



AUTO REGRESSIVE DISTRIBUTED LAG APPROACH TO ENTERPRENEURSHIP FINANCING AND POVERTY REDUCTION IN NIGERIA

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Abstract

This study examined the impact of entrepreneurship on poverty reduction in Nigeria, for the period of 27 years (1992- 2020). Data used for the study were obtained from CBN statistical bulletin and world bank data bank. The variables utilized in the study include poverty (POV), credit to SMEs (SMF), unemployment rate (UNM), Exchange rate (EXR) and inflation rate (INF). Descriptive summary was carried out on the variables. More so, the time series variables were tested for stationarity using, Augmented Dickey-Fuller method. additionally, the study utilized ARDL cointegration technique to check for long run relationship between the variables. The result of the regression showed that the key SMF exerts negative and statistically influence on poverty reduction in both short and long run. while UNM, EXR and INF exerts positive influence on poverty reduction in Nigeria in the long run. However, in the short run, EXR exerts negative and statistically insignificant influence on POV in Nigeria. Additionally, the (ecm -1) indicated that in case of any distortion amongst the variable, the system will return to equilibrium by 47.87 percent speed, annually. The study concludes that there is a relationship between poverty reduction and the independent variables. Therefore, the study recommends that the state government and stakeholders should embark on massive fiscal policy so as to reduce poverty and its menace in the state. The effect of fiscal policy direct, faster and to a large extent limits the strength of corruption that hampers government initiatives. Fiscal policy can go a long way in assisting entrepreneurs bring their ideas into reality, considering that start-up capital is the major determining factor in any business idea.

Key words: Poverty rate, Unemployment rate, Auto Regressive Distributed Lag, Exchange rate, Inflation Rate

1. Introduction

Entrepreneurship plays a significant role in the achievement of growth and development of various economies. Entrepreneur as an agent of economic transformation in society is visible in employment and wealth generation (Abdul & Idris, 2014). It has aptly been referred to as “the engine of growth” and “catalysts for socio-economic transformation of many countries”. It represents the vehicle for the achievement of national economic objectives of employment generation and poverty reduction (that is, SSBs create job which increases incomes as well as

reduces poverty) at low investment cost as well as the development of entrepreneurial capabilities including indigenous technology ((Edom, Inah and Emori 2015).

In the longer term, economic progress depends on the ability of the entrepreneur to increase the value of what she/he produces with his/her factor resource (people, land and capital). The primary concern of the entrepreneur is to create something new, involving the motivation to overcome obstacles, the willingness to run risks, and the desire for personal prominence in whatever is accomplished. A strong need to build something and to feel that what was built is due to personal efforts is a primary motivation. Therefore, by combining new and existing resources with innovative ideas, entrepreneurs add value through the commercialization of new products, the creation of new jobs and the building of new firms (Udih & Odibo, 2016).

In developing countries, like Nigeria, entrepreneurship offers the platform for indigenous technology development through fabrication of component parts for industrial production. However, it gives access to the infrastructural facilities occasioned by the existence of such business in their surroundings, the stimulation of economic activities such as supplies of various items and distributive trades for items produced and or needed by the entrepreneur, stemming of rural urban migration, enhancement of standard of living of entrepreneur and their dependents as well as those who are directly or indirectly associated with them.

In view of the innovation that comes with entrepreneurship, Naude (2013) illustration of this innovation takes its root from Schumpeter (1934) theory. Therefore, Naude (2013), illustrated this entrepreneurship innovative activity utilizing five distinguishing cases: (i) the introduction of a new good – that is, one with which consumers are not yet familiar – or a new quality of a good. (ii) The introduction of a new method of production, that is, one not yet tested by experience in the branch of manufacture concerned, which need by no means be founded upon a discovery scientifically new, and can also exist in a new way of handling a commodity commercially. (iii) The opening of a new market, that is, a market into which the particular branch of manufacture of the country in question has not previously entered, whether or not this market has existed before. (iv) The conquest of a new source of supply of raw materials or half-manufactured goods, again irrespective of whether this source already exists or whether it has first to be created. (v) The carrying out of the new organization of any industry, like the creation of a monopoly position or the breaking up of a monopoly position: Through his innovative activity, the Schumpeterian entrepreneur seeks to create new profit opportunities. These opportunities can result from productivity increases, in which case, their relationship to socio-economy income growth appears quite significantly.

