Assessing the Role of Innovation and Entrepreneurship in Driving Economic Performance: A Focus on Nigeria

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INTRODUCTION

Enterprise innovations are said to have significant influences on the growth and performance of economies. It is the basic endogenous driver of technological advancement in the course of growth and development of the economy. Variables of entrepreneurship in enterprises arouse economic activities that are disruptively innovative. This gives rise to new businesses that generates product brands, which are the main drivers of economic activity that stimulate and raise production. Schumpeter (1934) explained that for an economy to get out of recession, profit-motivated entrepreneurs should generate and create new product brands that disrupt existing ones to promote production and job creation.

Establishing and expanding businesses generates employment opportunities that reduces rates of unemployment and improves the income and welfare levels of the citizens of an economy. The multiplier effect of this, is the stimulation of consumption and its associated effect on economic growth performance. The association between innovation, entrepreneurship, and the economy is mutually reinforcing. Innovation stimulates entrepreneurship, while entrepreneurship drives economic growth. As enterprises introduce new products or services, they create demand, generate revenue, and contribute to gross domestic product (GDP) growth. Economic growth driven by entrepreneurship and innovation provides a favorable environment for further innovative and entrepreneurial activities. These activities plays a vital role in driving economic progress by identifying opportunities that creates values. The skill to innovate and adjust to fluctuating market conditions is essential for sustained economic development. By adopting new technologies, exploring new markets through investing in research, entrepreneurs stay ahead of competitors and drives innovation. This continuous cycle of innovation, entrepreneurship, and economic growth is vital for creating a dynamic and resilient economy which can thrive in an increasingly competitive global marketplace. Innovation and entrepreneurship are critical for maintaining a competitive edge in the global marketplace. Constant disruptive innovations enhances businesses and expand market share with increased export capabilities. It also fosters economic growth by attracting investment, generating revenue, and improving trade balances. Investors are drawn to regions with vibrant entrepreneurial ecosystems, where they can find promising startups, research institutions, and favorable regulatory environment. Increased investment contributes to economic growth through capital inflows, infrastructural development, and job creation.

Innovations often disrupts industries and create room to accommodate new players and fresh ideas. Innovative entrepreneurship is the vehicle through which production are transformed into tangible outcomes. Entrepreneurs identify supply chain gaps and develop disruptive solutions in addressing them. By taking calculated risks and mobilizing resources, entrepreneurs create new ventures that drive economic growth. They bring together ideas, capital, and labor, fostering job creation and economic development.

This research seeks to explore the impact of innovation and entrepreneurship regarding growth of an economy. Following the trending global success cases of enterprising organizations over the last decades, such as Google, Coscharis in Nigeria, Facebook, Amazon and the Dangotes, a lot of studies have been embark on to comprehend the association-ship among entrepreneurs and growth performance. Additionally, profound insights have been gained with respect to the interrelationship between entrepreneurship, innovation and economic growth. Despite the volume and sagacity of these discrete studies, a comprehensive interface of variables' specific and general, significant impact on the economy are not identified or explained. More

specifically, few studies have compared the impact of free enterprise and innovation on economic growth of Nigeria. Based on above, this research paper tends to shed light on the links and specific impact of variables that influence entrepreneurship, innovation and economic growth of Nigerian economy from 2000- 2023.

The report is organised into five sections. The introductory section covers the overview of innovation and entrepreneurship. We review the literature in Section 2 comprising of the conceptual, theoretical and empirical literature; theoretical framework and model specification is in Section 3; while Section 4 deals with analyses of regression result. Section 5 reports the summary, conclusion and recommendation

LITERATURE REVIEW

The word entrepreneurship was first used in the year 1755 by a French economist, Richard Cantillon followed by Knight (1921) and was popularized by the effort of Joseph Schumpeter through his study on "creative disruption" in 1934. He posits that entrepreneurship occurs when there is invention of a new product or a new business. When an enterprise ceases to invent or revolutionize his value creation, he ceases to be an entrepreneur. Entrepreneurship and innovation by entrepreneurs lead to creative destruction, which is the source of long-term economic growth. Baumol (1968) expanded the concept of an entrepreneur as an innovator who is always engaged in a new invention. He further explained entrepreneurs to differ with regard to firms as their contribution to growth differs. Previously, it was identified that risk and uncertainty are the important factors considered in innovation (Baumol, 1990). He opined that an entrepreneur has to take uncertainty into account when making decisions. This principle is a vital driver of the modern scheme of economic performance.

