Everant Journals/AFMJ

Research Article

Account and Financial Management Journal ISSN: 2456-3374
Impact Factor: 4.614

Entrepreneurial Intensity and Corporate Sustainability in the Nigerian Extractive Industry

Oshi, Joseph. E. O[1]. , Ule, P. Alamina[2], Ogah, J. Idagu[3]

[1,2]Department of Management, Faculty of Management Sciences, University of Port Harcourt, Nigeria.
[3]Department of Accountancy, Cross River University of Technology, CRUTECH, Ogoja Campus, Cross River State, Nigeria.

ARTICLE INFO

Corresponding Author:
Oshi, Joseph. E. O[1]
Department of Management, Faculty of Management Sciences, University of Port Harcourt, Nigeria

ABSTRACT

The study examines how extractive industries can be sustained within the context of entrepreneurial intensity in the Nigerian work environment. The nature of the study gave rise to quasi experimental design with simple random sampling technique used to select 400 personnel from five major extractive firms. These personnel are mainly managers and stakeholders who sample their individual opinion concerning the sustainability of their corporations through entrepreneurial intensity. The study utilizes multiple regression analysis and found that organizations can maintain sustainable development through entrepreneurial level of innovation, pro-activeness and risk-taking propensity. Based on the findings, we conclude that organizations should map out modalities to monitor and checkmate deviations and unethical practices among staff as well as government involvement in the resource rich industry.

KEYWORDS: ***Economic prosperity, innovativeness, risk-taking propensity, environmental quality, Pro-activeness.***

Introduction

The influx of exploration activities in the Nigerian State implies that, the nation's present economic position is gradually shifting towards the extractive industry; implying that the extractive industry would assume a central focus in the nearest future. Since the discovery of oil in commercial quantities, the survival of the nation has always relied on the proceeds generated from this "all important sector", but the ultimate question is, has this great sector been ably sustained and managed since its discovery? This is against the backdrop of the vision as stipulated by the world sustainable development summit held in Johannesburg 2002 as a global initiative to enhance the improvement and proper allocation of resources generated through extraction to improve the lives of its citizenry. This question is germane to the concerns of scholars as Okeke and Aniche (2013) opined that the Nigerian economy lack public accountability and transparency including security as a result of massive corruption among its leadership which has greatly affected the sustainability of the industry.

With the current economic situation plaguing the Nigerian State, it is imperative for corporations to ensure sustainability in their operations through strong synergy. This sustainability entails

Volume 2 Issue 12 December 2017
DOI: 10.18535/afmj/v2i12.08
Page no.1218-1225

combined effort of government and organizations as succinctly arguedby Zaharia, Alpopi and Nicolaescu (2015).The Nigeria extractive industry in recent times is posed with challenges of extinctions resulting from insecurity such as corruptions, Militancy, Boko Haram etc unlike in the past. These shortfalls have forced many to relocate to neighboring countries while others battle to sustain their firms by intensifying their entrepreneurial skills amidst the challenges ahead. In order to sustain this industry for better performance and growth, entrepreneurial potentials to sure up value for both companies and shareholders must be intensified (Erasmus and Scheepers, 2008; Morris, 1998).

Based on these pitfalls, the paper shall explore entrepreneurial intensity and corporate sustainability in the Nigerian extractive industry. It is hoped that the outcome will proffer suitable solution and sustainable measures to enhance the Nigerian extractive industry.

Review of Literature

Theoretical Framework

The work is anchored on the Resource-curse theory (also known as the paradox of plenty) as a foundational framework to x-ray entrepreneurial intensity and corporate sustainability in the Nigerian extractive industry.The contention about natural resources being an economic curse than a blessing to mankind surface in the early 1950^{s}and 60^{s}as a result of economic challenges befalling middle and low income nations (Ross, 1999). The term Resource-curse was first used by Richard Aunty in 1993. The rationale behind resource curse theory is built on the fact that nations with abundant natural resources tend to face depressing developmental outcomes such as negative economic growth, mismanagement of resources, increasing level of corruption, mass poverty, political violence, unstable institutions, ineffective governance, poor public accountability etc (Jonathan, 2010; Okeke and Aniche, 2013). Resource curse was used by Richard (1993) to explain how nations with abundance natural resources were unable to exploit their God given wealth to better the lives of its citizenry compared to nations with low or non-availability of natural resource of which the Nigerian State is not left out. The theoretical implication of our study is that in assessing the sustainability of the extractive industry in a nation with abundant natural resources like Nigeria, and explores the prospects for the industry.

