INFLUENCE OF STRUCTURAL SUPPORT SYSTEM AND GOVERNMENT INCENTIVES ON THE PERFORMANCE OF ENTREPRENEURIAL VENTURES: A STUDY OF SELECTED SMALL AND MEDIUM ENTERPRISES OWNER-MANAGERS IN NIGERIA

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Abstract

SMEs are widely acclaimed as being pivotal to the economic and industrial development of developed and developing nations. The realisation of this expectation in Nigeria is meted with a plethora of challenges that characterise the macro environment of SMEs. This study examines the impact of formal institutional environment of the entrepreneurial climate and its implications for entrepreneurial venture performance in Nigeria. A descriptive research method involving the use of Structural Equation Modeling and Confirmatory Factor Analysis were adopted to analyse 400 copies of questionnaire administered to SME owner-managers in three geo-political zones in Nigeria using stratified and simple random sampling techniques. The study revealed that both structural support system and government incentives have positive significant impact on venture performance. This suggest that road infrastructure, research and development and water infrastructure are the most important predictor of venture performance followed by electricity infrastructure, patent right and intellectual property protection and access to capital. We therefore recommend the setting up of appropriate institutional and stable micro-economic policy framework that caters for the interest of SME practitioners and policy makers.

Keywords: Entrepreneurial Climate, Institutional Environment, Entrepreneurial Ventures, Performance, SMEs.

1 INTRODUCTION

SMEs are considered to be the engine of growth of most developed and emerging market economies, playing significant role in the industrialisation process and economic growth [1]. Thus, a majority of developed and developing economies depend on the progressiveness, enthusiasm, resourcefulness and risk appetite of SMEs to stimulate and sustain process of economic growth [2]. The significant contribution of SMEs to the development of nations have been widely acknowledged. According to [3] SMEs in Ghana provide about 85% of manufacturing employment, contributes about 70% to GDP, and accounts for about 92% of businesses, while in South Africa, formal business entities comprise of about 91% SMEs who contributes between 52-57% to the GDP and also generates 61% of employment opportunities. In Nigeria, SMEs sector provides an average of 50% of employment and 50% of industrial output [4], with women entrepreneurs constituting major contributors to economic growth by virtue of their employment generating capacity [5].

The entire institutional (macro) environment of SMEs is characterised by the political, legal, financial, socio-cultural and technological components that are embedded within the local entrepreneurial climate. The formal and informal institutional elements of the entrepreneurial climate are susceptible to uncertainties and does not only create decision making dilemma for start-ups and growing SMEs [6], but also determine their performance and ultimate survival [7]. Governments word-wide have continually recognised the progressive and decisive impact new businesses have on employment creation with enterprise policies that varies from one country to another and targeted at encouraging entrepreneurship development [8]. This accounts for the rationale why Organisation for Economic Cooperation and Development (OECD) governments institute a number of support programs and policies aimed at promoting entrepreneurship and development of SMEs [9].

The mark of an effective strategy for promoting the SMEs sector by the government of any nation is manifested in the extent of assistance provided in overcoming the challenges of the business environment through measures not limited to ensuring the availability of venture capital, infrastructure as well as research and development support. The provision of incentives to SMEs to accelerate

entrepreneurship development through the adoption of favourable taxation policy to speed up employment and high-tech enterprises, development of industrial clustering and granting of one year income tax exceptions for services industries are therefore of utmost concern taking cognisance of the peculiarities of institutional settings [10], [11].

