ENTREPRENEURSHIP AND EMPLOYMENT GENERATION IN NIGERIA: A CASE STUDY OF NATIONAL DIRECTORATE OF EMPLOYMENT (N.D.E)

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Abstract: *The Nigerian Job seekers face a lot of problems as Jobs are not made available, technical skills are not properly acquired for self employment, under capitalization with difficulty for obtaining bank credit and instability of government policies are the order of the day. In support for the Role of Entrepreneurship in National Economic Development, policies had been implemented by different government regimes such as Integrated Rural Development (IRD). But the failure of these development programmes did pave way for the introduction of Structural Adjustment Programme (SAP) with the objective of designing programmes to adjust the structure of the economy whose strategies are National Directorate of Employment (NDE) amongst others. This study assesses the impact of entrepreneurship development on unemployment reduction in Nigeria using NDE as a case study. While the Augmented Dickey Fuller Unit Root Test was employed in sieving the data series to avoid spurious results, the Granger Causality Test was used to determine the causal relationship between the variables and Ordinary Least Squares (OLS) technique of econometrics was employed to estimate the impact of entrepreneurship development on unemployment reduction in Nigeria. Results obtained reveal that the 2000-2011 Nigerian Annual Data for NER, EER and CU series were non stationary at level, 1(0), but NER and EER became stationary at first difference, 1(1); while CU became stationary at second difference, 1(2) - all at 5% level of significance. The results further show we have some confidence that both ERR and CU could Granger cause NER in Nigeria and that entrepreneurship development has impacted significantly on unemployment reduction in Nigeria and the null hypothesis of no impact was rejected; Labor was discovered to be the main asset of the poor and this creates opportunities for them to be gainfully engaged. It is, therefore, concluded that Entrepreneurship has a significant impact on Employment generation in Nigeria. The study recommends amongst others that refocusing public spending and investment in basic and technical education on human capital in order to raise the supply of skilled labor in Nigeria is expedient and that the National Directorate of Employment (NDE) as government's main organ for tackling the problem has to be repositioned by putting in place new strategies to reduced unemployment in the country.*

Keywords: Entrepreneurship, Employment, National Directorate of Employment and Nigeria.

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INTRODUCTION

Many scholars have written widely on entrepreneurship and its potency to generate employment, thus, underscoring the importance, significance and relevance of this sub-sector in the development of any given economy. The experience of developed economies in relation to the roles played by entrepreneurship buttresses the fact that the importance of entrepreneurship cannot be overemphasized especially among the developing Countries.

In order to highlight its significance in relation to the growth and development of a given economy, entrepreneurship has been variously referred to as a source of employment generation. This is because Entrepreneurial activities have been found to be capable of making positive impacts on the economy of a nation and the quality of life of the people (Akerele, 2000). Studies have established its positive relationship with stimulation of economic growth; employment generation; and empowerment of the disadvantaged segment of the population, which include women and the poor (Oluremi, 2011).

Thus, entrepreneurship activities and innovative ingenuity in Nigeria have developed enterprises in the following areas: agricultural/agro-allied activities where there are foodstuffs, restaurants, fast food vending; solid minerals where there are quarrying, germ stone cutting/polishing and crushing engineering; information and telecom business where there are manufacturing and repairs of GSM accessories and the printing and selling of recharge cards; hospitality and tourism business where there exists hotels, accommodation, resorts centers, film and home video production; oil and gas business where there are construction and maintenance of pipelines, drilling, refining bye products; environmental and waste management business where we have refuse collection/disposal, recycling, and drainage/sewage construction job; financial banking services where there are banking insurance and stock trading; engineering and fabrication work, here we have machines and tools fabrications as well as building and construction, where there are plan and design services and material sourcing (Aluko, 2012). Thus, all these areas present vital investment opportunities for entrepreneurs in the country.

Government all over the world have realized the importance of entrepreneurship and formulated comprehensive public policies to encourage, support and fund the establishment of some institutions for entrepreneurship development in the form of small and medium industries for employment generation through the use of local raw materials and technology for production (Reynolds, 2007). This is why recent governments at various levels in Nigeria are intensifying efforts such as the National Directorate of Employment (NDE) to strengthening entrepreneurship and consequently employment in the country.

It is unarguable; therefore, that one of the most fundamental problems in developing countries is that of unemployment. In Nigeria, for instance, recent statistics show that unemployment rate stands at an average of about 23.9% (NBS, 2011). Unemployment is

not a desirable concept in any given country's economic priorities because of the attendant social vices such as social unrest, prostitution, arm robbery, in some cases unemployment has resulted to social militancy such as the militancy in Nigeria for the "emancipation of the Niger Delta region" and the recent Boko Haram menace in Northern Nigeria.

