Graduate Unemployment and Entrepreneurship in Nigeria

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Abstract: *This study explored the impact of entrepreneurship training on unemployment reduction in Nigeria. The study collected data from the archive of World Development Indicators (WDI) and the National Directorate of Employment (NDE) spanning the period of 1990 to 2021. The important variables that the study considered relevant indicators of unemployment reduction were vocational and technical skills The data were subjected to series of econometric test before the final estimation of the ARDL. The result showed that graduate enrollment in vocational skill acquisition and ease of doing business impact on unemployment reduction. Furthermore, the coefficient of ECT-1 is found to be negatively and statistically significant a 1% threshold as expected. The size and statistically significance of the coefficient on the error correction model measures the tendency of each variable to return to the equilibrium. This implies the existence of long-run and short-run relationship between graduate enrollment in vocational skill acquisition, ease of doing business and unemployment rate in Nigeria. As a matter recommendations Graduates should be encouraged leaving out shame to avail themselves with the skills acquisition opportunities available to them. This can be achieved by providing entrepreneurship training centers, mentorships programs, loans, grants, startup capitals etc. and also institutions giving loan should provide interest free loan scheme for graduate undergoing skills acquisition training to start up their business.*

Keywords: *Entrepreneurship training, unemployment reduction, ARDL model, Nigeria.*

1.0   Introduction

Before embracing the colonial government in Nigeria unemployment was a rare phenomenon because people were highly entrepreneurial and productivity engaged (Muogbo & John, 2018). However, Raimi (2017) opined that successive administrations in Nigeria introduced formal education which enabled people to have the opportunity to be employed in the civil service after graduation. This has destroyed the self-reliance, self- employment, and entrepreneurial skills of Nigerians as many have become permanently dependent on the colonial masters. It has led to massive unemployment and craze in contemporary times for "all-ready-made jobs.

On the contrary Nwakanma *et al* (2018) state that the manifest weakness of entrepreneur, brought to the fore during the oil glut of the late 1970s, was undue reliance on crude oil as the mainstay of the economy. The study further suggests that as crude oil prices plummeted on the world market, Nigeria's foreign reserves nose-dived. As the country struggled to meet its international obligations, the attendant massive backlog of unsettled foreign debt stemmed the flow of new credits and severely curtailed the nation's imports of raw materials and essential

goods and services. At the end of the 1980s, the government responded by instituting various job creation policies with a focus on establishing small and medium scale enterprises (SMEs) by entrepreneurs. This reflected the emerging consciousness of the potential of SMEs as economy growth spinners.

Nigeria like most developing nations of the world is faced with myriad problems and realities which include poverty, unemployment, conflicts, Covid 19, insecurity and diseases. These situations pose great challenges to the very existence of the individual in most developing nations thereby, calling for the training of educated youths, men and women who can function effectively in the society in which they live (Muogbo & John, 2018). Over the years Nigerians opted for a free enterprise economy. Today, Nigeria has still confronted with dismal economic indices: high unemployment; poverty; and a weak exchange rate (Nwakanma, *et al* 2018).

In the mid-1970s, Nigeria was quoted among the richest 50 countries of the world and just a few years after, she became one of the 25th poorest countries in the World (UNDP, 2016; Okafor, 2019). Nigeria, as the sixth-largest exporter of petroleum products in the world, it is hard to believe that more than 60 percent of her citizens live below US$2 (about N700) a day, going by the current naira exchange rate, with the majority of the people living in the rural areas where access to electricity, clean water, and sanitation, good roads, other government essential services, etc, are almost non-existent (Okafor, 2019). Also, despite the alleged strong economic growth, Okafor (2019) observes that the youth's full-time unemployment rate has continued to increase rapidly. Similarly, a recent United Nations Human Development Report for Nigeria (2019), indicates that poverty persists in Nigeria because past Nigerian leaders, instead of focusing on how to deliver essential services to the people assumed control of major sources of national income to the advantage of only a few. Thus, researchers and other scholars have started prescribing entrepreneurship development as the feasible and permanent solution to the extreme hunger and poverty which accompanies unemployment in Nigeria (Okafor, 2019; Muogbo & John, 2018)

In the opinions of Anyadike, *et al* (2018), the great need for entrepreneurship development in Nigeria today, more than ever is necessitated by the rate of unemployment and its effect on both the people and the nation and the need for micro and small scale enterprises. According to Idemobi (2015), as an employment strategy, entrepreneurship can lead to self-sufficiency and economic buoyancy for the people. Idemobi (2015) reiterates that self-employment provides entrepreneurs and their families with the potential to create and manage businesses in which they function as the employer or boss, rather than merely being an employee.