Consequently, Global Entrepreneurship Monitor (GEM) (2012) showed that countries with higher levels of entrepreneurial activity enjoy strong socio-economic growth with a significant positive effect on poverty reduction. As such, entrepreneurship entail the ability an economic agent to identify the resources, to perceive their economic potentials, the ability and willingness to utilize these resources and invest in their development defining immediate rewards in favour of future investment. Additionally, the Global Entrepreneurship Monitor (GEM) of 2012, identified Nigeria as one of the most entrepreneurial countries in the world. The study showed that, out of every 100 Nigerians, 35 are engaged in some kind of entrepreneurial activity or the other. However, it can be inferred that a strong correlation exists between entrepreneurship financing and poverty reduction. Unfortunately, the performance of entrepreneurship in poverty reduction has been bedeviled largely by poor financing. The inability of a young entrepreneur to access loan to finance new business have killed many innovative ideas prematurely. As such, poverty trend keeps surging high. Ojo (2003) argues that all these entrepreneurial assistance

programs such as NDE, NIRSAL, Anchor Borrowers, Trader Money etc have failed to promote the development of entrepreneurship.

Consequently, the cost of funds is a critical factor in the sense that it impacts significantly on the competitiveness and survival of these enterprises. Long gestation in an unstable environment coupled with unsound financial packaging tends to subject entrepreneurship to a high failure rate, which in turn makes the sector relatively risky and unattractive to the banking system's credit. Nevertheless, finance has been viewed as a critical element for the development of entrepreneurship. The aim of this study is to investigate the effect of entrepreneurship financing on poverty alleviation in Nigeria, Nigeria.

2. Literature Review

Conceptual Clarifications

Entrepreneurship

Afolabi (2015) defines entrepreneurship as the capacity and willingness to develop, organize and manage a business venture along with any of its risk in order to make a profit. The most obvious example of entrepreneurship is the starting of new businesses. In economics, entrepreneurship combined with land, labour, natural resources can produce profit. Entrepreneurial spirit is characterized by innovation and risk taking, and is an essential part of a nation's ability to succeed in an ever changing and increasingly competitive global market place.

Entrepreneurship entails the introduction of a change, an innovation, or a new order (Oteh, 2009). To a psychologist, an entrepreneur would be analyzed as a person typically driven by the need to obtain or attain a specific goal, to experiment, to accomplish, or perhaps to escape the authority of others (Oteh, 2009). However, a common denominator in a good number of studies is the important role of three key factors namely, risk-taking, innovation and identification and use of opportunities, with varying degrees of emphasis (Rusu, Isaac, Cureteanu & Scorba, 2012). Entrepreneurship is a dynamic process created and managed by an individual (the entrepreneur), which strives to exploit economic innovation to create new value in the market." This definition captures different features of entrepreneurship in an integrating manner. Entrepreneurship therefore is dynamic; involves a process, motivation or the need to achieve; affects and is also affected by the environment; and its end product is value-creation (which could come in form of fulfillment of goals and objectives of a particular entrepreneur or high return on investment to investors for a high growth ventures).

Schumpeter (1934), a development economist, who sees entrepreneurship from the point of view of value creation and defines an entrepreneur as a risk-taking innovator needed for rapid economic development, through the process of "creative destruction", by which obsolete technologies and ideas are replaced by new ones. Although this definition comes from the field of economics, but the basic ingredient is 'value creation' which has the capability of introducing change in the form of economic development. Closely related to the definition of Schumpeter is the view of Ronstadt (1988) who defines entrepreneurship "as the dynamic process of creating incremental wealth. The wealth is created by individuals who assumed the major risks in terms of equity, time and/or career commitment or provided value for some product or service. The

product or service may or may not be new or unique but value must somehow be infused by the entrepreneur by receiving and allocating the necessary skills and resources.

