DETERMINANTS OF SMALL AND MEDIUM SCALE ENTERPRISES IN NIGERIA

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Abstract

Small and medium scale industries usually tend to develop and grow into medium and large scale industries. This form of growth yields to the development of the economy. However, the path to development of the economy has some challenges which are classified into internal and external factors. This study theoretically and empirically examined the various factors that affect the performance of SMEs in Nigeria. It employed the logistic regression method to establish that corruption is the major external factor that affects growth of SMEs. The study recommended that in order to achieve the desired objective of functional SMEs, the fight against corruption must be tackled from the foundation and then to the leadership position.

Keywords: SMEs, internal factors, external factors, development

Introduction

Industrialization is seen widely as one of the most reliable means of raising a country's standard of living. There is an increasing awareness in the international community about the important role and potentials of small scale enterprises fostering socio-economic in development in both urban and rural settings. This explains why less developed countries (LDC's) pursue the goal of industrialization with determination and viguor. A critical observation of the history and structure of the Nigerian economy revealed that the future of the economy largely depends on the small scale enterprises (SSEs). This is in view of the relevance of the sub-sector in the production, distribution and consumption of commodities in the country.

Before 1970's the view was that large firms were the cornerstones of modern economic structure. The theory of economics of scale, which is predicated on the advantages of large scale operation was almost a doctrine and from this perspective small scale industries were seen as sign of technological backwardness. Until the 1960s it was common for economists to view the continued existence of small-scale industries in developing countries as a transition phase caused by capital inadequacy and weak administrative capacity. Many economists argued that with economic growth, these small scale enterprises would give way to modern large-scale organization capable of capturing economies of scale (Fadahunsi and Daodu, 1977).

A modern market sector and a dwindling traditional sector co-exist within the Nigerian economy. Most remained very relevant in the production, distribution and consumption of goods and services in the country. These small enterprises are dynamic entities. scale Government has designed programmes to enhance small scale industries. The government usually does this by using fiscal policies (Fiscal policy measures are macro-economic tools, which the government uses to manipulate the economy). This could be done through taxation i.e by granting tax holidays to local industries to encourage development, or imposition of tax rates on imports so as to discourage importation and encourage consumption of goods produced locally. This protects infant (Small scale) industries from competition. Government expenditure could also be used to encourage the promotion of small and medium scale industries. These mean that the government can play a major role in developing the industrial sector via small and medium scale industries.

Small and medium scale industries usually tend to develop and grow into medium and large scale industries. This form of growth yields to the development of the economy. It is also more logical than the path for industries to employ more workers and expand their output. This is a good example of development of small scale industries without any foreign intervention. On this basis, it could be said that Nigeria can achieve meaningful development of small and medium scale industries that can determine the height to which a country can aspire to, in its overall growth and development.

This paper tries to identify the factors that influence the growth and development of SMEs in Nigeria. In this context, it will analyze the impact of internal and external factors that most influence the development of SMEs in Nigeria.

Literature review

The Small and Medium industries and Equity Investment Schemes (SMIES) defines small and medium enterprises (SME) as any enterprise with a maximum asset base of N200 million excluding land and working capital and with the number of staff employed not less than 10 or more than 300. Small and medium enterprises (SME) have been defined along a broad continuum of size and type. In terms of size, measures used to classify SMEs include employment, assets and revenue. (NigeriaBusinessInfo.com).

Oshagbemi (1983) observed that small and medium scale business covers business whose scale of operation is less than the average for the industry. By 1993, the Apex bank found it necessary to revise its definition of the small scale business to mean; an enterprise with total cost of land including working capital above N1million but not exceeding N10million.

The Contingency theory which measures the performance and effectiveness of an organization claims that there is no optimum method to systematize a firm and the organization structure of the company (Fiedler, 1964). In other words, contingency theory argued that the most appropriate structure for an organization is the one that best fits a given operating contingency, such as technology (Woodward, 1965) or environment (Burns & Stalker, 1961). Every business faces its own set of challenges which are either internal or external constraints because every company has different organizational culture and different perspective towards risk.