Despite the fact that literature is replete with studies on the aspect of challenges and impediments to the survival and performance of SMEs focusing on insufficient and limited access to credit facilities [12], [13], [6], [14], however, there seems to be dearth of studies dwelling on the formal institutional framework as an important constituent of the macro environment that influences the performance of entrepreneurial ventures especially in developing settings like Nigeria. The drive to explore and investigate the formal institutional environment with particular emphasis on the structural support structures andgovernment incentives serve as sources of motivation to foster performance and sustainable entrepreneurial behaviour amongst SMEs. Thus the specific objectives of the study were to:

1 Determine the extent to which structural support system impact on Venture Performance.

2 Examine the effect of government incentives on Venture Performance.

The following research hypotheses were formulated in the null form to achieve the objectives of the study:

- **Ho_1**: There is no significant impact of structural support system on Venture Performance
- **Ho_2**: There is no significant effect of government incentives on Venture Performance.

2 METHODOLOGY

The study adopted descriptive research design by administering questionnaire to SMEs owner-managers that affiliated with SMEs umbrella associations in three geo-political zones in Nigeria (South-West, South-South and North-Central) in a survey. The SMEs umbrella associations of interest include: National Association of Small Scale Industrialist (NASSI), Nigerian Association of Small and Medium enterprises (NASME), and Association of Small Business Owners of Nigeria (ASBON) in view of the role they play in promoting the growth and development of SMEs in the zones. The selection of the three zones stem from their political and economic significance. Consequently, Lagos State, Rivers State and Federal Capital Territory- Abuja respectively were selected from each zone because the states and territory in question have the highest number of registered SMEs [15].

The population of this study put at 2,590 consisted of SME owner-managers on the membership register of the above selected associations. Sample size was determined as 400 by using sample size table developed by [16]. In selecting respondents from the sampling frame, multi-stage sampling technique comprising of purposive, stratified and random sampling techniques were adopted. States were purposively selected (as mentioned above) and stratification of respondents was based on membership register of each association. Random selection was based on satisfaction of the following criteria: at least 5 years of business operation, at least 3 years of association membership, employee strength of between 10 and 199, and consistency in paying membership dues.

Structural Support System and Government incentives respectively were measured by adapting the measurement scale developed by [17], while that of venture performance involved adapting measurement parameters developed by [18] respectively with little modifications to suit the constructs of the subject matter. Five-point Likert scale that best describes the degree to which the respondents agree with each item in the questionnaire was used.

3 DATA ANALYSIS AND RESULTS

3.1 Scale Validation and Measurement Model

The study adopted the two-step approach suggested by [19] to demonstrate construct validity, model fits and to test the hypotheses for this study. According to [19], the two-step approach is a robust and broad test for measuring construct validity, R-Square, path significant/strengths and hypotheses testing. These steps are: (1) measurement model and (2) structural model. The measurement and structural model in this study have constructs and measurement items that satisfy construct validity (i.e. convergent validity). To establish the convergent validity in the first step measurement model, we used confirmatory factor analysis (CFA) to evaluate item reliability, item loading, composite reliability,

construct validity, error variance and average variance extracted estimate (AVE). The structural model was accepted to transform the constructs in the measurement model to theoretically fit the research model and to demonstrate the causal relationship between the constructs (i.e. latent variables). In essence, CFA was used to assess the scale validity and the fit of the measurement model. Also in the study, the one sequential phase for the validation of the scale involved the use of convergent validity.

The study adopted three conditions to assess convergent validity as shown in table 1. The conditions to be met as recommended by [20] are: firstly, the CFA loading should indicate that all scale and measurement items are significant and exceed the minimum value criterion of 0.70, secondly each construct composite reliability should exceed 0.60, thirdly, error variance should be below 0.5 and lastly, each construct's average variance extracted estimate (AVE) should exceed 0.50. The results of CFA analysis as shown in table 1 suggest that the factor loadings for all major variables range between 0.72 and 0.97. The result of most of the construct composite reliability exceeds 0.60, most of the error variance are below 0.5 and each construct average variance extracted (AVE) exceeds 0.50. Thus the study indicates that most of the conditions for convergent validity as recommended by [20] and [21] are met.