Poverty

Poverty means different things to different people. It has many aspects, faces and causes. Poverty can be defined objectively and applied consistently only in terms of the concept of relative deprivation. Individuals, families and groups in the population can be said to be in poverty when they lack the resources to obtain the types of diet, participate in the activities and have the living conditions and amenities which are customary, or are at least widely encouraged or approved, in the societies to which they belong (Khubra, 2016).

The most widely held and understood definition of absolute poverty measures poverty strictly in economic terms earning less than \$1.90 a day. But the World Bank goes beyond the amount of money a person or family earns to expand the definition of poverty. Poverty is hunger. Poverty is lack of shelter. Poverty is being sick and not being able to see a doctor. Poverty is not having access to school and not knowing how to read. Poverty is not having a job, is fear for the future, living one day at a time. Poverty is losing a child to illness brought about by unclean water. Poverty is powerlessness, lack of representation and freedom (World Bank 2007). This poverty definition encompasses living conditions, an inability to meet basic needs because food, clean drinking water, proper sanitation, education, health care and other social services are inaccessible.

Poor families and children living in the world's low- and middle-income countries are highly vulnerable, powerless and afraid. They are dependent on others. Their rights and freedoms are restricted. They live without support, on the sidelines, watching economic growth and prosperity pass them by. Their dignity is assaulted daily, and their lives are abundant...in scarcity (Berry, 1995).

Poverty has many faces, changing from place to place and across time, and has been described in many ways. Most often, poverty is a situation people want to escape. So, poverty is a call to action for the poor and the wealthy alike, a call to change the world so that many more may have enough to eat, adequate shelter, access to education and health, protection from violence, and a voice in what happens in their communities. However, in the study, poverty can be seen as the inability of a healthy person to be profitably engaged in any economic activity, and the dissatisfaction of a failed dreams and aspiration.

Literature Review

Alfred Marshall's Entrepreneurship Theory

The Alfred Marshall theory of Entrepreneurship held land, labor, capital, and organization as the four factors of production. As such, Alfred Marshall considered organization as entrepreneurship as the binding pieces that holds these four factors together. The theory attempted to highlight features of a successful entrepreneur: thorough understanding of the industry, good leadership skills, foresight on demand and supply changes and the willingness to act on such risky foresights. Consequently, success of an entrepreneur depends not on possession of these skills, but on the economic situations in which they attempt their endeavors. Alfred Marshall believed that entrepreneurship is the driving force behind organization. As such, entrepreneurs create new commodities or innovate the process of producing an existing commodity. To achieve this, Alfred Marshall believed that entrepreneurs must have a thorough understanding about their

industries, and they must be natural leaders. Moreover, Marshall held that entrepreneurs must have the ability to foresee changes in supply and demand and be willing to act on such risky forecasts in the absence of complete information. Many economists have modified Marshall's theory to consider the entrepreneur as the fourth factor itself instead of organization, and which coordinates the other three factors.

Schumpeter's Innovation Theory

Schumpeter (1949) holds an entrepreneur as one having three major characteristics: innovation, foresight, and creativity. Entrepreneurship takes place when the entrepreneur creates a new product, introduces a new way to make a product, discovers a new market for a product, finds a new source of raw material, finds new way of making things or organization. Schumpeter's innovation theory however ignores the entrepreneur's risk-taking ability and organizational skills, and place undue importance on innovation. This theory applies to large-scale businesses, but economic conditions force small entrepreneurs to imitate rather than innovate. In Schumpeter's view the entrepreneur leads the way in creating new industries, which in turn, precipitate major structural changes in the economy. Other economists have added a dimension to imitating and adapting to innovation. This entails successful imitation by adapting a product to a niche in a better way than the original product innovators innovation.

