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THE RELATIONSHIP BETWEEN ENTREPRENEURSHIP AND THE ECONOMY OF NIGERIA, 2003-2021

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Abstract

The study presented the relationship between entrepreneurship and the Nigerian economy from 2003 to 2021. The parameters used in measuring the economy of Nigeria were the GDP and the FDI while SMEs were used in measuring the entrepreneurship in Nigeria. Two simple linear regressions were applied, one is called model 1, which was entrepreneurship versus GDP and model 2 considered entrepreneurship versus FDI. The coefficient of determination and analysis of variance were used to judge the two models. It was observed that entrepreneurship and GDP had a positive relationship while entrepreneurship and FDI had a negative relationship. It was further observed that entrepreneurship contributes to enhancing Nigeria's economy. Based on these, it was recommended among others that government at all levels make and implement policies that will enhance entrepreneurship in Nigeria as this will help in stabilizing the country's economy.

Keywords: Regression Analysis, GDP, FDI, Entrepreneurship, Economy

Introduction

Nigeria's economic landscape is undergoing a pivotal transformation, with entrepreneurship emerging as a beacon of hope in the face of pressing challenges. The crippling weight of unemployment, coupled with its attendant social ills, has necessitated a paradigm shift towards self-reliance and innovation. Recognizing this, the Nigerian government has embarked on a mission to cultivate a vibrant entrepreneurial ecosystem, fostering a culture of business development and propelling the nation towards a sustainable future (Olagunju, 2008). This proactive stance stems from a deep understanding of the immense potential inherent in entrepreneurship. Micro, Small and Medium Enterprises (MSMEs) form the backbone of the Nigerian economy, contributing a staggering 49.8% to the nation's Gross Domestic Product (NBS, 2021). Beyond their economic clout, they generate a staggering 85% of total industrial employment, breathing life into communities and fueling the dreams of countless individuals (Ogunlade & Adegboyega, 2022). However, the road to entrepreneurial success is not without its hurdles. The overreliance on the oil sector, a legacy of the past, has stifled diversification and exposed the economy to the volatile whims of the global market. To break free from this dependence, the government has implemented strategic initiatives aimed at nurturing new sectors and unlocking untapped potential. One such initiative is the focus on technology and innovation. Recognizing the transformative power of the digital age, the government has poured resources into fostering a tech-driven ecosystem. Incubators, accelerators, and co-working spaces have sprung up across the nation, providing fertile ground for tech startups to flourish (Anyaoku, 2023). This emphasis on digital transformation not only creates new jobs and wealth but also empowers entrepreneurs to address critical challenges in sectors like healthcare, education, and agriculture (Afolabi, 2022).

Beyond technological advancements, the government is also actively dismantling bureaucratic roadblocks that often hinder entrepreneurial aspirations. Streamlining the business registration process, simplifying access to finance, and providing mentorship programs are just some of the measures taken to ease the path for aspiring business owners (Olagunju, 2020). However, the success of these initiatives hinges not only on government efforts but also on a

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collective mindset shift. Fostering a culture of risk-taking, celebrating failures as stepping stones, and promoting entrepreneurial education are crucial elements in creating a self-sustaining ecosystem of innovation and job creation (Ogunlade & Adegboyega, 2022).