Theoretical Literature

The theoretical underpinning of this study is the endogenous growth framework. Theoretically, the model emphasize that technical progress in an economy depends on the volume of capital investment and the stock of human capital. Endogenous growth model relies on high competitive business environment with knowledge and technological advancement meaning that technological advancement centers on the formation of novel ideas. This growth theory assumes that firms that have market control earn profits from their discoveries. Several economists have expanded this endogenous theoretical framework. For instance, Romer (1990) extended the assumptions that economic growth comes from technological changes which are endogenous. He further presumed that market inducements play crucial roles in enhancing technological changes which are the product of human capital. This implies that economies with larger stocks of human capital enjoys faster rate of growth.

In all, endogenous growth theorists opine that creative insights are more obligatory than natural resources. This is very critical for emerging economies, including Nigeria, where presence of abundance natural resources does not translate to productive growth performance with improved wellbeing. Indeed, it is creative ideas that rules the world economy. The study conducted by Acemoglu, Aghion, and Bursztyn (2009), titled "Intellectual Property Rights and the Innovative Activity of Firms," explored the influence of intellectual property rights on innovation and growth. The study demonstrated theoretical evidence that strong protection of intellectual property right leads to increased innovation and economic development.

Empirical literature

Romer (1990) in his investigation of the influence of endogenous technological change on growth of an economy found that endogenous technological change plays a major role in driving growth of an economy. His findings further showed that investment in endogenous research and development (R&D) drives technological progress which results in sustainable economic growth. Jones (1997), in his study on the evolution of world income distribution, examined the link between technological change, innovation, and income distribution across countries. The result show that innovation drives economic growth. In their study of "economic growth through creative destruction", Aghion and Howitt (1992) observed that innovation leads to the obsolescence of technologies and industries, thereby fostering more efficient and advanced productive systems that drive economic growth. Earlier, in his study on Capitalism, socialism and democracy, Schumpeter (1942) explored

the relationship amongst entrepreneurship and economic growth. The result show that entrepreneurship, through creative destruction, leads to innovative activity that drives economic progress in capitalist economies. Lucas (1978) explored the role of entrepreneurship and technological progress in economic growth. His study illustrates that technological advancement is the result of willingness to invest in new technologies.

Economic growth and developments are the result of new technological ideas. Baksi (2013) empirically investigates "the relationship between entrepreneurship, innovation, and economic performance in the case of India". Applying data collected from Global Entrepreneurship Monitor (GEM) and the World Bank Enterprise Survey (WBES) to explore the link between entrepreneurship, innovation, and economic progress in the context of the Indian economy. The study finds that "entrepreneurship and technological innovation are significantly correlated to economic growth". Baksi's result confirms that a significant proportion of GDP in India is contributed by small and medium-scale enterprises (MSMEs) and that the influence of high technology adoption in India is significant in the last decade. However, the study of Matenda and Sibanda (2023) on "influence of entrepreneurship on economic growth" in BRICS, reveals statistically significant but negative correlations between economic growth and 'entrepreneurship in BRICS economies. This result is contrary to theoretical a'priori expectations and that of Olu and Ojo (2017). Olu and Ojo in their study on "the impact of innovation and entrepreneurship on the Nigerian economy", used both primary and secondary data to examine, analyze and interpret results of both inferential and descriptive statistics. They found that innovation and entrepreneurship have positive impact on the economic growth of Nigeria. The study suggests that promoting innovation and entrepreneurship could lead to increased job creation, increased exports, and enhanced economic growth. Their result corroborates the findings of Oyelaran-Oyeyinka and Lal (2018) who used Primary data collected through a semi-structured questionnaire. They found that technology and innovation are key drivers of entrepreneurship. To them, developing technology and innovative ecosystem helps in promoting entrepreneurship and economic growth performance. Furthermore, the study of Atoko and Makamu (2024) investigated the associationship between innovation and economic growth in 32 African countries from 2006 to 2017. Using linear regression panel corrected standard errors (PCSEs) regression estimation to analyze the data. Their result showed direct association-ship between innovation index and growth. The findings highlight the significance of innovation in fostering economic growth.