Keynesian Theory of Poverty

Keynesian theory of poverty also known as the Liberal theory is of the view that apart from market distortions paramount in the Capitalist economy, but also broad under development in its multiple facets mostly in developing economy cause poverty. Keynesian theory therefore suggests that economic growth can promote economic development and thereby alleviate poverty through more of government interventions (via fiscal and monetary policy) at the macroeconomic level, mainly to tackle involuntary unemployment (Davis & Miquel, 2014).

In a typical Keynesian theory approach according to Davis and Miquel (2014), the main signs of underdevelopment in an economy include poor levels of human capital (health, skills and education), business capital (machinery and buildings), infrastructure (transport, power and sanitation), natural capital (viable land), public institutional capital (rule of law and security) and knowledge capital (technical know-how needed to raise productivity). The theory's view involves government focus on the provision of capital goods, in the form of education (to increase human capital) and infrastructure (to increase productive capacity), flowing to the poor, as well as overall development of markets that may be applicable to the SMEs in Nigeria. Economies, like persons, should be seen as complex systems, where failures in one-part (poor SMEs financing) lead to failure elsewhere (e.g. market systems) (Davis & Miquel, 2014).

Factors to be taken into account include the existence of a poverty trap, the economic policy framework, the fiscal framework and fiscal traps, physical geography, governance patterns and failures, cultural barriers and geopolitics in SMEs financing for poverty reduction in Nigeria (Davis & Miquel, 2014). In this regard, poverty in a given country might be heavily affected by the presence of a very weak institutional environment including corruption or inadequate access of credits by the entrepreneurs, which adversely influences the functioning of markets, whereas in another context the most crucial factor may be geographical isolation, which may impede the import of basic goods and services needed for individuals to attain a certain level of well-being. Therefore, the importance of these wide ranges of factors at the macro level needs to be weighed in each specific case, and only then can a particular, tailor-made policy agenda be designed to

combat poverty. In line with the Keynesian theory on poverty, improving entrepreneurial financing by government could significantly alleviate poverty in Nigeria (Davis & Miquel, 2014).

Empirical Literature

Asogwa and Anah (2017) examined the entrepreneurship development and economic growth. Their study was focused in Enugu state, Nigeria. They utilized survey research design whereby structured questionnaires was administered to the sample drawn from the population of the study. The study also utilized Chi-Square (X²) method of analysis. As such, the study found that entrepreneurial activities create job opportunities which subsequently enhance the standard of living of the people of Enugu State, and therefore concludes that the role of entrepreneurial activities in economic development cannot be over-emphasized because it enhances the socio-economic well-being of the people.

Saidi, Sodiq and Olushola (2016) examined the causality between entrepreneurship development and economic growth in Nigeria. The study utilized Asymmetric auto-regressive distributed lag (ARDL). Consequently, the study outcome implied an insignificant direct relationship between SMEs finance and real gross domestic products (RGDP). The study concluded that inefficient mobilization of funds for SMEs operators in Nigeria incarcerates SMEs operators to operate in economies of scale.

Similarly, Farayibi (2015) utilized an Error Correction Model (ECM) approach on the effect of entrepreneurship in economic growth in Nigeria. The study focused on Nigeria area of innovation such as agriculture, information and communication, environmental and waste management, financial and banking. The findings of the empirical study confirm the roles of entrepreneurs as good drivers of economic growth in the country. Specifically, the results reveal that credit to SMEs is statistically significant in enhancing economic growth in Nigeria.

Muhammad and Hamisu (2018) investigated the relationship between credits to SMEs on economic growth using quarterly time series data between 1981 Quarter 1-2013 Quarter 4. The study utilized quarterly time series data in the analysis. Hence, Cointegration methods and granger causality method were employed in the analysis of data. The study found that there is a positive significant impact of credit to SMEs and credit to other private sector on economic growth in Nigeria.