According to Morrison (2006), enterprises which are affected by externalmacroeconomic factors;

political environment, economic, social, technological, environmental and legal factors, are not controllable. These factors are rarely affected by management decisions because they are external factors and beyond the control of SMEs. Othersare access to finance, corruption, competition, government policies etc.

Internal factors on the other hand, are those constraints that affect the businesses of SME owner/ manger's ability to operate efficiently, despite any inmate potential in the owner/manager (Baloyi 2010). According to Stokes and Wilson (2006) internal factors are the personal attributes, skills and competencies of the individual owner/manager which are crucial to how well the business faces up to the inevitable crises that arise. An important thing to note about these constraints is the fact that they are controllable by the owner/manager.

Internal and external factors affecting the development of SMEs

In SMEs, the position of individuals matter a lot as they are supposed to be generalist (Drew, 2003) in performing their functions. Most SME personnel are either in key managerial positions or are classified in a unit or function that performs a certain task or numerous tasks. Most SMEs are run by a manager who is usually the owner of the organisation (Demirbas, Hussain, & Matlay, 2011).

Internal factors

Manager characteristics

The competence of SME manager is the ultimate determinant of survival or failure. The root cause of either SME failure or poor performance is almost invariably a lack of management attention to strategic issues such as human resources management. Moreover, the early founder of the SME's personal competence in selecting the right business and running it will be crucial, as the firm is likely to be indistinguishable from the owner. Therefore, as the business develops, growth can be rapidly partially due to unwillingness or inability to draw others to help with the management of the SME (Pasanen 2006). In addition, the management of people (human resources management) is particularly important as it includes not only the personnel issues of dealing with employees, but also of managing people outside of the organisation who are also critical to its success, such as key customers, suppliers, banks and investors (Stokes and Wilson 2006).

Level of education

It is also necessary that the owner/manager and other key personnel in SMEs attain an acceptable level of education in order to drive SMEs activities. Research studies have found that one of the criteria for successful SMEs is the level of education (Thong, 1999; Sarosa & Zowghi, 2003). A basic level of education such as General of (GCE) Certificate Education or its international equivalent is critical as it allows easy communication and appreciation of business in global business. Most terms SME owner/managers, especially in developing countries, are unable to communicate in international languages that give access to global markets. A general acceptable level of education would be a high school ordinary level certification, although higher business qualifications are better.

Another individual factor in relation to education is the level of ICT knowledge. It is expected that an acceptable level of ICT knowledge of the owner or key manager, and other key decision making personnel can assist the SME to adopt appropriate activities in their business (Teo & Ranganathan, 2004; Meso, Musa & Mbarika, 2005; Looi, 2005). Wilson et al., (2008) found that skilled ICT personnel were crucial for the progression in the UK SMEs. They further argued that this factor is more important than financial ability.

Socio-cultural issues

Culture is another important factor that explains cross-country differences in SME development as entrepreneurs' decision-making is influenced by their cultural backgrounds. The term "culture", is defined as "the collective programming of the mind that distinguishes the members of one group or category of people from another" (Hofstede, 1991). Some empirical literatures have demonstrated the relationship between entrepreneurial activities and cultural dimensions, and have found similar results. In

general, low power distance, individualism, low uncertainty avoidance, and long-term orientation are associated with entrepreneurial activities and innovation (Shane, 1993, 1995; Thomas and Mueller, 2000; and Jones and Davis, 2000). Collectivism can be a good support to subsequent implementation after invention (Nakata and Sivakumar, 1996). Masculine cultures emphasize the value of performance, competition and success, while feminine culture may be more successful in the service sector due to the strong focus on relationships (Luczak and Mohan-Neill, 2009).

Addressing cultural impacts on entrepreneurship, the interrelationships among culture, policy, and entrepreneurial development must first be considered. The objective is shaping culture is not to overtake it but to capitalize on the positive sides and to introduce the missing elements for entrepreneurship and innovation.