Safiryu and Njogo (2012) studied entrepreneurial skills, poverty reduction, and the improvement of the standard of living in Nigeria, using simple percentages and the Chi-square analysis methodology on data obtained through questionnaires and interviews. They found that SMEs are responsible for employment creation in Nigeria. Innovation often leads to improvements in productivity by introducing new product processing technologies. Entrepreneurship is driven by the yearning to find more effective methods of creating values. Advancement in creative productivity enhances competitiveness of producers, resulting in economic activities growth with higher output.

In spite of the potential national benefits of entrepreneurship, access to finance remains a significant obstruction to entrepreneurship in Nigeria. A study by Akinbobola and Olokundun (2019) reports that lack of finance is the most significant challenge facing entrepreneurs in Nigeria. They also observed that government policy plays a vital role in promoting innovation and entrepreneurship in Nigeria. So far, from literature several studies highlighted the importance of government inclusive policies in promoting entrepreneurship in Nigeria. For instance, Adeyemo and Olokundun (2019), findings indicate that government supportive policies, such as tax incentives and access to finance, could help to promote entrepreneurship and contribute to economic activities growth. Similarly, a study by Adeniyi and Omisakin (2018) discovered that government policies aimed at providing support for small and medium enterprises (SMEs) could help to promote entrepreneurship and contribute to economic growth. Kreiterling (2023) in his study on"digital innovation and entrepreneurship" found that governments have significant influence in enhancing firm's digital technologies productivities in manufacturing industries.

The empirical study of Ajayi and Adelowo (2019) examined the role of education and training in promoting entrepreneurship in Nigeria. The authors find that providing entrepreneurship education and training could help to develop businesses which in turn could contribute to gross domestic product growth. Similarly, a study by Igwe and Onwumere (2019) found that entrepreneurship education could help to develop successful businesses and contributes to growth. Impact of business incubators and accelerators on entrepreneurship

development in Nigeria was examined by Adegbite, Ogunleye, and Oke (2020). The authors found that these organizations can provide critical support and resources to early-stage startups, which in turn can help promote entrepreneurship.

Informal sector plays a significant role in enhancing entrepreneurship growth in Nigeria. Ojukwu and Okafor (2019) findings indicate that entrepreneurship is critical for promoting economic activities growth in the informal sector. However, entrepreneurs in this sector faces challenge of limited access to finance and poor ease of doing business policies. Additionally, intellectual property rights (IPRs) though, important for promoting innovation and entrepreneurship, there are significant lacunas in the legal frameworks for protecting IPRs in Nigeria according to the findings of Ogbuabor, Ogbuagu, and Uduh (2018). Their research concludes that improving the legal framework for protecting IPRs could help to promote innovation and entrepreneurship in Nigerian economy.

Literature reviewed so far, suggests that entrepreneurship can play a critical role in promoting economic growth in Nigeria, but several challenges need to be addressed, such as limited access to finance, supportive government policies, and cultural barriers. Additionally, initiatives focused on developing technology and innovation ecosystems, promoting entrepreneurship education, supporting accelerators, protecting intellectual property rights, promoting gender equality, and promoting sustainable entrepreneurship could help to support entrepreneurship and contribute to economic growth.