3. Model Specification

The model for this study is stated as

$$POV = f(SMF, UNM, EXR, INF) \dots \dots \dots (3.1)$$

Where;

- POV = Poverty Rate
- SMF = Small and Medium Enterprises Financing
- UNM= Unemployment Rate
- EXR = Exchange Rate
- INF = Inflation Rate

Given equation 3.1 above, it expressed that poverty in Nigeria is a function of small and medium scale enterprises financing (SMF), unemployment rate (UNM), exchange rate (EXR) and inflation rate (INF). As such, equation 3.1 can be re-specified in econometrics form as:

$$POV_t = \beta_0 + \beta_1 SMF_t + \beta_2 UNM_t + \beta_3 EXR_t + \beta_4 INF_t + \epsilon_t \dots \dots \dots (3.2)$$

To regress the Autoregressive Distributed Lag Techniques for long run co-integration causality of the hypothesized variables, we utilized bound test technique of the ARDL specification. As such, the ARDL representation of the entrepreneurship and poverty relationship can be specified as:

$$\Delta \ln(\text{POV}_{t-1}) = \alpha_0 + \gamma_1 \ln(\text{POV}_{t-1}) + \gamma_2 \ln(\text{SMF}_{t-1}) + \gamma_3 \ln(\text{UNM}_{t-1}) + \gamma_4 \ln(\text{EXR}_{t-1}) + \gamma_5 \ln(\text{INF}_{t-1}) + \sum \gamma_i \Delta \ln(\text{POV}_{t-1}) + \sum \gamma_j \Delta \ln(\text{SMF}_{t-1}) + \sum \gamma_k \Delta \ln(\text{UNM}_{t-1}) + \sum \gamma_m \Delta \ln(\text{EXR}_{t-1}) + \sum \gamma_n \Delta \ln(\text{INF}_{t-1}) + \lambda \text{ECM}(-1) + \varepsilon_t \dots \dots \dots (3.3)$$

The benefit of the above model is that it produces accurate results irrespective of whether the regressors in the model are of different order of integration or jointly cointegrated. As such, Δ is the difference notation, while $\gamma - 5$ are the long run multipliers, α_0 is the intercept and ε_t is the stochastic error term. More so, the following hypothesis were tested in the study $H_0; \alpha_0 = \gamma_1 = \gamma_2 = \gamma_3 = \gamma_4 = \gamma_5 = 0$ against the alternative $H_1; \alpha_0 \neq \gamma_1 \neq \gamma_2 \neq \gamma_3 \neq \gamma_4 \neq \gamma_5 \neq 0$

4. Presentation and Interpretation of Regression Result

Table 1: Descriptive Statistics

	POV	SMF	UNM	EXR	INF
Mean	4.210970	0.542311	1.444231	3.254011	1.206571
Median	4.032211	0.874213	1.392345	3.834251	2.016623
Maximum	4.123603	3.232211	2.221345	4.609561	3.588204
Minimum	3.432785	-2.142367	1.457811	3.872391	1.084176
Std. Dev.	0.013241	2.978730	0.124357	0.231107	0.475873
Skewness	-0.214503	-0.128723	2.448721	1.636691	1.009076
Kurtosis	2.543246	1.343216	6.432561	3.554311	3.762726
Jarque-Bera	0.551381	3.221097	32.01545	3.185664	4.387254
Probability	0.623180	0.489123	0.000542	0.213451	0.111406
Sum	112.90121	11.73014	36.15931	134.7318	70.39714
Sum Sq. Dev	0.769910	112.45123	1.708943	4.904056	10.33096
Observations	27	27	27	27	27

Source: *Computed by the Author's, evIEWS 9.0, 2021*

In table 1 above, the mean value for each variable is explained by the mean. However, the standard deviation shows the measure of spread. The degree of deviation from the mean is explained by how high/low the value is. Skewness explores the distribution of the series around the mean. Moreover, normal distribution is associated with zero skewness. A rightward skewness denotes a distribution that is positive, while, a leftward skewness denotes a distribution that is negative. Kurtosis, explores the peakedness of a series. As such, the kurtosis for a normal distribution is 3. Therefore, a distribution that is greater than 3 is considered leptokurtic. On the

other side, a distribution that is less than 3 is considered platykurtic. Consequently, the null hypothesis for test statistic for normal distribution (Jarque-Bera) states that series is normally distributed. In line with this, null hypothesis is accepted when the p-value is higher than 0.10%, otherwise, we reject.

