
<td>CBC</td>
<td>-4.021574</td>
<td>1</td>
<td>-3.653730</td>
<td>-2.957110</td>
<td>-2.617434</td>
<td>I(1)</td>
</tr>
<tr>
<td>INFR</td>
<td>-5.700607</td>
<td>1</td>
<td>-3.653730</td>
<td>-2.957110</td>
<td>-2.617434</td>
<td>I(1)</td>
</tr>
<tr>
<td>FAID</td>
<td>-6.064146</td>
<td>1</td>
<td>-3.653730</td>
<td>-2.957110</td>
<td>-2.617434</td>
<td>I(1)</td>
</tr>
<tr>
<td>HCD</td>
<td>-4.308355</td>
<td>1</td>
<td>-3.661661</td>
<td>-2.960411</td>
<td>-2.619160</td>
<td>I(1)</td>
</tr>
<tr>
<td>PCI</td>
<td>-6.826707</td>
<td>1</td>
<td>-3.653730</td>
<td>-2.957110</td>
<td>-2.617434</td>
<td>I(1)</td>
</tr>
</tbody>
</table>

Author’s computation

Evidence from unit root table above shows that none of the variables is stationary at level difference, that is, I(0), rather all the variables are stationary at their first difference, that is I(1). Since none of the variables is stationary at level difference, that is I(1), we therefore test for cointegration among these variables. The result is summarized in the tables below for Trace and Maximum Eigenvalue cointegration rank test respectively.

Table 2: Summary of Johansen Cointegration Test

<table>
<thead>
<tr>
<th>Hypothesized No. of CE(s)</th>
<th>Eigenvalue</th>
<th>Trace Statistic</th>
<th>0.05 Critical Value</th>
<th>Prob.**</th>
</tr>
</thead>
<tbody>
<tr>
<td>None *</td>
<td>0.922134</td>
<td>223.3233</td>
<td>125.6154</td>
<td>0.0000</td>
</tr>
<tr>
<td>At most 1 *</td>
<td>0.714158</td>
<td>141.6347</td>
<td>95.75366</td>
<td>0.0000</td>
</tr>
<tr>
<td>At most 2 *</td>
<td>0.675078</td>
<td>101.5606</td>
<td>69.81889</td>
<td>0.0000</td>
</tr>
<tr>
<td>At most 3 *</td>
<td>0.573331</td>
<td>65.58709</td>
<td>47.85613</td>
<td>0.0005</td>
</tr>
<tr>
<td>At most 4 *</td>
<td>0.476214</td>
<td>38.33119</td>
<td>29.79707</td>
<td>0.0041</td>
</tr>
<tr>
<td>At most 5 *</td>
<td>0.359661</td>
<td>17.63768</td>
<td>15.49471</td>
<td>0.0234</td>
</tr>
<tr>
<td>At most 6</td>
<td>0.100053</td>
<td>3.373428</td>
<td>3.841466</td>
<td>0.0663</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Hypothesized No. of CE(s)</th>
<th>Eigenvalue</th>
<th>Max-Eigen Statistic</th>
<th>0.05 Critical Value</th>
<th>Prob.**</th>
</tr>
</thead>
<tbody>
<tr>
<td>None *</td>
<td>0.922134</td>
<td>81.68859</td>
<td>46.23142</td>
<td>0.0000</td>
</tr>
<tr>
<td>At most 1</td>
<td>0.714158</td>
<td>40.07417</td>
<td>40.07757</td>
<td>0.0500</td>
</tr>
<tr>
<td>At most 2</td>
<td>0.675078</td>
<td>35.97348</td>
<td>33.87687</td>
<td>0.0277</td>
</tr>
<tr>
<td>At most 3</td>
<td>0.573331</td>
<td>27.25589</td>
<td>27.58434</td>
<td>0.0550</td>
</tr>
<tr>
<td>At most 4</td>
<td>0.476214</td>
<td>20.69351</td>
<td>21.13162</td>
<td>0.0575</td>
</tr>
<tr>
<td>At most 5</td>
<td>0.359661</td>
<td>14.26426</td>
<td>14.26460</td>
<td>0.0500</td>
</tr>
<tr>
<td>At most 6</td>
<td>0.100053</td>
<td>3.373428</td>
<td>3.841466</td>
<td>0.0663</td>
</tr>
</tbody>
</table>

Summary of Cointegration Test

Cointegration means that there is a correlationship among the variables. Cointegration test is done on the residual of the model. Since the unit root test shows that none of the variables is stationary at level I(0) rather at first difference I(1), we therefore test for cointegration among these variables. The result is summarized in the tables 2 below for Trace and Maximum Eigenvalue cointegration rank test respectively.
Table 2 indicates that trace have 6 cointegrating variables in the model while Maximum Eigenvalue indicated only 2 cointegrating variables. Both the trace statistics and Eigen value statistics reveal that there is a long run and short run relationship between the variables. That is, the linear combination of these variables cancels out the stochastic trend in the series. This will prevent the generation of spurious regression results. Hence, the implication of this result is a short and long run relationship between employment generation and other variables used in the model.