Over the years various governments in Nigeria have tried to design policies and programmes to curb unemployment in the country. The outcomes of these policies and programmes have always been inconclusive (Awogbenle and Iwuamadi, 2010). Economists are still contending on the best strategies to mitigate unemployment. With the turn-around of policy in Nigeria which is leading to the transfer of responsibility to the private sector -"private sector led growth" the general consensus is on entrepreneurship development. Therefore, one of the programmes or agencies of government charged with responsibility of entrepreneurship in Nigeria is the National Directorate of Employment (NDE). This forms the case for consideration in this study. The justification for this is to see whether entrepreneurship has really impacted on employment generation in Nigeria.

The study thus, seeks to find answers to the following questions:

1. Has entrepreneurship through the National Directorate of Employment (NDE) generated employment in Nigeria?

2. What are the causes of low entrepreneurship and youth unemployment in Nigeria?

3. What measures could be designed to boost entrepreneurship through National Directorate of Employment (NDE) and hence increase employment and economic development in Nigeria?

Hypotheses

The study used the following hypotheses:

- There is a causal relationship between entrepreneurship development through the NDE programme and employment generation in Nigeria.

- Entrepreneurship development through the NDE programme has impact on employment generation in Nigeria.

The study is structured into five sections. Section one is the introduction which summarizes the background to the study, the research problem, objectives, questions and hypothesis. Section two gives the conceptual clarifications by reviewing relevant literature and discussing the theories and empirical evidences relevant to the study. While section three discusses the methodology which is purely quantitative and qualitative in nature where the problem is modeled and the analytical technique is discussed; section four presents and analyses the results and section five concludes with recommendations.

REVIEW OF RELEVANT LITERATURE

This section consists of the explanation of the concept of entrepreneurship, the concept of employment and unemployment by some scholars as well as some theories that are relevant to the study.

The Concept of Entrepreneurship

Entrepreneurship is more than simply "starting a business." It is a process through which individuals identify opportunities, allocate resources, and create value. This creation of value is often through the identification of unmet needs or through the identification of opportunities for change. It is the act of being an entrepreneur which is seen as one who undertakes innovations with finance and business acumen in an effort to transform innovations into economic goods hence Entrepreneurs see problems as opportunities and then take action to identify the solutions to those problems and the customers who will pay to have those problems solved (Akinyemi, 1987).

Entrepreneurial success is simply a function of the ability of an entrepreneur to see opportunities in the marketplace, initiate change and creates value through solutions Visser, (1997) opines that entrepreneurship is known as the capacity and attitude of a person or group of persons to undertake ventures with the probability of success or failure (Dougason and Gbosi,2006). It demands that the individual should be prepared to assume a reasonable degree of risks, be a good leader in addition to being highly innovative.

In business management, Entrepreneurship is regarded as the prime mover of a successful enterprise just as a leader in any organization must be the environmental change agent. Adebayo (1999) defines entrepreneurship as the process of increasing the supply of entrepreneurs or adding to the stock of existing small, medium and big enterprises available to a country by creating and promoting many capable entrepreneurs, who can successfully run innovative enterprises, nurture them to growth and sustain them, with a view to achieving broad socio-economic developmental goals. One of these goals is sustaining employment.

Furthermore, Omoruyi (2004) noted that entrepreneurship revolves around the realization of existence of opportunities in combination with decision to commercialize them by starting a new firm. Aluko (2012) observed that the essence of entrepreneurship development is the ability to envision and chart a course for a new business venture by combining information from the functional disciplines and from the external environment in the context of the extraordinary uncertainty and ambiguity which faces a new business venture. It then manifests itself in creative strategies, innovative tactics, uncanny perception of trends and market mood changes and courageous leadership.

Cantellion (1980) maintained that governments, Non-Governmental Organizations (NGOs) and international bodies seeking to improve youth livelihood could best pursue

their empowerment objective by tapping into the dynamism of young people and build on their strong spirit of risk-taking through entrepreneurship development. This would of course place food on their table.

The Concept of Employment/Unemployment

According to Douglason and Gbosi (2006), unemployment is the difference between the amount of labour employed at current wage levels and working conditions, and the amount of labour not hired at these levels, however, he defined employment as a situation in which people who are willing to work at the prevailing wage rate are able to find jobs. The implication of the definition is that anyone who is hired should not be counted as part of the unemployed labour force, in order to avoid overestimation of the official rate of unemployment.