Given the above illustration, descriptive statistics result showed that skewness appeared to be significantly higher than zero. The coefficient of kurtosis appeared to be either lower than the normally distributed data, or higher than the normally distributed value. As such, this observation is in accordance with our suspicion that the data applied in this study may not be normally distributed. This means that the expected stationarity outcome of the variables may no longer be possible. As such, a formal test of unit root needs to be carried out on the variables.

Table 2: Unit Root Test (Augmented Dickey-Fuller)

Variable	Level	First difference	Order of integration
POV	-4.771309 (0.0035)	-4.23310 (0.0098)	I(0)
SMF	-1.311200 (0.4883)	-5.723301 (0.0000)	I(1)
UNM	-0.322190 (0.6330)	-4.337901 (0.0034)	I(1)
EXR	-1.602178 (0.0668)	-4.332871 (0.0005)	I(1)
INF	-5.644210 (0.0000)	-4.722013 (0.0265)	I(0)

Source: Computed by the Author's, eviews 9.0, 2021

The result of stationarity test showed that the variables (POV, SMF, UNM, EXR and INF) are integrated of different order 1(0) and 1(1) at a critical value of 1%, 5% and 10%. As such, at intercept, the variables are stationary. This results therefore, requires cointegration examination.

Table 3: ARDL Bound Test Results

		F-statistic= 5.313661 K= 4
Critical Values	Lower Bound 1(0)	Upper Bound 1(1)
10%	2.34	3.36
5%	2.56	3.67
1%	2.61	3.42

Source: Computed by the Author's, eviews 9.0, 2021

The different order of integration of the variables required the investigation of the long run relationship between the variables by utilizing ARDL bounds testing approach to cointegration. The appropriate lag length is prerequisite to continue the ARDL bounds testing to examine cointegration between the series. The results of the bounds test for cointegration, together with critical values of Pesaran and Pesaran (1997) are reported in table 3 above. The decision rule as illustrated by Pesaran and Shin (1999) requires that the F statistics values of any of the variables be greater than the critical bound values at any significance level (10%, 5%, or 1%) for long run relationship to exist. As such, the calculated F-statistic together and the critical bounds values as shown in table 3 revealed that the F-statistic (5.313661) for the bounds test for cointegration

exceeds the upper bound critical value of 3.67 at 5% level. As such, the null hypothesis of no cointegration relationship was rejected. Additionally, with respect to the cointegration result, it is concluded that there is strong support for a long-run relationship between the variables.

Table 4: Summary of ARDL Long and Short Run Result

Long Run Coefficients				
Variables	Coefficients	Std. error	t-statistics	Prob.
SMF	-0.043551	0.021974	-1.500427	0.0289
UNM	0.058965	0.039892	-0.130889	0.0296
EXR	0.230164	0.017001	-2.023155	0.0611
INF	0.341917	0.023200	3.013931	0.0043
C	3.534312	0.475212	8.421771	0.0000
Short Run Dynamics and Error Correction Term				
Variable	Coefficients	Std. error	t-statistics	Prob.
D(SMF)	-0.022210	0.010265	1.011018	0.0346
D(UNM)	0.019451	0.052201	1.113601	0.0118
D(EXR)	-0.028110	0.032217	-0.500811	0.5122
D(INF)	0.211009	0.032991	2.533201	0.0321
CointEq(-1)	-0.438719	0.190011	-4.255011	0.0001