Training constitutes a basic concept in human resource development. It is concerned with developing a particular skill to the desired standard by instruction and practice. Training is a highly useful tool that can bring an employee into a position where they can do their job correctly, effectively, and conscientiously. Training is the act of increasing the knowledge and skill of an employee for doing a particular job (Chand, 2021). Training and development refer to educational activities within a company created to enhance the knowledge and skills of employees while providing information and instruction on how to better perform specific tasks (Talentlyft, 2021).

Internship or workplace learning is based on the notion that the experience a learner gains at work is considered an important aspect in matters concerning learning. Therefore, internship or

workplace learning induces a conscious effort to establish a situation where learning takes place in a real-life situation (Sumatti, 2018). While studies of student perception on internship have been conducted in Malaysia (Sumati, 2018) and in the UK the study of their effect on entrepreneurial inclination is a different thing. In Nigeria, polytechnic students irrespective of discipline must embark on 1- or 2-years industrial training with the hope that after graduation they can start their own business; but this is not the case.

In a study by Damuchi (2019) captures the present manpower-labor market discrepancy and observed that the Nigerian educational system has failed to produce workers with adequate technical, cognitive, and altitudinal skills require to meet labour demand. To correct this abnormality and tackle the consequence of mass youth unemployment, the federal government of Nigeria in 1986 introduced the small-scale industry and graduate employment scheme under the National Directorate of Employment (NDE). Aberu (2019) further stated that skill acquisition workshops and seminars are organized for unemployed graduates who are retrenched on the technicalities of starting and running small scale businesses (self-employed) such as the production of industrial starch and floor cassava, manufacture of soap, detergents, mobile phone repairs, maintenance, marketing, etc. NDE granted loans to the beneficiaries to start the project of their choice as well as become bosses of their own business [self-actualization].

It is on this premise that this study seeks for the development of entrepreneurship to sustain an economy of high-level unemployment reduction. Nigeria is a blessed country with numerous business and investment potentials due to the abundant, vibrant, and dynamic human and natural resources it possesses (Muogbo & John, 2018). Nigerians have made remarkable achievements in diverse fields such as science, technology, academics, business, and entertainment. Thus, entrepreneurship activities and innovative ingenuity in Nigeria have developed enterprises in the following areas; Agriculture/ agro-allied activities where there are foodstuffs, restaurants, fast food vending, etc. In the area of solid minerals, there are quarrying, perm stone Cutting/ Polishing, and Gushing engineering, In power and transport, there are power generations, haulages business (cargo and passengers), in the area of information and telecom business, there are manufacturing an repairs of GSM accessories, in hospitality and tourism business, there are hotels, accommodation, resorts centers, cinemas, film, and home video production; in oil and gas business, there are construction and maintenance of pipelines, drilling, refining by-products, etc). Although entrepreneurship development has been regarded as the bedrock for employment generation and technological development in Nigeria, the sector nevertheless has had its fair share of neglect with concomitant unpleasant impacts on the economy.

It is against this backdrop that this paper attempts to examine the impact of entrepreneurship training on unemployment reduction in Nigeria. Entrepreneurship when and if gallantly developed in Nigeria will take its pride of place in reducing unemployment and thus generating employment among Nigerian youths especially the graduates, and place the economy on a proper footing.

The remainder of the paper is categorized into sections: section two deals with the literature review which consist of various concepts related to the study; section three highlights the methodology and other estimation procedures; section four presents the data analysis and discussion of findings; and finally section five deals with the conclusion and policy

recommendations.

2.0   Literature Review

2.1   Conceptual Framework
2.1.1   Concept of Entrepreneurship Training

Entrepreneurship training is a structured program that aims to equip participants with the necessary skillset and mindset for identifying and launching new business ventures (Ringo Ho, Uy, Kang & Chan, 2018). Entrepreneurship training is distinct from training in specific trade skills since the objective is to provide training that helps a person to start their own business rather than seeking paid employment. Therefore, the entrepreneurship training program is an important component of demand-side job creation strategies since the training is combined with grants, life skills, internship, and mentorship to facilitate the startup of the intern business. Furthermore, Agbai (2018) stated that many entrepreneurship training initiatives do not address the real needs of entrepreneurs. He feels that there is often a significant gap between the perceptions of the training providers and those of the entrepreneurs in terms of training needs, for what sometimes appear as key problem areas to the trainer may have little importance for the entrepreneur. This may be because many providers have limited managerial or vocational experience in small firms and fail to understand the practical problems facing entrepreneurs.