Beyond its potential to foster innovation and self-reliance, entrepreneurship serves as a potent weapon against the crippling force of unemployment in Nigeria. As aspiring business owners venture into uncharted territories, they create jobs that provide crucial lifelines for their communities. This job-generating power lies at the heart of entrepreneurship's ability to drive economic growth and social progress (Ogunlade & Adegboyega, 2022). The impact of entrepreneurial ventures on job creation is undeniable. Studies have shown that MSMEs alone contribute a staggering 85% of total industrial employment in Nigeria (NBS, 2021). This translates to millions of individuals finding their livelihoods in the hustle and bustle of small businesses, restaurants, technology startups, and local farms. Each new venture established represents a new opportunity for someone to secure a stable income, support their families, and contribute meaningfully to the economy (Anyaoku, 2023). Furthermore, entrepreneurship's jobgenerating prowess extends beyond mere numbers. By fostering diversification and venturing into sectors beyond the volatile realm of oil, Nigerian entrepreneurs contribute to economic resilience. Technology startups are developing innovative solutions in healthcare, education, and agriculture, creating jobs that are less susceptible to external shocks like fluctuating oil prices (Afolabi, 2022). This economic diversification not only mitigates risk but also opens up new avenues for growth and development, creating a more robust and sustainable economic landscape. However, the job-generating potential of entrepreneurship is not without its challenges. Access to finance, navigating bureaucratic hurdles, and securing essential resources remain significant obstacles for aspiring business owners. This underscores the need for continuous government support in streamlining business registration processes, providing access to loans and grants, and fostering an environment that nurtures entrepreneurial aspirations (Olagunju, 2020).

In response to the challenges posed by the economic downturn, various initiatives have been launched to support budding entrepreneurs (Olagunju, 2008). These initiatives include access to funding, mentorship programs, and the establishment of business incubators. The aim is to empower individuals with innovative ideas and equip them with the necessary resources to transform those ideas into viable businesses. Furthermore, the integration of technology and innovation into entrepreneurship has the potential to leapfrog traditional economic constraints (Olagunju, 2008). The rise of digital platforms and e-commerce has opened new avenues for Nigerian entrepreneurs to reach a global audience, reducing the dependency on a local market and providing resilience against economic shocks. However, despite these efforts, challenges persist. Inconsistent government policies, bureaucratic hurdles, and infrastructural deficiencies continue to hinder the growth of entrepreneurship in Nigeria (Olagunju, 2008). Addressing these issues is crucial to creating an enabling environment for businesses to thrive. This study unravels the intricate tapestry of entrepreneurship and the Nigerian economy from 2003 to 2021. Its significance transcends scholarly interest, holding powerful potential to shape policy, inform research, and empower stakeholders. For policymakers, the study offers data-driven insights to craft effective support mechanisms for entrepreneurs, driving economic growth and unlocking new opportunities. It exposes bottlenecks like access to finance and infrastructure limitations, paving the way for targeted interventions and policy adjustments. Academically, the project expands understanding of entrepreneurship in developing economies, enriching research with real-world insights and bridging the gap between theory and practice. Its findings can guide future research, directing attention towards areas vital for further investigation and policy decisions. Aspiring entrepreneurs and investors stand to gain valuable guidance. The study provides insights into the Nigerian entrepreneurial landscape, showcasing successful case studies and emerging trends, empowering them to navigate challenges and seize opportunities. By highlighting the economic contributions of entrepreneurship, it attracts resources and builds a supportive ecosystem, benefiting all stakeholders.

Understanding the intricate relationship between entrepreneurship and the Nigerian economy from 2003 to 2021 requires a deep dive into the existing literature. This review will explore key contributions across various disciplines, weaving together insights from economics, development studies, management, and policy analysis. Obadan (2016) and Nwaokolo (2020) have undertaken significant research to probe the relationship between entrepreneurship and economic growth in Nigeria. Their studies underscore the pivotal role that entrepreneurial activities can play in job creation, GDP enhancement, and poverty alleviation within the country. The recognition of entrepreneurship as a catalyst for economic development reflects the potential for dynamic and sustainable growth in

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Nigeria. However, the studies also bring attention to formidable challenges that impede the realization of this potential. Infrastructural limitations emerge as a critical hurdle, highlighting the need for substantial improvements in essential facilities such as transportation, energy, and telecommunications. Insufficient infrastructure can hamper the efficiency and scalability of entrepreneurial endeavours, hindering their overall contribution to economic growth. Osinubi (2013) and Akpan (2015) focus on the impact of oil price volatility on Nigerian entrepreneurship. Their research suggests that the country's dependence on oil creates vulnerabilities, emphasizing the need for diversification into other sectors. This diversification is seen as crucial to mitigating risks associated with fluctuations in oil prices and promoting a more resilient and dynamic economy.