Table 1. *Measurement Reliability and Average Variance Extracted Estimate*

Measurement	Loading	Indicator Reliability	Error Variance	Composite Reliability	Average Variance Estimated
	≥ 0.7		**≤ 0.5**	**≥ 0.6**	**≥ 0.5**
VENTURE PERFORMANCE					
VP1	0.7298	0.5326	0.4674	0.5326	
VP2	0.7915	0.6265	0.3735	0.6265	
VP3	0.7615	0.5799	0.4201	0.5799	
VP4	0.7236	0.5236	0.4764	0.5236	
VP5	0.6690	0.4476	0.5524	0.4476	
VP6	0.7624	0.5813	0.4187	0.5813	
VP7	0.8007	0.6411	0.3589	0.6411	
VP8	0.8085	0.6537	0.3463	0.6537	
VP9	0.8755	0.7665	0.2335	0.7665	
VP10	0.7839	0.6145	0.3855	0.6145	
VP11	0.6964	0.4850	0.5150	0.4850	
VP12	0.7877	0.6205	0.3795	0.6205	0.7677
Structural Support System					
SS1	0.9364	0.8768	0.1232	0.8768	
SS2	0.7484	0.5601	0.4399	0.5601	
SS3	0.9283	0.8617	0.1383	0.8617	0.7955
Government Incentive					
GI1	0.8553	0.7315	0.2685	0.7315	
GI2	0.9744	0.9495	0.0505	0.9495	
GI3	0.8051	0.6482	0.3518	0.6482	0.8344

NOTE: VP –Venture Performance, SS- Structural Support, GI- Government Incentives

3.2 Model Fit

Besides the measurement model, of particular interest is the path significance indicated by the standardized regression estimate (β) that assesses the effects of the studied variables. A model fit was evaluated by examining several fit indices which include: chi-square/degree of freedom (χ2/df), Goodness-of-Fit Index (GFI), Normed Fit Index (NFI), Comparative Fit Index (CFI), and Root Mean Square Error of Approximation (RMSEA) as presented in Table 2.

Table 2. *Model Fit Summary*

Model-Fit Index	SEM Scores	Cut-off Values	Remarks
(X^2/DF)	**3.573**	**< 5**	**Good Fit**
NFI	**.921**	**≥ .90**	**Good Fit**
CFI	**.942**	**≥ .90**	**Good Fit**
RMSEA	**.038**	**≤ .05**	**Good Fit**
GFI	**.973**	**≥ .90**	**Good Fit**

According to [22] and [23] different indicators of goodness-of-fit are usually adopted in various research concepts. [22] and [23] asserted that the higher the number of the indices of indicators, the more acceptable the good fit such as Normed Fit Index (NFI) =>.90; and Comparative Fit Index (CFI) acceptable value =>.90. Other informative indices that measure the close association between the model and the data include Root Mean Squared Error of Approximation (RMSEA) and Goodness of fit (GFI). Thus our study revealed that the conditions for overall model fit as specified above are satisfied with chi-square/degree of freedom (χ2/df) = 3.573 < 5; Normed Fit Index (NFI) = 0.921> 0.90; Comparative Fit Index (CFI) = 0.942 > 0.90; and RMSEA = 0.038 < 0.05.

3.3 Modelling the Regression Effect of Government Incentives (GI) and Structural Support System (SSS) on Venture Performance (VP)

An analysis of the data using the structural equation modeling procedure, as shown in Table 3 and Figure 1, revealed the relative contributions of structural support system and government incentive dimensions respectively to venture performance. From the standardized regression estimate (β), structural support (SSS) and government incentives (Gov_Inc) are deemed to have 75% and 24% contribution to changes in venture performance respectively. Amongst the measures of SSS, Road infrastructure (RD_Infr) with (β) =0.31 has the most significant contribution to the predictive capability of structural support system on venture performance followed by water infrastructure (Wat_Infr) with (β) =0.28 and electricity infrastructure (Elect_Infr) with regression coefficient (β) =0.10 @ p=0.014 respectively. Similarly, looking at the predictive capability of the measures of government incentives on venture performance, Research and Development (R_D) has the most significant effect with (β) =0.30 followed by Patent Right and Intellectual Property Protection (Pat_Int) with ((β) =0.24 @ p =0.003 < 0.05 and Access to Credit (Cap_Acc) with (β) =0.034 @ p=0.046 < 0.05 respectively.