Every year Nigerian institutions turn out graduates which led to an increase in the entrance to the labour market without corresponding job creation. The unemployment situation in Nigeria is rising at a geometrical proportion largely due to an unfriendly environment that repels investment (Adetayo, Oke & Aderonmu, 2015). Despite various intervention programs by the Federal Government of Nigeria such as the establishment of the National Directorate of Employment (NDE) and National Poverty Alleviation Programme (NAPEP) problem of unemployment remains unabated. Realizing the failure of the Federal Government in creating employment, several States and Local governments have also introduced Entrepreneurship centers and Women and Youth Empowerment Schemes in which these sets of people are trained to acquire one skill or the other, and the participants are given a stipend or an interest-free loan to start a cottage or small business at the end of the program. The main purpose of these schemes is to reduce the rate of unemployment in their respective states. It is a known fact in the literature that entrepreneurship remains the gateway to sustainable wealth creation (Ogundele, 2017) and that if a nation desires to move out of the disturbingly high level of unemployment and ravaging level of poverty, adequate attention must be given to the growth of entrepreneurship.

Entrepreneurship has been defined by various professions to mean many things since middle age. The entrepreneur has been seen as an actor, innovator, or developer of the technology. Ossai (2018) defined entrepreneurship as the process of creating some new or different values by developing the necessary time, assuming the accompanying financial, psychic, and social risks, and receiving the resulting rewards of most personal satisfaction. Entrepreneurship is the process of bringing together creative and innovative ideas and coping them with management and organization skills to combine people, money, and resources to meet an identified need and thereby, create wealth. Although each of these definitions or descriptions views the entrepreneur from a slightly different perspective, they all contain similar notions such as risk-taking, organizing, creating wealth, initiative and newness.

Entrepreneurship training is a structured program that aims to equip participants with the necessary skillset and mindset for identifying and launching new business ventures (Ooi, & Nasiru, 2017). Entrepreneurship training is defined as the development of attitudes, behaviors, and capacities that can be applied during an individual's career as an entrepreneur (Ndofirepi, 2018). The notion stretches beyond merely teaching students to start a new business to incorporate other rich learning experiences that are gained from an educational environment. Collectively, these interventions promote "…desire, self-reliance, awareness of opportunity, adaptability to change and tolerance of risk and ambiguity by modifying attitudes, and instilling attributes, intentions, behaviours, knowledge, and skills enabling individuals and groups to participate meaningfully in all aspects of life, create something of value, and gain financial independence, or personal satisfaction, or both". Entrepreneurship education is complex as demonstrated by the diversity of its goals and the multiplicity of the ways and contexts in which it is offered. As a result, entrepreneurship- related instructional programs assume various forms and appellations.

2.1.2 Role of Entrepreneurship Education on Job Creation among Youths

Entrepreneurship education is critical to successful enterprise setting due primarily to the fact that enterprise setting devoid of entrepreneurship education has greater chances of failure due to poor preparation for the challenges associate with start-up. To be an entrepreneur is not just simply starting a business or two. It has much to do with attitude, the inner drive to be successful in business and training to improve on entrepreneurial competencies. It is now widely accepting that entrepreneurs are born and also made. Individuals could be trained to succeed in entrepreneurship. Entrepreneurship Education cultivates entrepreneurship traits like diligence and capacity for hard work (task- oriented); confidence, risk-taking, decision-making skills, interpersonal skills, leadership skills and goals-setting to blossom in individuals and inculcate in the trainee ability to manage time effectively, ability to communicate and negotiate; relate with people in power and authority, solve problem, resolve conflicts, cope with stress and tension and achieve self- confidence. (Ikeme, 2012) Entrepreneurship education and training becomes very important machinery to meet this national goal.

Education is the key to national development. This is because it unlocks the economic potentials of the people; empowers and equips individuals in the society to participate in, and benefit from their national economy; facilitates economic development, and provides the basis for transportation. Education is the essential tool for sustainability. Quality education plays a vital role in the social, political, and economic development of any nation. This is possible when jobs are created for the citizenry by establishing a lot of businesses that will accommodate the unemployed youth in Nigeria. A qualified graduate of entrepreneurship education would have acquired enough skills relevant to the management of a small business Centre. Through entrepreneurship education, a pool of potential entrepreneurs who are well equipped with skills and technical know-how to manage small/medium scale industries are produced. This will equally help in job creation. Through quality entrepreneurship education, Nigeria will provide a lot of entrepreneurs who could establish and manage the business on their own. This will help in reducing poverty in Nigeria.

2.1.3 Concept of Unemployment

Every economy is characterized by both active and inactive populations. The economically active ones are referred to as the population willing and able to work and include those actively engaged in the production of goods and services and those who are unemployed. According to Fajana (2016), unemployment refers to a situation where people who are willing and capable of working are unable to find suitable paid unemployment. It is one of the macro-economic problems which every responsible government is expected to monitor and regulate. The higher the unemployment rate in an economy the higher the poverty level and associated welfare challenges. Fajana (2017), Alao (2015), and Wikipedia (2016) identify the numerous types of unemployment. This occurs when there is a change in the structure of an industry or the economic activities in the economy.