Nature of Entrepreneurship

Entrepreneurship has gathered momentum in behaviourial sciences and workplace organizations in recent times as it brings unique packages by creating values. Entrepreneurship according to Jones and George (2008) is the mobilization of resources to take advantage of an identified opportunity with the provision of improved goods and services to customers' need. These according to them are individuals' with high internal locus of control, openness to experience, havingself-esteem and desiring high level of need for achievement. With these attributes, entrepreneurs must be people who are willing to venture into the unknown by taking calculated risk that must be innovative and as such be pro-active in their actions and dealings.

There is a growing consensus among scholars that entrepreneurship is a behaviourial process that is opportunity driven (Moore, 1986; Gartner, 1990; Morris and Sixton, 1996) and as a behaviourial process, it must be approached in a logical manner which include opportunity identification and the acquisition of appropriate resources to startup businesses. The entrepreneurial processes according to Gartner (1990); Morris, Sixton and Lewis (1993) is characterize with inputs and outputs processes. The inputs processes take into consideration environmental opportunities, business concepts and resources such as financial and non-financial activities while the output

Volume 2 Issue 12 December 2017
DOI: 10.18535/afmj/v2i12.08
Page no.1218-1225

focuses on the creation of new product idea, services, employment, profit and growth. Entrepreneurship as an opportunity identification or concept involves individual and collective actions depending on the context of usage.

Concept of entrepreneurial intensity

As the world has moved to becoming "a village", only entrepreneurially driven organizations can stand the test of times. Organizations with renewed, concentrated or intensifying effort to develop new ideas, product, markets and services are the ones capable to survive the turbulent business environment. Entrepreneurial intensity originated from the assumptions that entrepreneurial behaviour may differ in terms of its level of pro-activeness, risk-taking and innovative attributes (Erasmus and Scheepers (2008). These behaviourial attributes according to Scheepers, Hough and Bloom (2007) has numerous outcomes in the form of new business development, new product idea, services and processes.

The concept of entrepreneurial intensity was developed by Morris and Sixton (1996). To them it is the degree and frequency of an entrepreneur combined together. Erasmus and Scheepers (2008) viewed entrepreneurial intensity as the variable nature of entrepreneurship within an established enterprise. Morris and Sixton definition characterizes "frequency and degree" as major constituents of entrepreneurial intensity. The frequency depicts the number of occurrence an organization acts entrepreneurially in the form of inventing new product or processes while the degree is measured by the firm's innovativeness, pro-activeness and risk-taking ventures.

As adopted by Morris and Sixton (1996) entrepreneurial intensity has three major dimensions (innovativeness, risk-taking and pro-activeness) as against Lumpkin and Dess (1996) who came up with additional two dimensions (competitive aggressiveness and autonomy) to make up five dimensions. Following Morris and Sixton, competitive aggressiveness is a sub dimension of pro-activeness and as such cannot be used to measure degree of entrepreneurship or intensity. Autonomy according to Scheepers, et al, (2007) is a fundamental state that manipulate organizational climate therefore, should not constitute a proxy to measure entrepreneurial intensity. Entrepreneurial intensity as a concept has provided several opportunities for scholars to ascertain whether or not frequency and degree of entrepreneurship have contributing factor to firm performance, growth and sustainability in the long run. This study adopts Morris and Sixton's dimensions of entrepreneurial intensity as discussed below:

Innovativeness: The process of creating new idea or improve goods and services in the extractive industry is one that requires constant innovative practices among the workforce if they want to sustain their organizations. The invention of new technological ideas on how to man extractive industrial equipment is required on constant basis as the old fashion of doing thingsbecomes obsolete due to constant changes in the environment. Innovation according to Gamal (2011) "is the introduction of new product, services and process through a defined business model into the marketplace either by utilization or commercialization". Hence it involves the process, products, services as well as business model innovation and these contribute significantly to strengthening organizational competitive advantage.

Risk-taking: This involves entrepreneurial willingness to commit relevant resources to opportunities with full courage and determination that have uncertain outcomes (Scheepers, et al, 2007; Erasmus and Scheepers, 2008). Risk-taking in the extractive industry requires complete determination and willingness to venture into the unknown with

Volume 2 Issue 12 December 2017
DOI: 10.18535/afmj/v2i12.08
Page no.1218-1225

the sole aim of achieving something great. These risks should be calculated and well managed by organizations. Jones and George (2008) added that to encourage managers to bear the uncertainty and risk associated with the hard work of entrepreneurship, it will be necessary to link performance to reward meaning that corporations should reward employees on the basis of outcome.