Source: Computed by the Author's, eviews 9.0, 2021

As presented in the table above, SMF was found to be negatively and significantly related to poverty (POV) in the short run. As such, a percentage increase in entrepreneurship financing (SMF) will decrease poverty by 0.022%. More so, UNM was found to be positively and significantly related to poverty in Nigeria. Given out come, a percentage rise in unemployment rate (UNM) will increase poverty rate by 0.019% in the short-run. The result found negative and significant relationship between exchange rate (EXR) and poverty (POV) reduction for the period under investigation, this tells us that as dollar to naira exchange rate rise, more individuals are thrown into poverty due to hardship resulting from high cost of living in the short run. Therefore, Inflation rate which is a proxy for consumer price index is positively and significantly related to poverty reduction. This implies that one percent increase in inflation (INF) will worsen poverty (POV) by 0.21%. This finding illustrates the argument of supply side economics that inflation reduces the purchasing power of workers and thus influence aggregate demand negatively. The error correction model (ecm-1) denotes the speed of adjustment to equilibrium in case of any distortion in the variables under considerations. Consequently, in econometrics theory, (ecm) must be negative and significant to be able to serve the purpose of error correction. As such, lag 1 coefficient of the error correction term produced a negative sign (-0.438719) and statistically significant at 1%. This shows that, in case of distortion in the economy, equilibrium can be re-established by 47.87 percent speed, annually.

In the long run, the coefficients do not differ much from the short run especially the key variables, only the magnitude changed slightly. Hence, unlike in the short run, SMF is negatively and significantly related to poverty (POV) reduction in Nigeria. While unemployment (UNM) is positive and statistically significant to poverty (POV) in Nigeria. This denotes that in the long run, a one percent increase in unemployment will aggravate poverty by 0.058%.

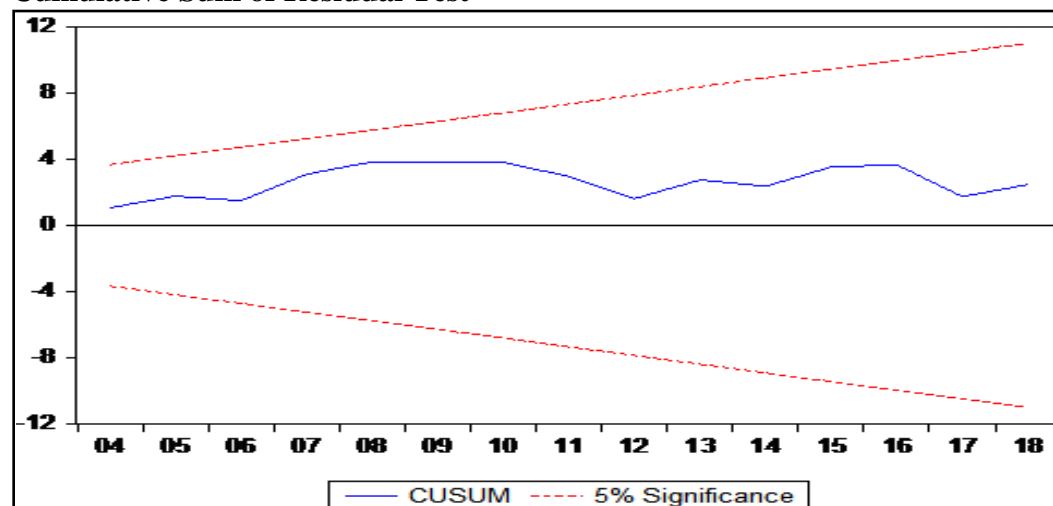
Post Estimation Diagnostic Tests

Normally Test			
Jarque Bera	2.541387	Prob.	0.330329
Breusch-Godfrey Serial Correlation LM Test			
F-statistics	0.670090	Prob. F(2, 14)	0.4132
Obs R-square	2.411120	Prob. Chi-square(2)	0.3931
Breusch-Pagan-Godfrey Heteroscedasticity Test			
F-statistic	0.328871	Prob. F(9,15)	0.8108
Obs*R-squared	5.061182	Prob. Chi-Square(9)	0.9160
Scaled explained SS	2.338113	Prob. Chi-Square(9)	0.7324