Table 3. *Regression Weights: (Group number 1 - Default model)*

Dependents		Independents	Estimate((β)	S.E.	C.R.	P	Label
SSS	<---	RD_Infr	.314	.109	3.678	***	Sig
SSS	<---	Elec_Infr	.099	.064	1.462	.014	Sig
SSS	<---	Wat_Infr	.277	.082	3.295	***	Sig
Gov_Inc	<---	Pat_Int	.239	.067	2.990	.003	Sig
Gov_Inc	<---	R_D	.297	.075	3.599	***	Sig
Gov_Inc	<---	Cap_Acc	.034	.092	.447	.046	Sig
Vent_Perf	<---	SSS	.747	.191	3.953	***	Sig
Vent_Perf	<---	Gov_Inc	.237	.233	1.113	.025	Sig

Note: C.R. = Critical Ratio; S.E. = Standard Error; * significant at 0.05

The findings of this study are in line with what is obtainable in the literature concerning the significant positive impact between government expenditure in the provision of infrastructure (electricity, road, and water infrastructure amongst others) on the performance of SMEs and deficiency of which resulted in a negative impact on profitability of SMEs [24], [25] and [26]. Also the significant positive relationship between government incentives and venture performance is supported by the works of [27], [13]] and [14]. The work of [13] particularly reiterated that absence of appropriate government

incentive structure (especially lack of access to capital) ultimately place funds beyond the reach of desiring SMEs).