Theoretical Framework and Models specification

This paper leverage on endogenous growth theory. This growth theory posits that technology drives economic growth endogenously. More so, it assumes that economic agents, determines technological innovations through competition. Adapting the endogenous theoretical model framework of Lucas (1988), who posits that technology and innovation are endogenously determined contrary to Solow (1957) of the classical economic denomination. Thus, the classical school treats technological innovation as exogenous to economic growth. Hence, following the Cobb–Douglas production function as expressed by Lucas (1988), we have: $Y = AK^aL^bC^g$ …(i). where Y is gross domestic output (proxy for economic growth), A is technology that supports labour productivity, K is physical capital, L is labour, and C denotes the human capital regarding knowledge accumulation and a, b, and g denote the output elasticities for capital, labour and human capital. Transforming the above equation (i) into a linear model we have:

$$\ln Y = \ln A + a\ln K + b\ln L + g\ln C + u.. \quad \text{(ii)}.$$

Based on above, we generate our functional form by using entrepreneurial influencing variables such as: investment in new knowledge (INK) proxy by school enrolment; new business registration (ENT) proxy of entrepreneurship; self-employment rate (SER) as determinants of entrepreneurship and innovation; physical capital formation (PCF); and unemployment rate (UER)" as control variables. The functional form of the model is hence specified as:

$$GDPg = f(INK, ENT, PCF, UER, SER). \quad \text{(iii)}$$

Consequently, the model mathematical operational form is specified as:

$$GDPg = \beta_0 + \beta_1 INK_t + \beta_2 ENT_t + \beta_3 PCF_t + \beta_4 SER_t + \beta_5 UER_t + \varepsilon_t \quad \text{(iv).}$$

Where: GDPg (gross domestic product growth rate) is proxy of economic growth rate. INK is investment in new knowledge. Entrepreneurship, (ENT) proxy by new business registration. SER is self-employment rate. PCF is physical capital formation and UER is unemployment rate. (INK, ENT, and SER are determinants of entrepreneurship and innovation). The error term is (ε_t). The study applies Auto Regressive Distributed Lag (ARDL) approach to estimate the equation.

Data Description and Sources

For this study we proxy economic growth variable with gross domestic product growth (GDP_g;) Innovation described as investment in new knowledge is proxy by intellectual property payment (INK); entrepreneurial activities represented by new business registration (ENT); physical capital formation (PCF) and self-employment rate (SER). The Study employs annual time series data sourced from various issues of Central Bank of Nigeria (CBN), Statistical Bulletin, National Bureau of Statistics, World Intellectual Property Organisation (WIPO) and World Bank Global Entrepreneurship Monitor (GEM) data bases for the period 2000 – 2023.

METHODOLOGY

The study employed the ARDL methodology to estimate relationship among the variables. The test also was used to determine the co-integration order among the variables. We thereby specify the model as follows:

$$\Delta GDP_g = \alpha_0 + \sum_{l=1}^{p} \beta_1 \Delta GDP_{gt-1} + \sum_{t=1}^{p} \beta_2 \Delta INK_{t-1} + \sum_{t=1}^{p} \beta_3 \Delta ENT_{t-1} + \sum_{t=1}^{p} \beta_4 \Delta PCF_{t-1} + \sum_{t=1}^{p} \beta_5 \Delta SER_{t-1}$$

$$+ \sum_{t=1}^{p} \beta_6 \Delta UER_{t-1} + \sigma_1 \Delta GDP_{gt-1} + \sigma_2 \Delta INK_{t-1} + \sigma_3 \Delta ENT + \sigma_4 \Delta PCF_{t-1} + \sigma_5 \Delta SER_{t-1} + \sigma_6 \Delta UER_{t-1} \mp$$

$$\lambda ECM_{t-1} + \varepsilon_t$$

Test of Unit Roots

Unit root tests were computed for the variables under study using Augmented Dickey-Fuller (ADF) test approach to establish the order of integration. The Eviews output of the estimated ADF tests indicated mixed integration order among the variables. One variable (GDG_r) was integrated at levels, while the other five are integrated at first difference. This justifies the application of the Auto Regressive Distributed Lag (ARDL) analytical methodology to estimate the data. The unit root tests results are presented as follows:

Table 1: Unit Root Test Results

Variable	ADF @ Level	ADF @ 1st Dif	Crit_Val @ 5%	Order of Integration
GDPg	**-5.937456**		**-3.029970**	**I(0)**
ENT		**-8.262635**	**-3,020686**	**I(1)**
INK		**-3.675261**	**-3.012363**	**I(1)**
PCF		**-8.522666**	**-3.020686**	**I(1)**
SER		**-3.195125**	**-3.040391**	**I(1)**
UER		**-3.788030**	**-3.012363**	**I(1)**

Source: Eviews 10 Output.