2.1.4 Causes of Youth Unemployment in Nigeria

In the study of unemployment in Nigeria, Adebayo (1999), Alanana (2003), Echebiri (2005), Ayinde (2008), Morphy (2008) and Awogbnle and Iwuamadi (2010) have identified the main causes of growth employment in Nigeria. The first is the rapidly growing urban labour force arising from rural-urban migration. Rural-Urban migration is usually explained in terms of push-pull factors. The push factors include the pressure resulting from the man-land ratio in the rural areas and the existence of serious under-employment arising from the seasonal cycle of climate. The factors are further exacerbated in Nigeria by the lack of infrastructural facilities, which makes rural –life unattractive. In addition to this, youth move to the urban area with the probability of securing lucrative employment in the industries. The second is the rapid population growth in Nigeria. Going by the 2006 census in Nigeria, the nation's population was put at 140,431, 790 and projections for the future indicate that the population could be over 180million by the year 2020. With the accelerated growth of the population, Nigeria's unemployment problem is multi-faceted. It affects the supply side through a high rapid increase in the labour force relative in the absorptive capacity of the economy The third is the outdated school curricula and lack of employed skill and the fourth is the rapid expansion of the educational system which directly leads to an increase in the supply of educated manpower above the corresponding demand for them. This contributes to the problem of youth unemployment in Nigeria.

In a nutshell, Nigeria is a country with numerous business and investment potentials due to the abundant, vibrant and dynamic human and natural resources it possesses. Corruption, which has permeated the entire social structure of Nigeria, has robbed the country of developing a vibrant economic base. Funds meant for development projects have been misappropriated, diverted or embezzled. Thus crippling the economy and engendering and exacerbating unemployment which creates abject poverty, hunger, and frustration, killing the zeal and means for entrepreneurship development on the Nigerian youths. Unemployment means the proportion or number of unemployed people at a particular time in a particular region. The rate of unemployment in Nigeria is a major concern to the stakeholders such as parents who have invested so much in the education of their children and are expectant of reward for their sacrifices. The rates of unemployment in Nigeria cannot be easily assessed. However, According to National Bureau of Statistics (2010), the national unemployment rates for Nigeria between 2000 and 2009 showed that the number of unemployed persons was 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. This

showed that the employment rates have been on the increase. This is largely due to the low level of employment opportunities in the public sector, the situation which compelled many of the youth to seek casual jobs and other illegal means of livelihood. The unemployment situation in Nigeria is so bad that university graduates stay at home for upwards of 10- 15years without a job. Consequent upon this, Nigerian Universities Certificates have become unattractive while many young ones shun University education.

Nigeria's Unemployment rate rises to 33% second-highest on the global list, the jobless rate increased to 33% in the fourth quarter more than half of labour force is unemployed or underemployed. Unemployment in Africa's largest economy surged to the second-highest on a global list of countries monitored by Bloomberg. The jobless rate in Nigeria rose to 33.3% in the three months through December, according to a report published by the National Bureau of Statistics on its website on 6/12/2021 that up from 27.1% in the second quarter of 2020, the last period for which the agency released labour force statistics.

2.1.5 Empirical Review

Baba (2020) carried out research work on the challenges of Entrepreneurship development in Nigeria and the way forward. He is of the view that in this era of shrinking economic activities, the government should endeavour to provide the necessary infrastructures required for skills acquisition among its citizenry because, without technological skills, the entrepreneurial spirit which drives economic development through job creation will be lacking. He concluded that entrepreneurship is essential for rapid and sustained economic growth but there is an urgent need to change the mindset of the average Nigerian especially the youths towards embracing self-employment and de-emphasizing the search for non- existent white-collar jobs.

Ndofirepi, (2020) examined the relationship between entrepreneurship education and entrepreneurial goal intentions. The purpose of this study was to test if selected psychological traits (need for achievement, risk-taking propensity, internal locus of control) mediated the predictive relationship between the perceived effects of entrepreneurship education and entrepreneurial intentions. A cross-sectional survey of a sample of 308 vocational education students in Zimbabwe was used for this purpose. The results show that the effects of entrepreneurship education variable had a positive and statistically significant relationship with need for achievement, risk-taking propensity, internal locus of control, and entrepreneurial goal intentions. Moreover, the need for achievement, risk- taking propensity, and internal locus of control accounted for a statistically significant amount of variance in entrepreneurial intentions. However, of the three psychological traits, only the need for achievement partially mediated the relationship between the effects of entrepreneurship education and entrepreneurial goal intentions. The outcome has implications for the design and focus of entrepreneurship education programs.

Okolocha, John-Akamelu and Muogbo (2020) examined the effect of skill acquisition programs on youth employability in Nigeria. In the study, undergraduate, graduate, and post-graduate individuals of Anambra State were used. The main instrument used was the structured questionnaire. 100 respondents were randomly selected from different local governments in Anambra State. Findings revealed that much emphasis on academic excellence, lack of quality skilled trainers, acute shortage of facilities, inconsistent follow up

by the government and poor funding are problems facing skills acquisition employment in Nigeria. Based on the premises of the findings it was recommended that teachers require professional skills development abilities, competence, years of experience through an understanding of the subject matter, and effective involvement of the student in the instructional delivery.