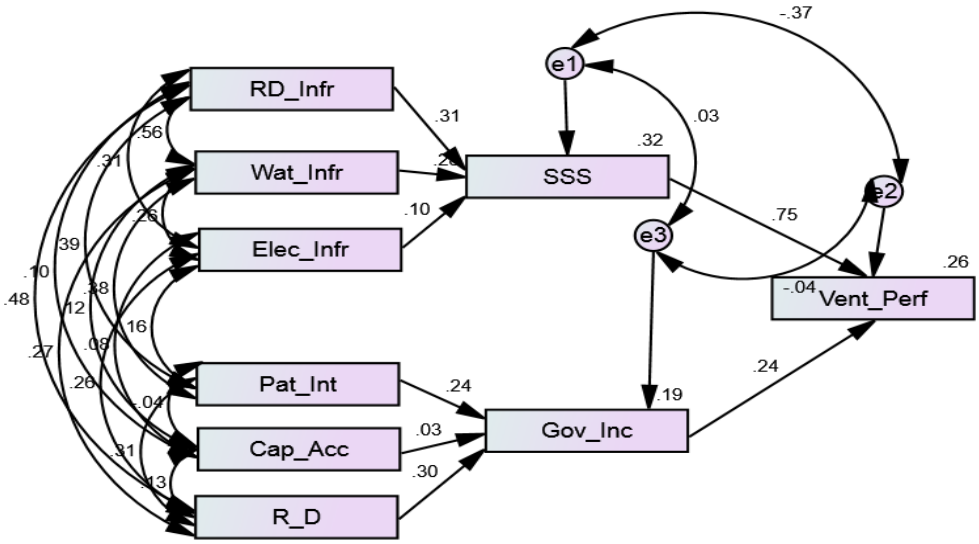

Fig. 1: Standardized Estimates of the Structural Model for the Study

4 CONCLUSION AND MANAGERIAL IMPLICATIONS

The findings of this study show the importance of structural support system and government incentive dimensions on entrepreneurial venture performance in the three regions. The study has highlighted that the interaction between small and medium enterprises and the external environment is exemplified by the institutional settings. The implication of positive and significant impact of structural support system as well as government incentives dimension respectively on the performance of entrepreneurial ventures demonstrate that a formal institutional framework that give support to adequate provision of infrastructure (in terms quality and adequacy) promotes the performance of SMEs. Also, the performance of SMEs (in terms of profitability, growth, and competitiveness) is fostered in a formal institutional environment where government incentives focuses on integrating research and development initiatives, protection of intellectual property and patent rights of SMEs, as well as enabling environment that ensure accessible and affordable credit (capital). Therefore, building an educational and judicial system that is responsive to intellectual property rights protection (IPR) and speedy adjudication of court proceedings on counterfeiting and infringement matters goes a long way in fostering the performance of SMEs.

Access to finance remains a critical determinant of entrepreneurial venture growth in Nigeria with the deepening of financial regulations further restricting its adequacy and availability. The study throw insight into the need for the consolidation of SMEs support agencies so as to have a robust financial support regime by considering the adoption of the valuation of intellectual and intangibles and their use as collateral for loans. It is also imperative to state that the study serves as pointer to SMEs managers and other stakeholders on the need to understand the peculiarities of their formal institutional environment with a view to instituting appropriate strategies that enable them optimally tap the opportunities while also being mindful of inherent challenges posed for enhanced performance. Furthermore, the study opens the door for future researchers to investigate influence of the informal institutional constituents of the entrepreneurial climate on the performance of entrepreneurial ventures.

REFERENCES

[1] T. A. Muritala, A. M. Awolaja, and Y. A. Bako, “Impact of Small and Medium Enterprises on Economic Growth and Development,” *American Journal of Business and Management*, vol.1, no. 7, pp. 18-22, 2012.

[2] J. Abor, and P. Quartey, “Issues in SME Development in Ghana and South Africa,” *International Research Journal of Finance and Economics,* vol. 39, pp. 218-228, 2010.

[3] D. Ariyo, “Small firms are the backbone of the Nigeria Economy: Africa Economic Analysis,” *Academy of Management Journal,* vol. 1, no. 1, pp. 109-124, 2008.

[4] O. Iyiola, and D. Azuh, “Women Entrepreneurs as SME Operators and their roles in Socio-Economic development in Ota, Nigeria,” *International Journal of Economic, Business and Finance*, vol. 2, no. 1, pp. 1-10, 2014.

[5] S. Ghosh, and B. Bhowmick, “Uncertainties in Entrepreneurship Climate: A Study on Start-Ups in India,” *Procedia-Social and Behavioural Sciences*, vol. 150, pp. 46-55, 2014.

[6] R. Tubey, J. Nandwa, P. I. Omboto, and M. K. Situma, “Entrepreneurship Climate and It’s Effects on Entrepreneurship development in Kenya,” *International Journal of* Innovative Research and Development, vol. 4, no. 3, pp. 280-284, 2015.

[7] O. J. Kehinde, A. J. Abiodun, O. Adegbuyi, and H. Oladimeji, “Small and Medium Scale Enterprises Pivotal to sustainable economic development: The Nigerian Experience,” *Internal Journal of Current Research*, vol. 8, no. 2, pp. 26411-26420, 2016.

[8] L. I. Savlovschi, and N. R. Robu, “The role of SME in modern economy. *Economia Seria Management*, vol. 14, no. 1, pp. 277-281, 2011.

[9] E. Oseni, and E. F. Osen, “Achieving inclusive economic growth and development in Nigeria through MSMEs,” *Journal of Economic and Financial Studies, vol.* 3, no. 4, pp. 30-40, 2015.

[10] X. Liu, “SME Development in China: A Policy Perspective on SME Industrial Clustering,” in *SME in Asia and Globalization, ERIA Research Project Report* (H. Lim, ed.), 18 July, 2017. Retrieved from http://www.eria.org/SME

[11] R. K. Singh, S. K. Garg, and S. G. Deshmukh, “The Competitiveness of SMEs in a Globalized economy: Observations from China and India,” *Management Research Review, vol.* 33, no. 1, pp. 54-65, 2010.