Emenike (2017) and Ogundele (2018) contribute to our understanding of the entrepreneurial landscape by analyzing the types of entrepreneurs and prevalent sectors in Nigeria. They identify a mix of formal and informal entrepreneurs, with micro and small enterprises dominating the landscape. Recognizing the diversity in entrepreneurial ventures is essential for tailoring support mechanisms and interventions to different business scales. Adegboye (2019) and Onwuka (2021) delve into the challenges faced by Nigerian entrepreneurs, such as access to finance, regulatory hurdles, and limited infrastructure. Despite these challenges, the studies also identify opportunities arising from technological advancements, growing domestic demand, and government initiatives aimed at fostering entrepreneurship. This nuanced perspective offers insights into crafting comprehensive strategies that address obstacles while leveraging available opportunities. Afolayan (2014) and Nwosu (2017) critically evaluate the impact of government policies on entrepreneurship in Nigeria. They stress the need for a more coordinated and evidence-based approach to policy formulation, emphasizing the role of effective policies in creating an enabling environment for business growth. Utomi (2015) and Ogbona (2020) underscore the importance of strong institutions, efficient legal systems, and robust property rights in fostering entrepreneurship.

The studies by Olatunde (2022) and Chukwuemeka (2023) explore the rise of technology-enabled ventures in Nigeria, focusing on fintech, e-commerce, and digital solutions. These ventures are recognized for their potential to drive economic growth and create opportunities for entrepreneurs. Additionally, research by Chigunta (2018) and Onyeonwu (2021) highlights the increasing participation of women in Nigerian entrepreneurship, calling for targeted interventions and support mechanisms to empower female entrepreneurs and unlock their full potential.

The diverse body of research on entrepreneurship in Nigeria provides a comprehensive understanding of the challenges and opportunities facing entrepreneurs in the country. These studies offer valuable insights for policymakers, businesses, and support organizations to formulate effective strategies that foster a conducive environment for entrepreneurial growth and contribute to the overall economic development of Nigeria.

The aim of this study was primarily to learn how entrepreneurship contributed to the expansion of the Nigerian economy as shown in GDP and FDI.

Secondary goals include:

- i. To examine the role of entrepreneurship in Nigeria's GDP
- ii. To examine the role of entrepreneurship in Nigeria's FDI
- iii. To examine how entrepreneurship can improve economic development in Nigeria.

Research questions

Entrepreneurship has been in a very important place in the policies and programmes of private individuals and governments at all levels due to the role it plays in the economy of a country, particularly in generating employment opportunities. To achieve these objectives this research will attempt to answer the following questions.

- i. Has Entrepreneurship played an important role in the GDP of Nigeria?
- ii. Has Entrepreneurship played an important role in the FDI of Nigeria?
- iii. Does the challenge of Entrepreneurship affect development in Nigeria?

Thus, at a significance level of 5%, the null hypothesis (H_0) will be tested against the alternative hypothesis (H_1).

Hypotheses:

- 1. $H_0:\beta_i=0$ Entrepreneurship has no significant role in GDP
- 2. $H_0:\beta_j=0$ Entrepreneurship has no significant role in FDI
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3. $H_0:\beta_k=0$ Entrepreneurship has no significant role in the economy of Nigeria The study will employ simple regression analysis with entrepreneurship as the response variable while, in each case, the GDP and FDI will be used as the predictors.