The unit root results indicate that growth rate of gross domestic product ((GDGg) proxy for Economic growth rate) is stationary at level and hence integrated of order I(0). New business registration (ENT); intellectual property payment (INK); physical capital formation (PCF); self-employment rate (SER); and unemployment rate (UER) indicates that these five variables are integrated of order one, i.e. I(1). However, Since the unit tests

show that the variables are integrated of different orders [I(I) and I(0)] we employ the ARDL approach to establish the relationship among the variables.

Table 2: Bounds Test for Co-Integration

F-Bounds Test		**Ho: No levels relationship**		
Test Stat	Value	Signif.	I(0)	I(1)
		Asymptotic: n=1000		
F-stat	5.4526	10%	2.26	3.35
k	5	5%	2.62	3.79
		2.50%	2.96	4.18
		1%	3.41	4.68

Source: Eviews 10 Output

The results of the bounds test of co-integration are reported in Table 2 above. The computed F-Statistic from the Bounds test is 5.4526 which exceeds the lower and upper bounds critical value at the 5% significance level respectively. This implies that the alternate hypothesis of the existence of a unique co-integration (long run) relationship among the variables under study are cointegrated such as: GDP growth rate (GDPg), capital formation (PCF), intellectual property payments (INK), new business registration (ENT), self-employment rate (SER) and unemployment rate (UER).

Table 3: The ARDL Model Statistical Estimate

Dependent Variable: GDPg				
Method: ARDL				
Dynamic regressors (2 lags, fixed): ENT IPC PCF SER UER				
Fixed regressors: C				
Variable	**Coefft**	**Std. Er**	**T-Stat**	**PV.**
GDPg(-1)	**-0.3217**	**0.4107**	**-0.7833**	**0.4772**
GDPg (-2)	**-0.5050**	**0.4980**	**-1.014**	**0.3679**
ENT	**8.0739**	**3.6228**	**2.2286**	**0.0898**
ENT(-1)	**-12.4052**	**7.4620**	**-1.662**	**0.1718**
ENT(-2)	**-4.7158**	**7.3255**	**-0.6437**	**0.5548**
INK	**-8.8983**	**11.7703**	**-0.756**	**0.4917**
INK(-1)	**16.6733**	**11.9399**	**1.3964**	**0.2351**
INK(-2)	**9.8300**	**8.1515**	**1.2059**	**0.2943**

PCF	**0.1178**	**0.0975**	**1.2077**	**0.2937**
PCF(-1)	**0.2179**	**0.1213**	**1.7966**	**0.1468**
PCF(-2)	**0.1777**	**0.1054**	**1.6861**	**0.1671**
SER	**4.4093**	**2.2083**	**1.9966**	**0.1166**
SER(-1)	**-2.2254**	**2.0348**	**-1.0936**	**0.3356**
SER(-2)	**1.3833**	**1.4520**	**0.9526**	**0.3947**
UER	**-30.9491**	**8.8225**	**-3.5079**	**0.0247**
UER(-1)	**15.5032**	**12.1051**	**1.2807**	**0.2695**
UER(-2)	**21.8556**	**14.2858**	**1.5298**	**0.2008**
C	**-542.433**	**330.6313**	**-1.6406**	**0.1762**
R^2	**0.92612**	**AR^2**	**0.6121**	
F-statistic	**2.94953**	**Pb(F-S)**	**0.0121**	
Durbin-Wat	**2.3582**	**AIC**	**4.4826**	

Source: Eviews 10 output

The above test result shows long-run statistics of the model. The coefficients of new business registration (ENT), self-employment rate (SER) and unemployment rate (UER) have expected signs but are not significant. Capital formation (PCF) and intellectual property payments (INK) have negative signs and are not significant.

Table 4: Short-Run ARDL Error Correction Regression

Dependent Variable: D(GDGR). ARDL Error Correction Regression Results.