Pro-activeness: Corporations should actively embrace socially responsible behaviour by going out of their organizational way to learn about the need of different stakeholders groups and utilize organizational resource to promote the interest of both stakeholders and shareholders (Jones and George, 2008). Pro-activeness here depicts top management orientation to pursue improved competitiveness, encourage initiative, explore opportunities, competitive aggressiveness and confidence (Erasmus and Scheepers, 2008; Scheepers, et al, 2007).

Concept of corporate sustainability

Corporate sustainability represents the building and upholding of stakeholders satisfaction in the long-term (Fikret, Natalie, Akram and Kim, 2008). It is the significant practices and fulfillment derived by stake-holders when their valued long-term prosperity are meet by their corporations. The construct of "corporate sustainability" has no unified agreement when it comes to application but the relevance linked to the relationship visualize a situation where a firm claims to be sustainable without polluting societal environment when using natural resources at organizational disposal to improve economic activities such that threat on the development and growth of its surroundings are eradicated (Atkinson, 2000). However, Santos, Anunciacao and Svirina (2013) believed that contemporary challenge of the era is creating sustainable universal economy and society aided by corporations that not only sustain their firms but also sustain their impact on the environment and society in general. In-line with the above positions, the concept should be silent in consideration of a better welfare for the entire human race.

Sustainability as conceived by Mehra (2010) is the process that frequently disrupts the standard and harnesses instability to achieve long-term goals of a firm through stable commitment, innovation, accountability, responsibility and transparency. Corporate sustainability is a fundamental principle for internal business success strategies (Zaharia, et al, 2015) because it signifies economic well-being as well as societal integrity and environmental standards among individuals. The construct (sustainability) according to Fikret, et al (2008) has three measures; economic prosperity, social justice and environmental quality but the paper adopts two proxies as listed below.

Economic prosperity: The growth and development of any business organization is characterized by the good fortune in its possession. Economic prosperity here depicts the effective management or utilization of the nation's resources for the well-being of its citizenry and as such deserves high level of sustainability from its stakeholders and shareholders in the long run. Many organizations in the extractive sector of the Nigerian economy strive to achieve sustainable management in their business operations but their efforts remain unclear due to the consequences of irrelevant factors emanating from valuations of internal and external aspect of their corporations.

Environmental quality: In trying to improve individual well-being in organizations and society, the quality of societal environment should not be compromise by corporations. However, in today's competitive business world, firms are battling to survive the turbulent business environment as a result of

Volume 2 Issue 12 December 2017
DOI: 10.18535/afmj/v2i12.08
Page no.1218-1225

globalization; innovation in technology, competitive advantage etc. but environmental challenge such as increased awareness among individuals in society with regards to social and environmental issues including global warming has forced corporations to implement sustainable developmental practices in their firms. One of the obstacles preventing the adoption of these sustainable practices among business firms according to Fikret, et al (2008) is lack of a single management tool that can combine and harness the three proxy of corporate sustainability.

Extractive industry in Nigeria

The need for resource rich nation such as Nigeria to assume responsibility of exploration activities (Balouga, 2012) in the extractive industry and harness the potentials to add value appears to receive desired recognition from stakeholders. The industry being the dominant contributor of the nation's vast earning account for about 90% of its total revenue generation deserved concerted effort towards sustainability. The Nigerian extractive industry is meant to foster infrastructural development and improve the wellbeing of its citizenry as stipulated by the Johannesburg summit but the nations' inability to utilize these resources as a medium of eradicating poverty and maintain sustainable development pose serious challenge to successive administrations. Some of these challenges as posit by Jimoh (2011) are attributed to perceived neglect and environmental degradation of regions (Niger-Delta) where the country's wealth is derived and as such gave rise to the current state of insecurity, restiveness and all other social vices faced by the nation in the present dispensation.

Methodology

The study is designed to examine corporate sustainability through entrepreneurial intensity in the extractive industry and as such required a wide range of data collection. The nature of the study gave rise to cross sectional survey design with a target population of all existing extractive firms under the umbrella of Nigerian Extractive Industries Transparency Initiative (NEITI) Act 2007, a subsidiary or national version of the Extractive Industry Transparency Initiative (EITI). A global initiative scheduled with the responsibility of ensuring transparency among exploration activities as to fast-track sustainable development among resource rich nations. Due to constraints within the researchers' disposition, a cross section of managers and major stakeholders were selected using simple random sampling technique from five extractive firms amounting to four hundred (400) personnel issued with copies of well-structured questionnaire to sample their opinions concerning their activities relating to sustenance of their firms through innovative practices as well as pro-activeness and risk-taking propensity. In analyzing the data, a multiple regression analysis was utilized to ascertain the level of prediction among extractive firms sustainability in Nigeria.