Emeka and Ile (2019) paper examine how youth unemployment can be reduced through entrepreneurship development. The paper discusses among other issues what entrepreneurs do, the role of entrepreneurship in national development, and entrepreneurship development strategies for youths in Nigeria. It was revealed that entrepreneurship development reduces youth unemployment and empowers them to contribute positively to the nation's economic development. The paper recommends that the leaching of entrepreneurship should be taught as an activity and not just as an academic field. An appropriate conducive environment in the form of quality infrastructural facilities and start- up capacity should be provided.

Nwachukwu and Ogbo (2019) carried out empirical research on the role of entrepreneurship in economic development: The Nigerian perspective. The paper aims to develop and analyze the contributions of entrepreneurship in economic development through SME development in Nigeria. A total of 1000 SMEs were randomly selected from a cross-section of a population of all SMEs spread around some states of Nigeria. The hypotheses of this research which were tested at a 0.05 level of significance using chi-square statistics hinged on identifying the greatest problem that SMEs face in Nigeria. The researcher found out that SMEs have played and continue to play significant roles in the growth, development, and industrialization of many economics the world over. They concluded that promoters of SMEs should thus ensure the availability or possessions of managerial capacity and acumen before pursuing financial resources for the development of the respective enterprise.

Asad, Ali, and Islam (2019) examined the need to reduce unemployment through entrepreneurship in Pakistan. The regression results indicate that 91 percent of variations in entrepreneurship development have been explained by the explanatory variations in variables. The unemployment rate is negatively related to entrepreneurial development. A high rate of unemployment has been associated with the low level of entrepreneurial development in the economy of Pakistan.

Oladeji (2019) assessed the level of impact this program has on Youth empowerment and development in the Ondo State. Youths are said to be the future leaders of any country in the world, Nigeria inclusive. It is also a general belief that governments all over the world try to invest strategically in their youth for them to be able to assume the position of leadership when the time comes. Despite this, it appears that the training, the investment of the Nigerian governments as well as the socialization of youth in Nigeria and Ondo State, in particular, seem to be inadequate because many of them instead of contributing meaningfully to the development of the society, they are doing otherwise. 27 copies of the questionnaire were administered on the trainers at the skill acquisition centers, while 557 copies were given to the beneficiaries of the skills acquisition programme in Ondo State. Thirteen members of the coordinating departments were chosen for an in-depth interview. Findings revealed that the skills acquisition program has been able to provide employment opportunities for youth beneficiaries, reduce their involvement in social vices, improved their standard of living.

3.0   Methodology

3.1   Sources of Data

The study would employ a secondary source of data. The secondary source is time-series data from the World Bank database online and National Directorate of Employment (NDE). The study will cover the period 1990 to 2021 using annual data. This period is chosen to provide the most recent effect or events on unemployment and entrepreneurship training for policy measures. The study chooses secondary sources due to time and financial constraints and many other reasons; the secondary data is more convenient to use because the study does not need to collect the original data by himself. Therefore, secondary data is a good way to save research costs. The most important is that the secondary sources are also creditable, reliable for the fact that they are prepared by a team of experts in the World Bank since this study tries to examine events that have already happened.

3.2   Tools of Analysis

The study employed ex-post-facto research design which is use to examine how independent variables, present prior to the study affects a dependent variable. The study adopted an Autoregressive Distributed Lag (ARDL) econometric model to determine the impact of entrepreneurship training on unemployment, rate of self-employment, graduate enrollment in skill acquisition in Nigeria. One of the advantages of using this technique is that it does not consider the problems arising from the different order of integration of the variables. This study used variables in their natural logarithm form to assess the significance of the relationship among the entrepreneurship and unemployment variables. Since the data are time series indeed lags are involved in all economic behavior. In a dynamic world of continuous adjustment, the adjustment process take time, the length of the time depending on the nature of the phenomenon.

This study adopted both descriptive and inferential statistics to analyze the data. The choice of both methods and techniques is to have a detailed and robust analysis that would support objectives and relevant conclusions. This study will use Rstudio version 4.0.4 for analysis and the model estimation of ARDL. The choice of Rstudio is because of its interactive nature, quick, easy to learn and powerful visualization of data.