10. PRESENTATION OF RESULT
The summary of the regression result is shown in table 3 below.

Table 3: Summary of regression results

<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>40.36023</td>
<td>9.814657</td>
<td>4.112241</td>
<td>0.0003</td>
</tr>
<tr>
<td>SME</td>
<td>1.043053</td>
<td>0.336029</td>
<td>3.104061</td>
<td>0.0044</td>
</tr>
<tr>
<td>CBC</td>
<td>-0.000949</td>
<td>0.003927</td>
<td>-0.241814</td>
<td>0.8108</td>
</tr>
<tr>
<td>INFR</td>
<td>0.000252</td>
<td>0.001012</td>
<td>0.249322</td>
<td>0.8050</td>
</tr>
<tr>
<td>FAID</td>
<td>-0.009824</td>
<td>0.008598</td>
<td>-1.142538</td>
<td>0.2633</td>
</tr>
<tr>
<td>HCD</td>
<td>-10.00895</td>
<td>9.375806</td>
<td>-1.067529</td>
<td>0.2952</td>
</tr>
<tr>
<td>PCI</td>
<td>0.012417</td>
<td>0.000674</td>
<td>5.587526</td>
<td>0.0001</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.644176</td>
<td></td>
<td></td>
<td>15.72235</td>
</tr>
<tr>
<td>Adjusted R-squared</td>
<td>0.512882</td>
<td>Prob(F-statistic)</td>
<td>0.000924</td>
<td></td>
</tr>
<tr>
<td>S.E. of regression</td>
<td>2.016816</td>
<td>Durbin-Watson stat</td>
<td>1.708385</td>
<td></td>
</tr>
</tbody>
</table>

11. EVALUATION OF RESEARCH HYPOTHESIS
To evaluate the regression results as presented in table 3, we employ economic a priori criteria, statistical criteria and econometric criteria.

**Evaluation based on economic a priori criteria**
This subsection is concerned with evaluating the regression results based on a priori (i.e., theoretical) expectations. The sign and magnitude of each variable coefficient is evaluated against theoretical expectations.

From table 3, it is observed that the regression line have a positive intercept as presented by the constant (c) = 40.36023. This means that if all the variables are held constant or fixed (zero), EMG will be valued at 40.36023. Thus, the a-priori expectation is that the intercept could be positive or negative, so it conforms to the theoretical expectation.

It is observed in table 3 that small and medium enterprise development, infrastructure and per capita income has a positive impact on employment generation in Nigeria, while commercial bank credits to SMEs, foreign aids and human capital development has a negative impact on employment generation in Nigeria.

From the regression analysis, it is observed that while some variables conform to the a priori expectation of the study, some did not. Thus, table 4 summarises the a priori test of this study.
Table 4: Summary of economic a priori test

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Variables</th>
<th>Regressand</th>
<th>Regressor</th>
<th>Expected Relationships</th>
<th>Observed Relationships</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>$\beta_0$</td>
<td>EMG</td>
<td>Intercept</td>
<td>+/-</td>
<td>+</td>
<td>+</td>
<td>Conform</td>
</tr>
<tr>
<td>$\beta_1$</td>
<td>EMG</td>
<td>SME</td>
<td>+</td>
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</tr>
<tr>
<td>$\beta_2$</td>
<td>EMG</td>
<td>CBC</td>
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<td>-</td>
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</tr>
<tr>
<td>$\beta_3$</td>
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<td>INFR</td>
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</table>

Source: Researchers compilation

Conclusions and Recommendations

The study attempted to explain the impact of small and medium enterprises development on employment generation in Nigeria from 1980-2016 using Ordinary least Square (OLS) technique method. All data used are secondary data obtained from the Statistical Bulletin of Central Bank of Nigeria (CBN). From the result of the OLS, it is observed that small and medium enterprise development, infrastructure and per capita income have a positive impact on employment generation in Nigeria. This means that increases in small and medium enterprise development, infrastructure and per capita income will bring about increase in employment generation in Nigeria. On the other hand, commercial bank credits to SMEs, foreign aids and human capital development has a negative impact on employment generation in Nigeria, meaning that as commercial bank credits to SMEs, foreign aids and human capital development increases, employment generation will be falling. From the regression analysis, the result show that small and medium enterprise development, infrastructure and per capita income conform to the a priori expectation of the study while commercial bank credits to SMEs, foreign aids and human capital development did not conform.

From the empirical reviewed work, some authors argued that small and medium enterprise development is positively related to employment generation; while some authors argued that it is negatively related. However, from empirical analysis of this study, it was found that small and medium enterprise development is positively related to employment generation in Nigeria. The findings of the study also show that small and medium enterprise development and per capita income are statistically significant in explaining employment generation in Nigeria while commercial bank credits to SMEs, infrastructure, foreign aids and human capital development is statistically insignificant in explaining employment generation in Nigeria. The F-test conducted in the study shows that the model has a goodness of fit and is statistically different from zero. In other words, there is a significant impact between the dependent and independent variables in the model. Finally, the study shows that there is a long run relationship exists among the variables. Both $R^2$ and adjusted $R^2$ show that the explanatory power of the variables is strong. The standard errors show that all the explanatory variables were all low. The low values of the standard errors in the result show that some level of confidence can be placed on the estimates.

The study therefore recommends that the government should lay strong emphases on SMEs development through entrepreneurship and skill acquisition development because SMEs have been found to be statistically significant in explaining employment generation in Nigeria. The government should also vigorously support the sector through a supervised credit scheme. This will help boost per capita income as well as improve the standard of living of the people.

References