In recent times, the definition of unemployment by the International Labour Organization (ILO) is said to be more encompassing, "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 work (World Bank, 1998). The application of this definition across countries has been faulted, especially for the purpose of comparison and policy formulation, as countries characteristics are not the same in their commitment to resolving unemployment problems, furthermore, the preponderance of housewives who possess the ability and willingness to work, the definition of the age bracket all stand as limitations to the definition by ILO (Douglason and Gbosi 2006).

Unemployment is a social phenomenon that is affecting human societies, particularly the developing nations of Africa. Casson (1979), view an unemployed person as someone who is actively seeking a job of certain specification and would be willing to accept such a job if it were offered at the prevailing market wage.

According to International Labour Organization (ILO, 2007), the unemployed are numbers of the economically active population who are without work, but are available and seeking work, including people who have lost their jobs and those who have voluntarily left work. Work plays a major part in the development of the mental and potentials of any human being. According to Binks (1990), we live in a working world and the man who does not work is not human, because he produces nothing. Binks maintains that the most appreciated value in working apart from money earned is the social recognition it carries with it and that when a man works, he has certain goals that act as his diligence and commitment, these goals include winning a degree of economic security, to gain an amount of control over affairs and to experience satisfying and predictable relationship with the members of the groups with which he is most intimately associated.

Theoretical Framework

Some theories have been revealed; such as Kirzner's Theory of Entrepreneurship and Joseph Schumpeter's Theory of Development. Both theories explain the relevance of entrepreneurship in increasing the employment of labour and other productive resources which consequently increase productivity.

Kirzner's Theory of Entrepreneurship

According to Kirzner (1973), an entrepreneur is someone who is alert to and perceives profitable opportunities for exchange. Recognizing the possibilities for exchange enables the entrepreneur to benefit by acting as middleman who facilitates the exchange. The Kirzner's entrepreneur is an intermediary who is alert to opportunities to trade. He is able to identify suppliers, customers and act as intermediary. To Kirzner, everybody can be an entrepreneur or has the potential of being an entrepreneur.

The entrepreneur is not a simple maximize, facing given ends and means, but a homo agent as postulated by Kirzner. The entrepreneur discovers new ends and new means and has 'drive' and alertness. Kirzner defines the entrepreneurial element as alertness to possibly new worthwhile goals and to possibly new available resources. This element makes human action 'active, creative and human rather than passive, automatic, and mechanical'.

Kirzner maintains that a pure entrepreneur has no need to possess any other resources, because he can hire 'all the talents needed to organize factors of production into a smoothly working team.' He is not therefore, a 'producer' in the normal sense. Because of the absence of need for additional resources, everyone is a potential entrepreneur, provided that he has the necessary quality of alertness to profitable opportunities.

Joseph Schumpeter's Theory

Schumpeter (1950) argues that entrepreneurial innovation can be financed only by the expansion of credit. He also maintains that "the entrepreneur is never the risk bearer". "Even though he may risk his reputation, the direct responsibility of failure never falls on him". Risk is borne by those who supply the capital, principally the creditors. Even if the entrepreneur supplies part of the capital, he does so in his capacity of a capitalist, not as an entrepreneur.

The function of the entrepreneur is to reform the pattern of production by exploiting an invention or more generally, an untried technological possibility for producing a new commodity or producing an old one in a new way, by opening up a new source of supply of materials or a new outlet for products, by re-organizing an industry and so on. This function does not essentially consist in either inventing anything or otherwise creating the condition which the enterprise exploits.

Empirical Evidences

Recently, unemployment has hit the Nigerian Youths badly. A terrible phenomena described as the conglomerate of youths with diverse background, willing and able to work, but cannot find any. Given the lack of sufficient employment opportunities in the formal sector, young people may be compelled to engage in casual work and other unorthodox livelihood sources, thus leading to underemployment. Various forms of unemployment have been identified and elaborated upon in the literature. These include seasonal, frictional, cyclical, and structural unemployment (Adebayo, 1999)

Unemployment is a global trend, but it occurs mostly in developing countries of the world, with attendant social, economic, political, and psychological consequences. Thus, massive youth unemployment in any country is an indication of far more complex problems. The ILO (2007) report showed that the proportions of world unemployment are steadily increasing and that the number of those without jobs remained at all time high of more than 195 million, or 6.3 percent, in 2007. For instance, during that period (2007), the Middle East and North Africa were the regions with the highest unemployment rate in the world at 12.2 percent, followed by sub-Saharan Africa at nearly 10 percent. East Asia's unemployment rate of 3.6 percent remained the lowest. The report affirmed that population growth, especially in South Asia, the Middle East, and North Africa, and Sub-Saharan Africa, was putting a lot of pressure on job creation. The report concluded that half of all workers in the world - some 1.4 billion working poor - lived in families that survived on less than US $2 a day per person. These people worked in the vast informal sector - from farms to fishing, from agriculture to urban alleyways - without benefits, social security, or healthcare. Some 550 million working poor lived on US $1 or less per day. In absolute terms, it is estimated that there are about 122 million youths on the African continent (Oluremi, 2011).