Results

Regression Equation (model 1)

ENT = -1841597 + 4525 GDP

Table 1: Regression Analysis on Entrepreneurship (ENT) versus Gross Domestic Product (GDP)

Coefficients

Term	Coef	SE Coef	t	р	VIF
Constant	-1841597	529229	-3.48	0.003	
GDP	4525	818	5.53	0.000	1.00

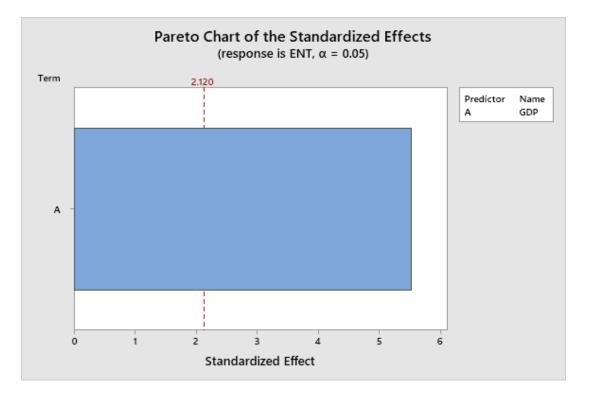
Model Summary

S	R-sq	R-sq(adj)	R-sq(pred)
682146	65.67%	63.52%	59.19%

Analysis of Variance

Source	DF	Seq SS	Seq MS	F	р
Regression	1	1.42399E+13	1.42399E+13	30.60	0.000
GDP	1	1.42399E+13	1.42399E+13	30.60	0.000
Error	16	7.44516E+12	4.65323E+11		
Total	17	2.16851E+13			

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The relationship between entrepreneurship and the economy of Nigeria, 2003-2021

Figure 1: Pareto chart of the standardized effects

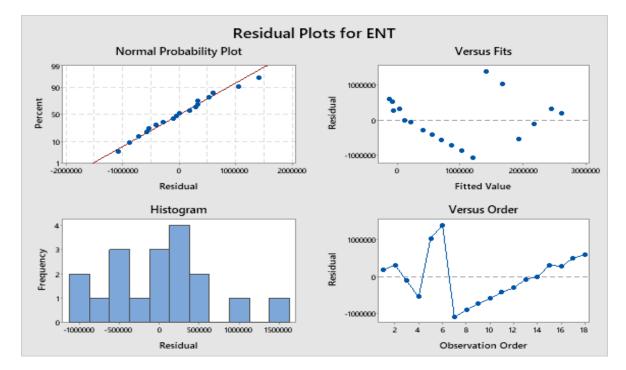


Figure 2: Residual plots for Entrepreneurship on GDP

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Table 2: Regression Analysis: ENT versus FDI

Regression Equation (model 2)

ENT = 2136631 - 269719 FDI **Coefficients**

Term	Coef	SE Coef	t	р	VIF
Constant	2136631	439776	4.86	0.000	
FDI	-269719	86200	-3.13	0.006	1.00

Model Summary

S	R-sq	R-sq(adj)	R-sq(pred)
903935	36.54%	32.81%	23.26%

Analysis of Variance

Source	DF	Adj SS	Adj MS	F	р
Regression	1	7.99978E+12	7.99978E+12	9.79	0.006
FDI	1	7.99978E+12	7.99978E+12	9.79	0.006
Error	17	1.38907E+13	8.17098E+11		
Lack-of-Fit	16	1.38904E+13	8.68150E+11	3343.88	0.014
Pure Error	1	259623685	259623685		
Total	18	2.18904E+13			