Source: Computed by the Author's, *evIEWS 9.0*, 2021

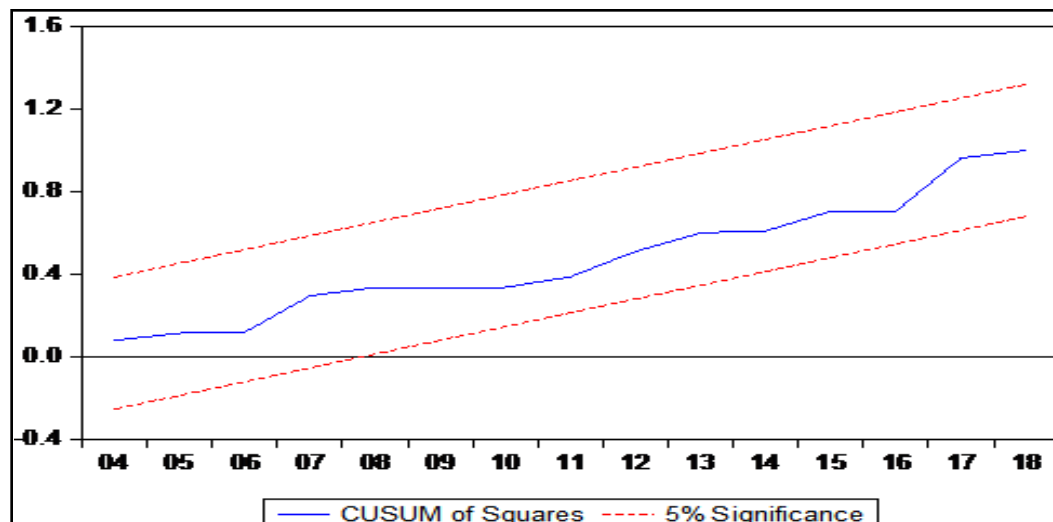
The result of the post estimation results showed the Jarque bera statistics to be 2.541387. Accordingly, since the probability value of the test statistic is greater than 5%, the null hypothesis is rejected and conclude that the residuals of the model are normally distributed. Additionally, the post estimation result showed the Breusch-Grodfrey serial correlation LM Test and Breusch-Pagan-Godfrey Heteroskedasticity test. As such, for the serial correlation LM test, the insignificant Probability values of 0.4132 and 0.3931 for F-statistic and obs*R-squared respectively, reveals that there is no evidence of serial correlation. Similarly, the P values of F-statistic, obs*R-squared and scaled explained SS stand at 0.8108, 0.9160 and 0.7324 respectively, informs us not to reject the null hypothesis that residuals of the model are homoscedastic.

Fig 1: Stability TEST
Cumulative Sum of Residual Test



The CUSUM result showed that the model and the estimated parameters are stable given that the graph moves within the 0.05 critical values.

Fig 2: Cumulative Sum of Squares of Residual Test



Similarly, the cumulative sum of square test in fig 2 above, explained that the model and the estimated parameters are generally stable all through the period under investigation the blue line swings within the two red lines signifying 5% level of significant.

5. Conclusion and Recommendation

The study examined the effect of entrepreneurship financing on poverty reduction in Nigeria, Nigeria, between 1992 to 2020. As such, auto regressive distributed lag approach was utilized in the analysis of the econometrics model. This study is very important at this time mainly due to the high level of poverty occasioned by poor business environment in Nigeria. Most of the entrepreneurs finds it difficult to stay in business withing five years of establishment largely due to poor financing and poor macroeconomic business environment. As such, this study has been able to establish that entrepreneurship financing is critical for poverty reduction in state. As such, it also creates jobs which induces employment. Additionally, exchange rate and inflation were found to fueling poverty in Nigeria. This means that entrepreneurs find it difficult to bring their ideas into existence. Where the business is already in existence, innovation and improvement becomes difficult due to exchange rate and inflation. Given this, it is recommended that the state government and stakeholders should embark on massive fiscal policy so as to reduce poverty and its menace in the state. The effect of fiscal policy direct, faster and to a large extent limits the strength of corruption that hampers government initiatives. Secondly, government and stakeholders should make concerted effort that can guarantee stable macroeconomic environment that would ensure the survival of entrepreneurship especially inflation, and exchange rate.

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