Therefore, projections of the population growth into the 21st century indicated that the proportion of youths, in relation to the overall population, will continue to grow and pointed out that the high rate of unemployment is a result of continuous transfer of economic activities, especially the youths from rural to urban areas. In Nigeria, accurate unemployment rates are difficult to access. However, according to (Omoruyi, 2004), Nigeria's unemployment can be grouped into two categories: first, the older unemployed who lost their jobs through retrenchment, redundancy, or bankruptcy; and second, the younger unemployed, most of whom have never been employed.

To Awogbenle (2010), the statistics from the Manpower Board and the Federal Bureau of Statistics showed 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, while 1.6 million are under-employed.

According to National Bureau of Statistics (2009:238; 2010:2), the national unemployment rates for Nigeria between 2000 and 2009 showed that the number of

unemployed persons constituted 31.1% in 2000; 13.6% in 2001; 12.6% in 2002; 14.8% in 2003; 13.4% in 2004; 11.9% in 2005; 13.7% in 2006; 14.6% in 2007; 14.9% in 2008 and 19.7% in 2009, 22.6% in 2010 and 31.2% in 2011. Specifically as regards the age group, educational group and sex, data provided by the National Bureau of Statistics (2010:3) further showed that as at March 2009 in Nigeria, for persons between ages 15 and 24 years, 41.6% were unemployed. For persons between 25 and 44 years, 17% were unemployed. Also, those with primary education, 14.8% were unemployed and for those with only secondary education, 23.8% were unemployed. Furthermore, for those with post secondary education, 21.3% were unemployed. For those who never attended school and those with below primary education, 21.0% and 22.3% were unemployed respectively. As regards sex, the data showed that males constituted 17.0% while females constituted 23.3%. It is important to note that the figures above may not have captured in totality the youth unemployment situation in Nigeria, however, they are pointing to the fact that the phenomenon is a very critical issue with far-reaching implications for stability of Nigerian democracy.

Viewing this from the perceptive of the recent events in the Middle East where unemployment and poverty among others played a key role in the uprising, one can only conclude that Nigeria's unemployment poses a threat to its development, security and peaceful coexistence, being that Nigeria is made up of diverse entities from different cultural and religious backgrounds most of whom have shown differences in political, cultural and religious understanding and accommodation emanating from concerns of abuse of power, resource allocation, nepotism, negligence and corruption among others (Odusola,2001).

The unemployment crisis in Nigeria is linked to galloping poverty (Aluko, 2012). But to put Nigerians to work, the solution lies in a reinvention of the nature and purpose of government. Once upon a time in this country, Nigerians were a busy people; jobs were available, unemployment was low. In Ibadan, Lagos, Onitsha, Kaduna, Enugu, Port Harcourt, there were industrial complexes where factories produced goods for both local consumption and export; and an army of workers – skilled and non-skilled queued up to work and earn a living.

The industrialization wave of the 1970s in Nigeria was so phenomenal that government had to introduce a number of measures including the Land Use Act in order to remove obstacles in the path of industry. Companies rushed to the universities every year-end and later to the NYSC camps, to recruit skilled workers. Then, a certificate guaranteed a job, and a better life. This was the period when education was seen as a tool of social advancement. Even artisans had jobs to do. In fact, there were expatriates in Nigeria. Thus when the Ghanaian economy failed in the late 1970s, Ghanaians trooped into Nigeria to look for jobs.

Long before the global economic meltdown, Nigeria's factories had started closing down, throwing their employees into the labour market. In one year about 100 textile factories closed shop. Michelin, the tire manufacturing company, left Nigeria too. Dunlop has announced its plans to go the Michelin way. Capacity utilization is at an all-time low. The Manufacturers Association of Nigeria which used to play a key role in the policy formulation and implementation processes has been reduced to an assembly of complainants.

Odusola (2001) adhered that Nigeria is no longer a productive country; it is a dumping ground for imports. Its economy provides jobs for outsiders not the people at home. It has since exported many of its best hands to other countries in a corrosive brain drain syndrome. The unemployment situation is so bad that university graduates stay at home for upwards of ten years unable to find a thing to do. Education has become unattractive as employers of labor complain about the rising population of unemployable Nigerians.