3.3   Model Specification

Linear regression assumes a dependent variable can be modeled by a linear combination of explanatory variables (explanatory variables in the regression are also called independent variables, but they are not necessarily statistically independent): The relationship between unemployment (UNEMPL), rate of self-employment (RSM), number of graduates enrolled for entrepreneurship (GEE), ease of doing business (EDB) is examining whether unemployment can lead to entrepreneurship training and this is expressed implicitly as:

UNEMPL ☐ ƒ(RSM,GEE,EDB)

Where: RSM- self-employment rate

GEE – number of graduates enrolled in vocational skill acquisition EDB – ease of doing business

This study also wishes to analyze the relationship that runs from Graduates enrollment for entrepreneurship (GEE) or vocational skills acquisition to unemployment reduction. In other words, to examine whether entrepreneurship training is mainly driven by an unemployment "push" effect that has consequences upon the potential of growth of new- firm start-ups equation 2 is stated to capture this relationship.

Where:

$GEE \square f(UNEMPL, RSM, EDB)$

$UNEMPL \square \square \square \square_1 RSM \square \square_2 GEE \square \square_3 EDB \square \square$

$UNEMPL_t$ = unemployment rate at the current time (t)

β_0 = constant term

RSM_{t-1} = self-employment rate one lag period (t)

GEE_{t-1} = number of graduates enrolled in vocational skill acquisition one lag period (t)

EDB_{t-1}= ease of doing business one lag period (t)

$UNEMPL_{t-1}$= unemployment rate one lag period (t)

ECM_{t-1} = is the error correction model one lag period(t)

p is the lag value of the dependent variable

q is the lag value of the independent variables

β_1-β_5 = are the long-run dynamics coefficients of predictors estimate which measures the size of the effect the predictor variables are having on the target or dependent variable (unemployment reduction).

φ_1-ω_5 are the long-run dynamics coefficients of predictors estimate which measures the size of the effect the predictor variables are having on the target or dependent variable (vocational skill acquisition).

α_0-α_5 = are the short-run dynamics coefficients of predictors estimate which measures the size of the effect the predictor variables are having on the target or dependent variable (unemployment reduction).

μ_t = error term

Δ= is the difference operator indicating the short-run models.

$\gamma - \omega=$ is the speed of adjustment parameter expected with a negative sign

4.0 Results and Discussion

This section provides the techniques used in analyzing the data such as the descriptive statistics, unit root test, optimal lag length test, ARDL bound test for cointegration and some post estimation test conducted for validity of the results as follows:

4.1 Stationarity Analysis of the Variables

The order of integration is very important in econometric analysis of variable for having internal inconsistency among the research variables. This is because cointegration necessitates that variables be cointegrated of the same order. This study ascertained the order of the integration by pretesting each variable using the Augmented Dickey–Fuller test proposed and Phillips - Perron (1988). The unit root test with a null hypothesis non- stationary against the presence of a stationary in the dataset. Among all the variables, lnUNEMPL and lnRSM conform to stationary at the level I(0) in ADF test and the remaining variables conform to stationary after the first difference but there is no variable integrated after the second difference I(2). Only lnUNEMPL was conform to PP test at level I(0) i.e. found to be tstationary. A mixed order of integration allows performing ARDL bound testing, initially proposed by Pesaran and Shin (1998) and after that further development conducted by Pesaran et al. (2001) to capture long-run cointegration among variables.

Table 1 Unit Root Test

	Level Difference		First	
	adf.test	pp.test	adf.test	pp.test
lnUNEMPL	-0.526(0.026)**	-0.591(0.012)**	-3.384(0.002)**	-28.978(0.010)***
lnRSM	-0.926(0.067)*	-6.56(0.289)	-3.259(0.003)	-27.049(0.010)***
lnEDB	-2.303(0.544)	-6.793(0.305)	-2.842(0.011)	-20.702(0.023)**
lnGEE	-1.293(0.155)	-6.331(0.275)	-2.010(0.062)	-17.380(0.067)*

Note 3: ***/**/* indicates statistically significant at 1% , 5%, and 10% respectively.

4.2 ARDL Bound Test for Cointegration

In this section, the study investigated the long-run cointegration that runs from unemployment rate (UNEMPL) to rate of self-employment (RSM), ease of doing business (EDB) and number of graduate's enrollment in entrepreneurship (GEE) in model 1. In the same vein, the study also examined if a long run relationship run from entrepreneurship to unemployment in model 2. Though cointegration necessitates that variables be cointegrated of the same order. Irrespective of whether the underlying variables are I(0) or I(1) or a combination of both the ARDL technique can be applied based on Pesaran and Shin (1998) approach. The null hypothesis is there is no cointegration and the alternative hypothesis is there is cointegration. The study findings revealed the existence of a long-run cointegration for the tested models based on the value of F-Statistic

in model 1 (21.414) and F-Statistic in model 2 (7.795) were found to be greater than I(1) (Upper bound). Therefore, the study concludes that unemployment rate and entrepreneurship move together in the long-run. The study rejected the null hypotheses and concludes that there is enough evidence that support cointegration of unemployment and entrepreneurship in the long run under reviewed years of the study.