[12] R. O. Akingunola, “Small and Medium Scale Enterprises and Economic Growth in Nigeria: An Assessment of Financing Options,” *Pakistan Journal of Business and Economic Review, vol.* 2, no. 1, pp. 78-97, 2011.

[13] E. O. Oni, and A. A. Daniya, “Development of Small and Medium Scale Enterprises: The role of Government and other Financial Institutions,” *Arabian Journal of Business and Management Review (OMAN Chapter)*, vol. 1, no. 7, pp. 16-28, 2012.

[14] U. G. Akam, E. I. Idemobi, and I. C. Nworgu, “Nurturing Small Businesses and Entrepreneurs in the South-East of Nigeria: Problems and Prospects,” *International Journal of Recent Scientific Research, vol.* 7, no. 5, pp. 11391-1140, 2016.

[15] SMEDAN and NBS Survey 2013 Report, Accessed 25 July, 2017. Retrieved from https://www.nigerianstat.gov.ng

[16] T. Yamane, *Statistics: An Introductory Analysis, 2nd Ed*. New York: Harper and Row, 1967.

[17] Y. E. Eratus, A. Stephen, and I. Abdullah, “Institutional Framework for promoting SMEs in Ghana: Perspective of Entrepreneurs,” *Australian Journal of Business and Management Research, vol.* 3, no. 10, pp. 28 – 45, 2014.

[18] L. M. Khan, and I. J. Muhammed, (2012). Antecedents of Innovation and Its Impact on Small Firm Performance. (Master Thesis, Blekinge Institute of Technology, 2012). Accessed 12 August, 2017. Retrieved from https://www.diva-portal.se

[19] J. C. Anderson, and D. W. Gerbing, “Structural Equation Modeling in Practice: A Review and Recommended Two-Step Approach,” *Psychological Bulletin,* vol. 103, no. 3, pp. 411-423, 1998.

[20] C. Fornell, and D. F. Larcker, “Evaluating Structural Equations with Unobservable variables and measurement error,” *Journal of Marketing Research*, vol. 18, pp. 39-50, 1981.

[21] R. P. Bagozzi, and Y. Yi, “On the evaluation of structural equation models,” *Journal of the Academy of Marketing Science*, vol. 16, no. 1, pp. 74-94, 1988.

[22] P. M. Bentler, and L. T. Hu, “Cut-off criteria for fit indexes in Covariance Structure Analysis: Conventional criteria versus new alternatives,” *Structural Equation Modelling: A Multidisciplinary Journal*, vol. 6, no. 1, pp. 1-55, 2002.

[23] D. Kaplan, “Structural Equation Modelling: Foundations and Extensions,” *Advanced Quantitative Techniques in the Social Sciences Series*, vol. 10, no. 2, pp. 323 – 33, 2000.

[24] O. Kodongo, and K. Ojah, “Does Infrastructure really explain economic growth in Sub-Saharan Africa?” *Review of Development Finance*, vol. 6, pp. 05–125, 2016.

[25] S. K. Forkuoh, and Y. Li, “Electricity Power Insecurity and SMEs Growth: A Case Study of the Cold Store Operations in the Asafo Market Area of Kumasi Metro in Ghana,” *Open Journal of Business and Management, vol.* 3, pp. 312-325*,* 2015*.*

[26] S. T. Akinyele, F. E. Akinyele, and O. D. Ajagunna, “Infrastructural Development as predictor to SMEs Performance in Nigeria,” *Kuwait Chapter of Arabian Journal of Business and Management Review, vol.* 6, no. 3, pp. 40-53, 2016.

[27] O. Fatoki, and D. Garwe, “Obstacles to the growth of new SMEs in South Africa: A Principal Component Analysis Approach,’ *African Journal of Business Management*, vol. 4, no. 5, pp. 729-738, 2010.