ARDL Error Correction Regression				
Dependent Variable: D(GDGR)				
Selected Model: ARDL(2, 2, 2, 2, 2, 2)				
Variable	Coefft	Std.Er	T-Stat	PV.
D(GDPg(-1))	0.5050	0.1737	2.9066	0.0438
D(ENT)	8.0739	1.8956	4.2591	0.0131
D(ENT(-1))	4.7158	2.6426	1.7845	0.1489
D(INK)	-8.8983	1.9576	-2.4877	0.0396
D(INK(-1))	-9.8300	2.9993	-3.2774	0.0306
D(PCF)	0.1178	0.0206	5.7015	0.0047

D(PCF(-1))	-0.1777	0.0279	-6.3475	0.0032
D(SER)	4.4093	0.8693	5.0717	0.0071
D(SER(-1))	-1.3833	0.5761	-2.4011	0.0743
D(UER)	-30.9491	4.3397	-7.1315	0.002
D(UER(-1))	-21.8557	5.3666	-4.0725	0.0152
ECM(-1)	-0.8268	0.2508	-7.2822	0.0019
R^2	0.9162	A-R^2	0.8241	
Durbin-Watson	2.5826	AIC	3.9372	

Eviews 10 output

The above table shows the ARDL model estimates of short-run dynamics, comprising error correction. The lag values of GDPg complies with the a'priori signs and are significant. This implies that previous economic growth has direct positive impact on current economic growth. New business registration which proxies for entrepreneurship activity (ENT) and self-employment rate (SER) have the expected signs and are significant confirming that entrepreneurship activity and self-employment rate have positive impacts on the growth rate of Nigerian economy. The results indicate that new business registration (ENT) have a direct significant relationship with economic growth as one percent increase in ENT results in 80.74% increase in the growth rate of GDP. This is in harmony with theoretical a'priori expectation.

Intellectual property payments (INK) which measure the impact of innovation on growth rate are significant. It indicates that an increase by 1% on intellectual property patent payments causes current and previous INK to reduce economic activities growth by 88.98% (-8.8983) and 98.30% (-9.8300) respectively. This implies that new inventors will be discouraged to register their patent rights, instead will prefer to sell their rights to foreigners against endogenous expectations.

The estimated coefficient of physical capital formation (PCF) another index that enhances endogenous innovation and entrepreneurship indicates a direct impact on economic growth on the period under study. The current PCF value estimate indicates that a 1% percent change in PCF brings about an 11% or 0.1178unit change in economic growth significantly within the period under study. More so, an increase in PCF causes previous year's PCF indices to significantly impact negatively on economic activities growth as shown in the result output. This could be because previous infrastructural PCF may need maintenance attention.

Similarly, a percentage change in current self-employment rate (SER) results in a significant change in GDP growth rate by 44.09%. This confirms that the Nigerian economy improves with increase in innovation and entrepreneurial activities. The impact of the lagged value is indirect and not significant with a probability value of 7.43% which is greater than 5% critical value.

The impact of unemployment is inversely significant on the economic activities growth of the economy. The estimated result show that a percentage increase of UER by 1unit brings about -30.9491units decrease in economic activities growth. As a collorary, 1% increase in current unemployment rate causes previous unemployment to decrease gross domestic product by 21.86% (-21.8557) significantly.

The Error Correction Term (ECM) has the expected sign and adjusts to its long-term equilibrium at the rate of 82.62%. The cointegration coefficient value of -2.7382 and its significance at a 5% level confirmed long-run relationship among the variables. The coefficient of determination of determination (R^2) of 0.9162 indicate that 91.62% of changes in the model are significantly explained by the independent variables.

Stability Test

The existence of parameter instability is established if the Cumulative Sum of the residual goes outside the area between the critical (dotted bounded) lines. It is estimated at a 5 per cent critical level.