Table 2: F-Statistics for Testing Existence of Long Run Cointegration

Model		F-Statistics
Model 1: UNEMPL=f(UNEMPL, RSM, EDB, GEE)		21.414* Model 2: GEE =f(UNEMPL, RSM, EDB, GEE) 7.795
Narayan(2005)	K = 3, n = 31	
Critical Value	Lower Bound I(0)	Upper Bound I(1)
1%	4.614	5.966
5%	3.272 -	4.306
10%	2.676	3.586

Note 3: ***/**/* indicates statistically significant at 1% , 5%, and 10% respectively.

4.3   Short-Run and Long-Run Estimation of Parameters

After verifying the existence of a long- and short-run association between the variables from ARDL bound test in the two models. The study finds the short- and long-run parameters of the variables. The regression result on table 2 reveals that R-squad is 95.85 which implies that the R-square for both models represent 96% correction. The results suggest a high level of relationship between the dependent variable (UNEMPL) and the dependent variable (GEE). This implies that the models explained about 96% of the systematic variation in unemployment rate and entrepreneurship training. In other words, the R^2 values (95.85 and 95.77) indicate that the variation in UNEMPL and GEE is explained by RSM, EDB, GEE and UNEMPL is 96%. This means that the remaining 4% changes in the UNEMPL and GEE could be cause by other variables not found in the equation (not included in the model) represented by the error term. The goodness of fit of the models is further expressed by the value of F-statistics at 21.46 and

18.09 which is statistically significant at a 1% level. This implied that the overall regression result is significant.

Table 3: ARDL Regression on Impact of Entrepreneruship Traning

Variables	Model 1	Model 2
	UNEMPL(Depedent Variable)	*GEE(Depedent Variable)*
ECM.1	-0.3396(0.0000)***	-0.0089(0.0000)***
dRSM.T	0.1900(0.0000)***	0.9015(0.0015)***
dRSM..1	-0.4942(0.0000)***	-2.5104(0.0000)***
dRSM..2		-3.0392(0.0000)***
dEDB.T	0.0000(0.0002)***	0.0004(0.0000)***
dEDB.1	-0.0002(0.0000)***	-0.0007(0.0000)***
dEDB.2	0.0000(0.0394)**	-0.0002(0.0000)***
dEDB.3	-0.0001(0.0000)***	-0.0003(0.0013)***
dGEE.T	-0.0374(0.1310)	
dGEE.1	-0.0170(0.5147)	-0.0059(0.9661)
dGEE.2	-0.1261(0.0000)***	0.0799(0.6087)
dGEE.3	-0.1876(0.0000)***	-0.8209(0.0000)***
dUNEMPL.T		-1.5098(0.0111)*
dUNEMPL.1	-0.2320(0.0148)**	2.5292(0.0000)***
dUNEMPL.2	-0.1520(0.0872)*	1.3604(0.01146)*
dUNEMPL.3	0.6184(0.0000)***	2.4359(0.0051)***
R	**0.9585**	**0.9577**
Adj. R	**0.9138**	**0.9047**
F-Stats	**21.46**	**18.09**
P-Value	**0.000**	**0.000**

Source: Author's Computation 2022; Note 3: ***/**/* indicates statistically significant at 1% , 5%, and 10% respectively. Error Correction Model, Rate of sel-employment, ease of doing business, number of graduate enrollment in entrepreneurship and unemployment rate, ECM, RSM, EDB, GEE and UNEMPL respectively.

4.4   Error Correction Model

The coefficient of ECT.1 (-0.3396) is found to be negatively and statistically significant a 1% threshold as expected. The size and statistically significance of the coefficient on the error correction model (ECM) measures the tendency of each variable to return to the equilibrium and by theoretical expectation. The error correction model is negative as expected. This measures the speed of adjustment of unemployment to its equilibrium level. However, this model indicates a slow speed of adjustment from the short run to the long run equilibrium state. The error correction term enhances UNEMPL and GEE deviation from long-run equilibrium to be corrected gradually through a series of partial short-run adjustments as observed in the models. In the direction to establish the long-run and short-run association between the variables. Short-run effects are captured through individual coefficients of the differentiated terms, and the long run is captured through the coefficient of ECT variable which contains information about whether the past values of variables affect the current values of the variables under study. Its significance measures the tendency of each variable to return to the equilibrium at the speed of 33.96% annually. Since the p-value are significant the study

is confident of the inter-temporal stability of the models and hence short-run fluctuations will converge at the long-run estimates at an expected speed of about 33.96 annually.

4.5   Discussion of Findings

This study has provided sufficient statistical evidence which suggests that entrepreneurship training can impact unemployment rate both positively and negatively. Rate of self-employment, ease of doing business and number of graduate enrollment in entrepreneurship training have provided sufficient evidence as good predictors of unemployment rate in Nigeria.