Analysis/Findings

Below are the descriptive and analysis tables.

Descriptive Statistics

Variables	Mean	No of Items	Std. Deviation	Alpha Coefficient
INNOVATIVENESS	2.49	3	1.202	.803
RISK-TAKING	2.12	3	1.139	.779
PRO-ACTIVENESS	2.57	3	.983	.835
CORPORATE SUSTAINABILITY	3.05	3	.734	.854

Volume 2 Issue 12 December 2017
DOI: 10.18535/afmj/v2i12.08
Page no.1218-1225

The descriptive statistics revealed the mean scores of entrepreneurial intensity dimensions and corporate sustainability which are 2.49; 2.12; 2.57 and 3.05 with standard deviations of 1.202; 1.139; 0.983 and 0.734 respectively. The figures show that pro-activeness has the highest mean score among the dimensions followed by innovation and risk-taking. Pro-activeness highest mean score is attributed to the positive attitude of stakeholders towards socially responsible behaviours that promote enhanced competitiveness and engender confidence in the long run. On the contrary risk-taking indicate a lower mean score, perhaps it is because of the Nigerian syndrome of corrupt practices among top management, government and stakeholders within the industry.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.881[a]	.775	.773	.350

a. Predictors: (Constant), PRO-ACTIVENESS, RISK-TAKING, INNOVATIVENESS

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	126.508	3	42.169	345.178	.000[b]
	Residual	36.650	300	.122		
	Total	163.158	303			

a. Dependent Variable: CORPORATE SUSTAINABILITY

b. Predictors: (Constant), PRO-ACTIVENESS, RISK-TAKING, INNOVATIVENESS

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	1.400	.061		22.981	.000	1.280	1.519
	INNOVATIVENESS	.252	.049	.412	5.118	.000	.155	.349
	RISK-TAKING	-.150	.047	-.232	-3.170	.002	-.242	-.057
	PRO-ACTIVENESS	.522	.056	.699	9.402	.000	.413	.632

a. Dependent Variable: CORPORATE SUSTAINABILITY

A multiple regression analysis was run to predict corporate sustainability among extractive industries in Nigeria from innovation, risk-taking and pro-active activities of firms. The result indicate that innovativeness and pro-activeness both statistically and significantly predict the variance in corporate sustainability at a 95% confidence level given innovativeness (t=5.118) and pro-activeness (t=9.402) while risk-taking negatively and significantly relate to the change in corporate sustainability (-3.170).

The overall model revealed that all entrepreneurial intensity variables added together significantly and statistically predict corporate sustainability $f(3,303) = 345.178$, $p<0.05$ and $R^2= 0.775$. The outcome from the coefficient of determination (0.775) implies that 78% of corporate sustainability among extractive firms in Nigeria can best be explained by entrepreneurial intensity while 22% of its explanation is not accounted for by the dimensions of entrepreneurial intensity and as such considered as the error term. Our model

DOI: 10.18535/afmj/v2i12.08
Page no.1218-1225

indicates the value of R is (0.881) 88% which shows a good level of prediction.

Discussions, Conclusion and Recommendations

The study revealed that entrepreneurial intensity gave rise to corporate sustainability among extractive firms. The findings corroborate with the empirical evidence of Erasmus and Scheepers (2008); Scheepers, el al (2007); Morris and Kuratko (2002) that firms with higher propensity of entrepreneurial activity tends to create economic value for shareholders over a considerable period of time. The economic value by implication depicts sustenance of the firm in the long term benefits of shareholders. Corporate sustainability as predicted by entrepreneurial intensity is as positive to entrepreneurial innovativeness and pro-activeness while risk-taking indicates negative prediction.

It is pertinent to note, that innovativeness and pro-activeness contributes to adding values to shareholders. This seemingly imply that corporations with high level of pro-active (ideas) activities coupled with their level of innovativeness in products and services tend to attain firm sustainability in the long run for the benefit of shareholders as well as enhancing the economy than those with high risk-taking propensity. Although, high degree of risk-taking among extractive firms tend to produce innovativeness and products that will improve corporate sustainability in the long term for shareholders benefits but the reverse is that most risk-taking activities embarked by organizations are triggered by government to re-invest heavily in the firm's area of operation. Corporate risk-taking from the analysis table shows a negative prediction implying that as corporations embark on high propensity of risk-taking activities in an unstable environment like Nigeria that lack proper accountability, unstable economic policies, poor governance and high level of corruption among public office holders, sustainability of corporations will be on the decrease if calculations are not properly made in line with environmental change before delving into actions.