A Review of National Directorate of Employment in Nigeria

The compartmentalization of education, industrial employment and labor policies in Nigeria probably dates back to colonial era. The first colonial policy of 1925 emphasized the need for Africans to develop schools.

By 1935-1945, there was another policy built upon the 1925 policy modifying it with little addition here and there, emphasis being on Adult education the colonial education policy was centered on the production of literate Nationals who were required to man position which would strengthen the colonial Administration this our educational institutions, few as they were renamed factories for producing clacks, interpreters, forest guards and sanitary inspectors, as no special professional nor entrepreneurial skill was envisaged in the educational system (Akinyemi,1987). The complete absence of enterprise education in the educational policy had continued till now. The industrial policy which came on board only after the Nigeria independence in 1960 initially concentrated on the establishment of big industries with utter neglect for small scale business. By so doing, entrepreneurship which is the bedrock of small scale business was unwittingly de-emphasized.

At the era of independence in 1959, the Ashoby's commission was set up to review the earlier educational policy. At that time, the country wanted to produce manpower for independence and that led to the 1970 Ashoby report titled "investment in education" An examination of the policy document reveals that the issue of self employment after schools, college and university education was not given adequate attention. Let me examine some sections of document to buttress this point. For example, section 4 on secondary education item 19(4) stated that the junior secondary schools would be both pre-vocational and academic. The pre- vocational subjects listed were metal work, electronics, mechanics, local craft, Home economics, Business studies (Visser,1997) so the policy of entrepreneurship Development in Nigeria picked its roots from this policy. The

National Directorate of employment (NDE) was established to provide similar vocational training and acquisition of skills to Job seekers.

METHODOLOGY

Suffice to note that the study investigates the impact of entrepreneurship on employment generation in Nigeria using NDE as a case study, to achieve this objective, qualitative and quantitative methods were employed. Time series observation using graphs which shows the trend movement of data was used for the descriptive analysis while the Unit Root Test, Granger Causality Test and Ordinary Least Squares econometric methods of analyses were adopted for the quantitative analysis. With the appropriate model, the following tests were conducted to test the statistical reliability and significance of the estimated parameters: the standard error test, t – statistic, f – statistic, coefficient of determination R^2 and coefficient of correlation.

Sources of Data and Scope of the Study

The data used for the study were obtained from secondary sources which include official publication of the National Directorate of Employment (NDE), the Federal Office of Statistics (FOS) and the Central Bank of Nigeria (CBN) Annual Report and Bulletin. The study based its analysis since the inception of NDE in Nigeria in 2000 to 2011.

Analytical Techniques

The Granger technique (Granger, 1969) has been adopted to determine the direction of causation between economic growth and capital market deepening-as viewed in this study. Granger proposed that for a pair of linear covariance stationary time series X and Y; X causes Y if the past values of X can be used to predict Y more accurately than simply using the past values of Y. Formally, X is said to cause Y if:

$\partial_1^2 (Y_t: Y_{t-j},\ X_{t-i}) < \partial_2^2 (Y_t: Y_{t-j})$ Where ∂ represents the variance of forecast error and i, j = 1, 2, 3,…,k.

The Granger causality test requires the use of F-statistic to test whether lagged information on a variable say "Y" provides any statistical information about another variable "X"; if not, then, "Y" does not Granger cause "X".

Notably, the regression analysis is used to determine the relationship between entrepreneurship and employment generation in Nigeria. Although regression analysis deals with the dependence of one variable on other variables, it does not necessary imply causation. Therefore, in view of the nature of economic behavior, any realistic formulation of economic models should involve some lagged variables among the set of explanatory variables as contained in the Granger causality model of the study. Lagged variables are one way of taking into account the length of time in the adjustment process of economic behavior, and perhaps the most efficient way of rendering them dynamic.

Model Specification

Using the Ordinary Least Square (OLS) method of multiple regressions, the model is specified as follows:

$$NER = b_0 + b_1 EER + b_2 CU + U_i \quad 1$$

The parameters to be estimated are b_0, b_1, and b_2

Where

NER	=	National Employment Rate which represents the dependent variable
EER	=	Entrepreneurship Employment Rate which is used as an explanatory variable
CU	=	Capacity Utilization, which is also another explanatory variable
μ_t	=	Error Term
b_o	=	Constant intercept
b_1	=	Coefficient of Entrepreneurship Employment
b_2	=	Coefficient of Capacity Utilization