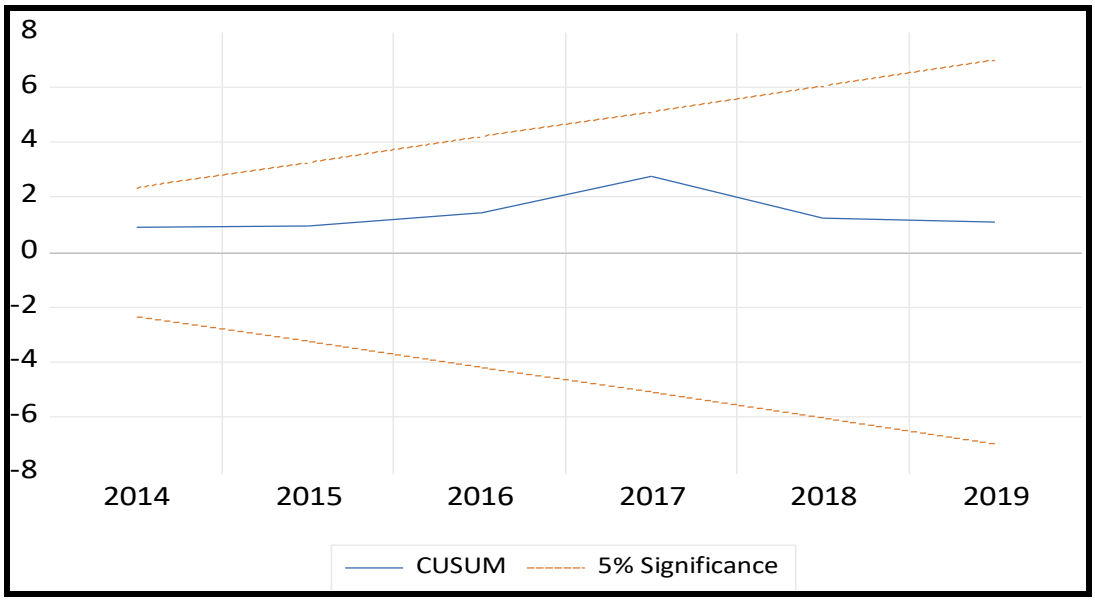

Figure 1. Plot of Cumulative Sum of Recursive Residual

Eviews 10 output

From Figure 1 above, it can be inferred that the model at a 5 per cent level of significance has been stable over time. The decision rule is that all the coefficients of the error correction are stable.

SUMMARY

This study explored the effect of innovation and entrepreneurship on the growth of the Nigerian economy. The study employed ARDL bounds testing techniques in its analysis. It premised on the theoretical framework of Cobb- Douglas production function which reiterates the impacts of Knowledge, innovation, endogeneity among other variables in the growth process.

CONCLUSION

The findings indicate that innovation (INK) and entrepreneurial variables have significant impacts on the growth rate of economic activities outputs in Nigeria. Specifically, intellectual property patent registration is expensive, hence, inability to acquire patent right causes reduction in investment hence, reducing economic activities growth for beginners. The implication of this is that new inventions through research and development are discouraged to register their patent rights, instead will prefer to sell their patent rights to foreigners against endogenous expectations hence, discouraging innovations and development.

The study also found that previous investments on physical capital formation needs maintenance due to depreciation, otherwise, it's contributions becomes negative to economic activities growth.

The result of the study also indicate that self-employment rate (SER) results in direct significant change in GDP growth rate.

The output of the result also show that unemployment significantly but negatively impacts on the economic activities growth of the Nigerian economy.

RECOMMENDATIONS

From our findings we recommends the followings:

In order to enhance economic growth in Nigeria, innovation, research and development, should be gazetted and patent rights adequately registered at minimum or at no cost to encourage indigenous innovators investments.

From the findings, it is necessary for the government to enhance growth and development by establishing technical and entrepreneurial institutions as well as research centers to encourage investments.

Existing physical capital necessary for economic activities production such as electricity, roads, water and production institutions must be maintained and guided to avoid depreciations which is inimical to economic activities growth. We also recommend capital investment on "industrial villages" where young entrepreneurs can hire machines for production engagements.

Reduction in unemployment should be encouraged to increase productivity by providing investment access to school graduates. This is because the volume of self-employment enhances growth and reduces the believe that research and school is a scam.

Finally, we recommend inclusive government who generates policies, to improve ease of doing business in order to enhance innovation and sustained competitiveness.

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