Following the outcome above, it is believed that each entrepreneurial intensity dimensions significantly contribute to corporate sustainability in varying degree and frequencies depending on the level of corporate involvement and application. Though it is seen that risk-taking has negative predictions on corporate sustainability in the typical Nigerian work environment but this is resulting from the endemic challenges beleaguering the Nigerian extractive industry which can be attributed to poor governance, lack of accountability among public office holders, corrupt practices engulfing the industry etc. The study therefore recommends that, management of firms should adopt a sustainability plan that would monitor and checkmate deviations and unethical practices among staff as well as government involvement in the resource rich industry. This would ensure that the future of the generational need for the present resource cannot be compromised.

References

1. Atkinson, G. (2000). Measuring corporate sustainability. *Journal of Environmental Planning and Management*, *43*(2), 235-252.
2. Balouga, J. (2012). Nigerian local content: Challenges and prospect. *International Association for Energy Economics*, *3*: 23-26.
3. Erasmus, P., and Scheepers, R. (2008). The relationship between entrepreneurial intensity and shareholders' value creation. *Managing Global Transitions*, *6*(3), 229-256.
4. Fikret, K. T., Natalie, M. S., Akram, K., and Kim, L. N. (2008). Organizational sustainability: A new portfolio management approach that integrates

DOI: 10.18535/afmj/v2i12.08
Page no.1218-1225

financial and non-financial performance measures. *Proceedings of the 2008 Industrial Engineering Research Conference.*

5. Gamal, D. (2011). How to measure organizational innovativeness? An overview of innovation measurement frameworks and innovation audit/ management tools. *Technology Innovation and Entrepreneurship Center* (TIEC). 1-35.
6. Gartner, W. B. (1990). What are we talking about when we talk about entrepreneurship? *Journal of Business Venturing*, *5*(1), 15-28.
7. Jimoh, M.(2011, October, 17). Challenges and prospects in Nigeria's petroleum Industry. *The Tide:* A Commitment to Truth.
8. Jonatha, D. J. (2010).The resource curse: Theory and evidence (ARI).*Sub-Saharan Africa*, 1-9.
9. Jones, R. G., and George, M. J. (2008). *Comparative Management*. 5th edition. McGraw-Hill/Irwin.
10. Lumpkin, G. T., and Dess, G. G. (1996). Clarifying entrepreneurial orientation construct and linking it to performance. *Academy of Management Review*, *21*(1), 135-172.
11. Mehra, M. (2010). Sustainability strategy-The centrality of transparency. World council for corporate governance, London.
12. Morris, M. H. (2008). *Entrepreneurial intensity: Sustainability advantage for individuals, organizations and societies*. Quorum, Books; Westport.
13. Morris, M. H., and Sixton, L. D. (1996). The concept of entrepreneurial intensity: Implications for company performance. *Journal of Business Research*, *36*; 5-13.
14. Morris, M. H., Sixton, L. D., & Lewis, P. (1993). Re-conceptualizing entrepreneurship: An input-output perspective. *Sam Advanced Management Journal*.
15. Okeke, V. O. S., & Aniche, E. T. (2013). A critique of the enforcement of Nigeria extractive industries transparency initiative (NEITI) Act 2007 in Nigerian oil and gas sector. *British Journal of Acts and Social Sciences*, *14*(2), 98-108.
16. Richard, A. (1993). *Sustainability development in mineral economies: Then Resource Curse Thesis*. London, Routledge.
17. Ross, M. L. (1999). The political economy of resource curse. *World Politics*, *51*(2), 297-322.
18. Santos, R. J., Anunciacao, F. P., and Svirina, A. (2013). A tool to measure organizational sustainability strength. *Journal of Business Management*, *7*, 105-117.
19. Scheepers, M. J., Hough, J., and Bloom, J. Z. (2007). Entrepreneurial intensity: A comparative analysis of established companies in South Africa. *SAJEMS NS10* (2), 238-255.
20. Stevenson, H., and Jarillo, J. A. (1990). A paradigm of entrepreneurship: Entrepreneurial management. *Strategic Management Journal*, 11; 17-27.
21. Zaharia, C., Alpopi, C., and Nicolaescu, E. (2015). Measuring corporate sustainability performance. *Sustainability*, *7*, 851-865.

Volume 2 Issue 12 December 2017
DOI: 10.18535/afmj/v2i12.08
Page no.1218-1225