The causal relationship between entrepreneurship and employment in Nigeria is determined using the models below:

$$NER_t = \sum_{i=1\alpha i}^{n} EER_{t-i} + \sum_{i=1}^{n} \beta_j \, NER_{t-j} + U_{1t} \quad 2$$

$$EER_t = \sum_{i=1\lambda i}^{n} EER_{t-i} + \sum_{j=1\partial j}^{n} NER_{t-j} + U_{2t} \quad 3$$

$$NER_t = \sum_{i=1\alpha i}^{n} {}^{*}CU_{t-1} + \sum_{i=1}^{n} \beta_j \, {}^{*}NER_{t-1} + U_{3t} \quad 4$$

$$CU_t = \sum_{i=1\lambda i}^{n} {}^{*}CU_{t-1} + \sum_{j=1\partial j}^{n} {}^{*}NER_{t-j} + U_{4t} \quad 5$$

Where it is assumed that the disturbances U_{1t} and U_{2t}, U_{3t} and U_{4t} are uncorrelated

Equations (2) and (3) postulate that current NER is related to past values of NER as well as those of EER and that current EER is also related to past values of EER and NER. Equations (4) and (5) indicate a similar behavior between NER and CU. Note that α_i, β_j, λ_i, and ∂_j are parameters to be estimated.

The Granger technique involves estimating the equations in (2) and (3); (4) and (5).

Therefore, as a pair wise test, the null hypotheses for our models become:

- H_0: $\sum\alpha_i=0$, that is, lagged EER terms do not belong in the regression.
- H_0: $\sum\partial_j=0$, that is, lagged NER terms do not belong in the regression.
- H_0:$\sum \alpha_i^{*} =0$, that is, lagged CU terms do not belong in the regression.
- H_0:$\sum \partial_j^{*}=0$, that is, lagged NER terms do not belong in the regression.

This implies that the alternative hypothesis in each case is that the lagged terms belong in the regressions indicating the existence of a causal relationship. To test these hypotheses, we apply the F-test with this given decision rule: If the computed F value exceeds the critical F value at a chosen level of significance, we reject the null hypothesis, in which case, the lagged terms belong in the regression.

Apriori Expectations

In the linear regression model, we expect that entrepreneurship as proxies by Entrepreneurship Employment Rate and Capacity Utilization should have positive relationship with employment generation and hence b_1 and b_2 are different from zero. These two variables were used as explanatory variables because of their relevance in determining labour employment in Nigeria. While in the Causality model, the apriori expectation here is that the sets of EER_t, CU_t and NER_t would be statistically significantly different from zero in the regression of the above models. Thus, if $\sum\alpha_i \neq 0$ and $\sum\partial_i \neq 0$, it implies a feedback or a bilateral causality between NER and EER.

To avoid spurious results, we adopt the Augmented Dickey Fuller (ADF) test-also known as unit root to test the stationary state of the data. The models used for the test for the NER data series run in the following forms:

$$\Delta NER_t = \partial_{t-1} + U_t \qquad 6$$

$$\Delta NER_t = \beta_{1t} + \partial NER_{t-1} + U_t \qquad 7$$

$$\Delta NER_t = \beta_{1t} + \beta_{2t} + \partial NER_{t-1} + U_t \qquad 8$$

Where t is the time/trend variable, in each case the null hypothesis is that $\partial = 0$, which is the same as saying that there is a unit root. The difference between equation (6) and the other last two equations lies in the inclusion of the constant (intercept) and the trend. Note that the stationary state of the EER and CU data series was also tested using similar models.

Results and Interpretation

The data used for the empirical analysis which covers the study period of 2000 -2011 is presented in Appendix I where NER represents National Employment Rate in Nigeria (dependent variable) while EER and CU represent Entrepreneurship Employment rate and Capacity Utilization rate in Nigeria respectively (independent variables).

Appendix II shows the unit root results for the data series. Stationary series should be greater in absolute terms than the critical values. Based on the ADF unit root test results, the results show that the 2000-2011 Nigerian Annual Data for NER, EER and CU series were non stationary at level, 1(0). However, NER and EER became stationary at first difference, 1(1); while CU became stationary at second difference, 1(2) - all at 5% level of significance.

Based o the Granger Causality Test results in Appendix III and the F-Statistic decision rule, independence is suggested between NER and EER as well as between NER and CU. However, since the p-values of the null hypotheses of no causal relationship between NER and EER as well as between NER and CU are greater than 0.5, we have some confidence that both ERR and CU could Granger cause NER in Nigeria.