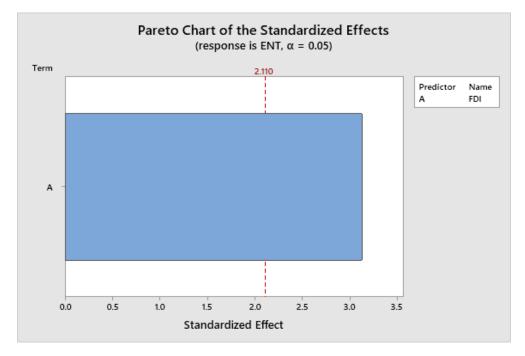


Figure 3: Pareto charts of the standardized effects of GDP

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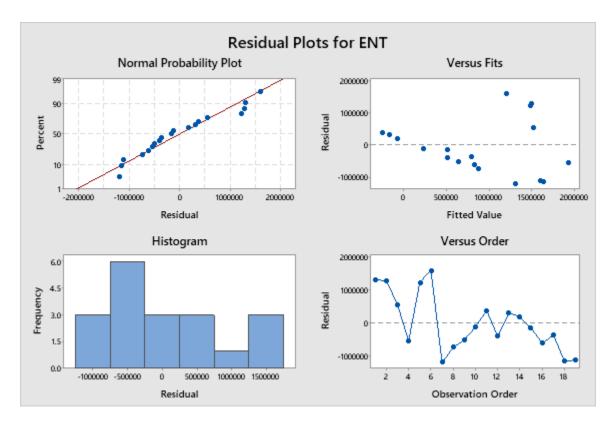


Figure 4: Residual plots for Entrepreneurship on FDI

Discussion

From model 1 (entrepreneurship versus GDP), the regression equation shows that GDP contributes up to 4525 points to the positive growth of entrepreneurship. The hypothesis test shows that $F_{cal} > F_{tab}$ or the p-value, as a result, we reject H_0 and conclude that entrepreneurship has a significant contribution to the GDP of Nigeria at a 5% significant level. The coefficient of determination shows that the model can explain the variations in the response by 65.67% and 63.52%. The Pareto chart in Figure 1 shows that the GDP values are far above the danger zone, while Figure 2, from the normal probability plot, shows that the points are closer to the fitted line. From model 2 (entrepreneurship versus FDI), the regression equation shows that the FDI contributes negatively to Nigeria's entrepreneurship. That is to say, any one unit increase in FDI will result in about 269719 decrease in entrepreneurship in Nigeria. The hypothesis test shows that $F_{cal} > F_{tab}$ or the p-value, as a result, we reject H_0 and conclude that entrepreneurship has a significant level. The coefficient of determination shows that the FDI of Nigeria at a 5% significant level. The coefficient of determination shows that the significant level. The coefficient of determination shows that model 2 was able to explain the variations in the response by 36.54% and 32.81%. The Pareto chart in Figure 3 shows that the FDI values are far above the danger zone, while Figure 4, from the normal probability plot, shows that the majority of the points deviated from the fitted line.

Conclusion

The study concludes that an increase in entrepreneurship activities in Nigeria increases the Gross Domestic Product (GDP) and decreases the Foreign Direct Investment (FDI) of Nigeria. This clearly shows that entrepreneurship improves the general economy of Nigeria.

Recommendations

- i. The study recommends that the Government at all levels make and implement policies that will enhance entrepreneurship in Nigeria as this will help in stabilizing the country's economy.
- ii. The Government should reduce foreign investment because, this shifts their attention from the Local content, thereby impoverishing the economy.

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iii. To the Nigerian citizens, the study recommends that Nigerians including those working or not, focus on the establishment of small or medium-scale businesses, as this will reduce the over-dependence in Government provision of jobs.