However, rate of self-employment at the current year (beginning of the year of analysis) was positively associated with unemployment at 1% level of significance. The implication of this is that an increase in self-employment brings about increase in unemployment rate. This could be contradicting at the face value. However a critical look suggests that countless startups fail in Nigeria, either within the year of establishment or beyond. This can definitely lead to unemployment of the owners of such businesses, hence the positive association business self-employment and unemployment. Table 4.4 shows that rate self-employment revert to negative association with unemployment, which suggests that an increase in rate of self-employment could lead to decrease in unemployment rate by 49.42%. The impact of genuine reduction in unemployment through rate of self-employment could be attributed to the existing entrepreneurship training in which graduates and non-graduate participate to find meaning and contribute to the society.

The economic crisis and periods of high unemployment in Nigeria can push people towards self-employment due to the absence of other opportunities. The economic theory also states that unemployed people are motivated to be self-employed when there are incentives, such as the availability of free training or free vocational skills acquisition programs, which are provided by the federal government, grand, loans to small businesses or start-up businesses, and also when there is the ease of doing business unemployed people are motivated to register their businesses, etc. therefore, this study has validated and affirmed the applicability of economic theory in Nigeria.

This study also observed that ease of doing business indicator plays an important role in promoting employment in Nigeria which in turn underpins rapid and sustained economic growth. For example, that the rate at which new firms are created is a function of positive ease of doing business reforms. Based on World Bank database (2022) Nigeria has improved transparency and business environment and implementation of some of ease of doing business reforms across various sectors which have made Nigeria move up 24 places in the World Bank's Ease of Doing Business Index 2018. Nigeria actually moved up from 168th position in 2017 ranking to 145th in the 2018 report, scoring 52.03 out of 100. It is an indication on how quickly firms can be established in formal regulatory environments provides a powerful rationale for some of the reforms in investment. From the coefficient of current and lagged two of EDB found to be positively associated with unemployment. Meaning that ease of doing business increases unemployment, though, the 0.00% contribution increase could not significant impact on unemployment during these periods. However, lagged one and three were highly significant and reduces unemployment by 0.02% and 0.01% respectively.

Number of graduate enrollment in entrepreneurship training in this study demonstrated to be the best predictor of unemployment. The coefficients are negatively associated with unemployment, though only few are statistically significant in both models. These indicate that more increase in graduate participation in entrepreneurship training will reduce unemployment by 12.61% and 18.76% this study agrees with the findings of Ekong & Ekong, (2018) who investigated how the Unemployment problem is tackled through Skills Acquisition by the National Directorate of Employment (NDE) in Akwa Ibom State, Nigeria. Ekong and Ekong further found that a positive link exists between Skills Acquisition by NDE and Unemployment reduction in Akwa Ibom State.

Finally, the lagged of unemployment rate was include as independent variable to provide robust estimates of the impact one expect the current level of the unemployment when it is heavily determined by its past level. In that case, not including the lagged unemployment rate will lead to omitted variable bias and the results might be unreliable. In other words, in conclusion of the lagged of unemployment rate in the model take out a lot of variances and is likely to make unemployment rate effects less significant. The lagged coefficients of unemployment rate were found to be negatively and significantly associated with unemployment. However, the lagged three coefficient was found reverted or add unemployment rate to unemployment.

5.0 Conclusion and Policy Recommendations

This study concludes that economic theory, resources-based theory and human capital theory are applicable in the Nigeria economy. Economic theory which is noticeable through the ease of doing business indicator, is felt by the reforms especially in terms of funds incentives such as loans, grants provided by either the federal government, individuals or banks are stimulating investment growth which in turn is reducing unemployment in the country. This is also possible as resource-based theory amplified by access to information, education and entrepreneurship training are increasingly inspiring self-employment and reducing unemployment over the years under review. In this study human capital development is carried out through universities, secondary schools, entrepreneurship training centers etc. are providing and developing graduates or unemployment youth with the right skills and opportunities necessary to reduce unemployment in the country. In a nutshell, all these programs seem to have significant influence on unemployment as found in this study. The study therefore recommends the followings:

1) More efforts from both the federal and state government and also stakeholders, banks, agencies should be channeled towards investing in the development of skill acquisition centers

2) Graduates should be encouraged leaving out shame to avail themselves with the skills acquisition opportunities available to them. This can be achieved by providing entrepreneurship training centers, mentorships programs, loans, grants, startup capitals etc. and also institutions giving loan should provide interest free loan scheme for graduate undergoing skills acquisition training to start up their business.

3) There is need for develop agencies to partner with this graduate in business startup so

that their confidence can be promoted.

4)   There should be more effective review process of ease of doing business index in Nigeria to reduce delays in starting business and also to encourage entrepreneurship practices.

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