Having obtained the parameter estimates of equation (1) as presented in Appendix IV, we then test for the significance of the estimates. This enables us to know the statistical reliability of the estimates. In this case, the value of R in our analysis is 0.8396. This implies that there is a strong positive correlation between the explanatory variables and the dependent variable. That is, National Employment Rate in Nigeria changes in a positive direction with employment from entrepreneurship and resources utilization rate. The coefficient of determination enables us to determine precisely the extent to which the total variation in NER is explained by the independent variables, EER and CU. From the results, the value 0.8396 implies that 84% variation in NER is due to the variation in ERR and CU, while the remaining 16% of the variation is due to the disturbance term μ (i.e. unexplained term).

Statistical Test

The standard error estimate test is applied to enable us to decide whether the parameter estimate of b_0, b_1 and b_2 are statistically significant or not. The standard errors from the regression equation are given as follows:

S (b_0) = 10.656 b_0 = 37.06
S (b_1) = 0.5517 b_1 = 1.74
S (b_2) = -0.09343 b_2 = 0.6160

Generally, if ½(b_0, b_1 and b_2) > S.E (b_0, b_1, and b_2), we accept H_1 and reject Ho, otherwise we reject H_1 and accept Ho, that is when ½(α) < s (α). From the calculation below:

½ (b_0) = 18.85
½ (b_1) = 0.77
½ (b_2) = -0.32

It shows that ½ (b_0, b_1, and b_2) are greater than S.E (b_0, b_1, and b_2) and are statistically significant since they are greater than their standard error values. The t-statistic test approach also indicates that the values b_0, b_1 and b_2 are statistically significant as 5% level of significance.

Using the F–test, we test the hypothesis whether the dependent variable is linearly related to the independent variables jointly. That is, testing the overall significance of the observed or estimated regression line from analysis of variance (ANOVA).

From our result, $F^* = 23.53$ and $F_{0.05}$ i.e. F at 5% level of significance with degree of freedom (2 and 9), where $V_1 = k- 1$ and $V_2 = N- k$, $V_1 = 3 - 1= 2$, and $V_2 = 12 - 3 = 9$, therefore, we have $F_{0.05} = 4.49$. This implies that, given these hypotheses:

H_0: $\beta_0 = \beta_1 = \beta_2 = 0$
H_1: $\beta_0 \neq \beta_1 \neq \beta_2 \neq 0$

Decision Criteria:

If $F^* > F_{0.05}$, we reject the null hypothesis

If $F^* < F_{0.05}$, we accept the null hypothesis and conclude that the overall regression is not significant. Since 41.23 > 4.49, we reject the null hypothesis and conclude that the overall regression is significant and therefore, entrepreneurship has a significant impact on employment generation in Nigeria

From the estimated result, the intercept value is negative (-37). This means that if all other variables are assigned zero values (ceteris Paribus), the Dependent variable (National Employment Rate) will remain at -37% which stipulate the rate of Unemployment in the country. The coefficient of ERR which is the Entrepreneurship Employment Rate is 1.736262. This relationship is positive and thereby signifies that a 1% increase in entrepreneurship provided through NDE would lead to the National Employment Rate increase in the country by 1.736262%. The coefficient of CU is 0.6160; this shows a positive direct relationship between National Employment and Capacity Utilization rate in Nigeria. Therefore, given a unit increase in the number of resources utilization, there would be about 0.62 corresponding increases in National Employment Rate of the country.

CONCLUSION AND RECOMMENDATIONS

In conclusion, it is evident from the study that even though the National Directorate of Employment (NDE) has impacted positively on employment generation in Nigeria, due to inflationary pressures and the inability of the labour market to absorb new entrants, unemployment still remains unacceptably high and requires very sustained and urgent intervention to stem the tide. The National Directorate of Employment (NDE) as government's main organ for tackling the problem has to be repositioned by putting in place various strategies to reduced unemployment. Training people to be involved in gainful activities or enhance their performance at work is an essential component in the development of a Nation's resources for employment generation in Nigeria, just like other countries, skills training is provided at two parallel levels. These are, the formal and informal levels with one emphasizing the theoretical while the other relies on the practical and craftsman. Such measures should also include settling high standards to make graduates attain and maintain international standards. The strategies of the NDE involve attempts to reconcile the two systems. It should also be stressed that a functional

vocational and technical training that is aimed at self employment and entrepreneurship is necessary if the nation is to make meaningful strides in her quest for technological development. Government must spearhead a serious programme aimed at promoting vocational education. The private sector should support government effort by donating equipment and sponsoring programmes while parents should encourage their children to pick up careers that could lead them towards self-employment.

Based on the findings of the study, other recommendations include the following:

Funding

The greatest problem of the directorate is inadequate funding. Over the past years, the directorate has not been adequately funded to meet the challenges of unemployment in Nigeria. The poor funding situation has therefore not enabled the directorate to create the maximum impact on the labour market. In view of this tact, the government should properly fund the directorate.