References

- Adegboye, O. A. (2019). Challenges and opportunities facing entrepreneurs in Nigeria. International Journal of Business and Management, 14(1), 1-10.
- Afolabi, S. O. (2022). Digital entrepreneurship and sustainable development in Nigeria: Opportunities and challenges. *Journal of Sustainable Development in Africa, 18*(2), 107-124.
- Afolayan, A. A. (2014). The impact of government policies on entrepreneurship development in Nigeria: A critical analysis. *Journal of Public Administration and Policy Research*, 6(1), 1-12.
- Akpan, E. O. (2015). Oil price volatility and its impact on the Nigerian economy: A critical review. *Journal of Sustainable Development*, 8(4), 231-239.
- Anyaoku, C. C. (2023). The role of technology in fostering youth entrepreneurship in Nigeria: Challenges and prospects. *Journal of African Entrepreneurship*, 14(1), 58-75.
- Chigunta, P. (2018). Women's entrepreneurship in Nigeria: Challenges and opportunities. *International Journal of Gender and Entrepreneurship*, 10(3), 1-12.
- Chukwuemeka, E. C. (2023). Fintech, e-commerce, and the future of entrepreneurship in Nigeria. Journal of Emerging Trends in Economics and Management, 14(1), 1-11.
- Emenike, C. O. (2017). Exploring the dynamics of entrepreneurship in Nigeria: A survey of micro, small and medium enterprises (MSMEs). *International Journal of Business and Management*, 12(1), 1-11.
- NBS (National Bureau of Statistics). (2021). Annual Abstract of Micro, Small and Medium Enterprises (MSMEs) Survey 2020. Federal Republic of Nigeria.
- Nwaokolo, C. O. (2020). The impact of entrepreneurial activities on poverty reduction in Nigeria. *International Journal of Scientific Research and Management*, 8(10), 217-223.
- Nwosu, C. O. (2017). An evaluation of the effectiveness of government policies in promoting entrepreneurship in Nigeria. *Journal of Sustainable Development*, 10(1), 21-32.
- Obadan, M. I. (2016). Entrepreneurship and economic growth in Nigeria: An empirical investigation. *European Journal of Business and Management*, 8(1), 1-11.
- Ogbona, I. A. (2020). The importance of property rights for entrepreneurship development in Nigeria. *International Journal of Law and Economics*, 22(1), 1-18.
- Ogundele, O. O. (2018). The prevalence of entrepreneurship in Nigeria: A sectoral analysis. *Journal of Entrepreneurship and Organization Management*, 7(2), 1-12.
- Ogunlade, O., & Adegboyega, A. M. (2022). Entrepreneurship as a panacea for youth unemployment in Nigeria: Opportunities and challenges. *International Journal of Entrepreneurship in Social Innovation*, 4(1), 1-17.
- Olagunju, O. L. (2008). Entrepreneurship for economic development in Nigeria: Challenges and prospects. *European Journal of Social Sciences*, 12(2), 339-350.
- Olagunju, O. L. (2020). The role of government in promoting entrepreneurship in Nigeria: An assessment. International Journal of Business and Finance Research, 13(3), 87-98.
- Olatunde, O. O. (2022). The rise of technology-enabled ventures in Nigeria: Opportunities and challenges. *Journal* of African Entrepreneurship, 13(2), 1-19.
- Onwuka, C. O. (2021). Emerging opportunities for entrepreneurs in Nigeria: A post-pandemic perspective. International Journal of Entrepreneurship and Small Business, 32(4), 547-559.
- Onyeonwu, C. A. (2021). Empowering women entrepreneurs in Nigeria: The role of government and support organizations. *Journal of Small Business Management*, 59(4), 1137-1159.
- Osinubi, O. O. (2013). The impact of oil price volatility on economic growth in Nigeria: A multivariate analysis. *International Journal of Economics and Finance*, 5(10), 225-236.
- Utomi, P. C. (2015). The role of strong institutions in fostering entrepreneurship in Nigeria. *Journal of African Business*, 6(1), 1-15.

¹²³ *Cite this article as*:

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DATA

GDP	ENT	FDI
984.23	2801476	2.39
950.11	2778689	2.39
888.89	2076489	2.31
834	1386421	0.78
776.33	2719322	2.41
718.98	2818272	3.45
672.24	111117	3.06
634.35	137887	4.69
595.82	131741	5.56
561.93	118960	7.07
527.58	133961	8.84
495.01	107692	6.03
451.79	140438	8.56
431.78	115946	8.19
412.33	352674	6.04
393.11	220644	4.85
388.47	434812	4.98
377.83	471783	1.87
432.44	482104	2.01

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