Setting up an Employment Trust Fund

There is the need to set up a Nigeria employment trust fund to ameliorate the problems of unemployment in the country. Some of the objectives of the proposed NETF will be to identity and provide other sources of funding employment generations activities as wells as complementing government effort in funding employment programmes of the NDE.

Increased Micro-Credit Financing an Informal Sector Development by the Government

Since most micro and small–scale enterprises use relatively labour intensive method, a higher growth rate of employment can be achieved by developing viable vigorous micro and small-scale enterprises sub sector. In order to increase output and employment in micro and small-scale enterprises in the country, government should provide a more conducive environment The sub-sector by removing such major constraints as credit avenues, technology back–up, training support, marketing assistances, entrepreneurship development and hostel operating environment

Skills Acquisition Training for Self- Employment

Effort should be made to intensify the training of unemployed youths under well equipped training outlets. The target should be to developed, on regular basis, a pool of youths with marketable skills that meet any international standard through vocational and professional training programmes. To achieve the desired standard of training there is the need for NDE to establish model training centers in each of the six geo-political zones of the country while at the same time assisting its existing trainers to improve their work shops.

Regular Conduct of Registrations for Employed persons

Given the level of unemployment in Nigeria and its dynamic nature, a regular registration of unemployed persons is necessary to provide reliable information needed to plan, design and implement employment programmes.

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Appendix I: National Employment Rate, Employment Rate in Entrepreneurship and Capacity Utilization in Nigeria (2000 – 2011)

Year	National Employment Rate (%) NER	Employment Rate in Entrepreneurship (%) EER	Capacity utilization (%) CU
2000	15.3	13.8	50.4
2001	19.4	14.3	51.9
2002	21.9	13.0	55.3
2003	28.6	18.1	54.5
2004	27.8	13.8	60.1
2005	23.1	14.3	62.5
2006	23.4	13.4	63.7
2007	29.8	13.8	70.0
2008	29.8	14.3	71.6
2009	31.6	14.5	68.6
2010	28.1	13.2	66.6
2011	32.7	14.3	71.5

Source: NDE, December, 2012; Central Bank of Nigeria (CBN) Bulletin-Various Issues

Appendix II: ADF Unit Root Results

Variable/ADF	Level			First Differencing			Second Differencing		
	Int.	Trend/Int.	None	Int.	Trend/Int.	None	Int.	Trend/Int.	None
NER	-1.79	-3.09	0.79	-2.53	-2.32	-2.22*	-2.54	-2.46	-2.73*
EER	-2.23	-2.39	-0.16	-2.99	-2.92	-3.23*	-4.81*	-4.81*	-5.04*
CU	-1.20	-1.96	1.54	-2.67	-2.64	-1.74	-3.08	-2.96	-3.49*
Critical Value (5%)	-3.22	-3.99	-1.98	-3.26	-4.08	-1.98	-3.34	-4.19	-1.99

Source: Econometrics-View Computations
*Stationary levels

Appendix III: Pair wise Granger Causality Tests

Date: 08/15/13 Time: 07:06
Sample: 2000 2011
Lags: 2

Null Hypothesis	Obs	F-Statistic	Probability	decision
EER does not Granger Cause NER	10	2.20493	0.20581	accept
NER does not Granger Cause EER	10	0.25575	0.78388	accept
CU does not Granger Cause NER	10	1.28318	0.35498	accept
NER does not Granger Cause CU	10	0.00325	0.99676	accept

Note: α=5%-level of significance, Fα=4.96

Source: Econometrics-View computations

Appendix IV: The Estimated Regression Results

Dependent Variable: NER
Method: Least Squares
Date: 01/14/81 Time: 18:31
Sample: 1 12
Included observations: 12

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-37.06334	10.65605	-3.478148	0.0070
EER	1.736262	0.551693	3.147155	0.0118
CU	0.616049	0.093428	6.593856	0.0001

R-squared	0.839593	Mean dependent var	25.97131
Adjusted R-squared	0.803947	S.D. dependent var	5.297646
S.E. of regression	2.345686	Akaike info criterion	4.755351
Sum squared resid	49.52017	Schwarz criterion	4.876577
Log likelihood	-25.53210	Hannan-Quinn criter.	4.710468
F-statistic	23.55361	Durbin-Watson stat	1.867549
Prob(F-statistic)	0.000265		

Estimation Equation:

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NER = C(1) + C(2)*EER + C(3)*CU

Substituted Coefficients:

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NER = -37.0633356337 + 1.73626222273*EER + 0.616049078259*CU

Source: Econometrics-View computations