External factors

Access to finance

The first external factor is the financial constraints. Lack of capital or financial resources was a major barrier for SMEs and entrepreneurs who usually have to mobilize their own capital or their own resources to establish or expand their business (Harvie, 2005). In addition, SMEs in developing countries have difficulties in accessing bank loans as a consequence to the high risk for failing loans, low profitability and lack of collateral required by banks (Harvie, 2005).

For many SMEs in Nigeria, access to finance and capital appear to be difficult. This comes as a consequence of weak banking institutions, lack of capital market and inefficient legal framework regarding credit and collateral assessment. Financing of SMEs and access to finance plays a crucial role in the growth process and development of the enterprises (WB, 2011).

According to Fatoki and Garwe (2010), the lack of capital seems to be the primary reason for business failure and is considered to be the greatest problem facing small and micro business owners. This was supported by Shafeek (2009) who said that, from a business viewpoint without adequate financing, the business will be unable to maintain and acquire facilities, attract and retain capable staff, produce and market a product, or do any of the other things necessary to run a successful operation.

Stokes and Wilson (2006) also added on to say that financial difficulties of SMEs arise, either because of an inability to raise sufficient funds to properly capitalise the business, or а mismanagement of the funds that do exist or a combination of both. He explained that, access to external funds may be difficult to achieve for new or young, small and micro businesses with no track record, especially for owners without personal assets to offer as security. Stokes and Wilson (2006) go on to stress that many new owner managers, having received funds, misuse them: small businesses are notorious for their lack of proper financial controls and information.

Government policies

The importance of SMEs to the economy of a country indicates how important it is to have government policies that support SMEs, including regulations that enable them to operate efficiently and regulations that reduce their administrative costs (Harvie and Lee, 2005). Althoughthere have been initiatives by governments to promote and support SMEs in order to enhance their development and reduce poverty, there is still a lack of laws and genuine administrative procedures such as accessibility to assistance from the government agencies.

According to World Bank research, complex tax systems, low level of trust in the judicial system, and the need to pay bribes to access public services, represent major barriers, especiallyin South East Europe (WB, 2000).

Corruption

One of the major determinants of SMEs is corruption. Long-term consequences of corruption in transition economies and developing countries can be very harmful. Nigeria still faces numerous challenges in infrastructure and economic development policy (Riinvest, 2002). The fight against corruption seems impossible especially in a country with the highest rate of poverty in Nigeria. In Nigeria, the level of corruption remains high and this requires more commitment by the government and citizens in continued reduction until the total elimination of this phenomenon. In addition to problems with infrastructure, administrations, as well as other services such as electricity and water every day make difficulties for businesses and citizens. As a consequence, corrupt practices in other countries have shown that this phenomenon negatively affects investment, whether foreign or domestic.

Marketing

To have a good chance of survival, a small business firm needs to answer the basic strategic questions: "what markets are we targeting, with what products?" A common weakness in the SME owner/ managers lies in their failure to understand key marketing issues (Stokes and Wilson, 2006). Stokes and Wilson (2006) believed that product or service concepts and standards often reflect only the perceptions of the owner, which may not be mirrored in the market place. They further stated that, minor fluctuations in markets can topple a newly established small/micro business) firms, particularly where it is reliant on a small number of customers.

Application of information technology

Apulu and Latham (2011) found that the competitiveness of SMEs will be increased through adopting Information and Communication Technology. Subrahmanya, Mathirajan, and Krishnaswamy (2010) summed up that those SMEs which have technological innovation have a higher growth compared to the SMEs which are not creative in the sales turnover, investment and job.

Environmental factors

The external environment of the SME organisation also impacts some challenges to ecommerce adoption. It describes the realm of business engagement of the firm (Scupola, 2009). This describes factors such as government role; business partner affiliation and preferences; nature and characteristic of value chain; logistics and telecommunications infrastructure; economic and political instability; human-rights issues; business culture macro-economic policies; natural disasters and floods.

Economic and political instability

Economic and political instability prevents SMEs from freely trading in the country due to several uncertainties. Related to this is the human rights situation that may hinder SMEs growth and development in Nigeria.

Methodology

A survey analysis was ran to ascertain the major determinant of each independent factor towards the growth of and performance of SMEs in Nigeria. A total of 230sets of questionnaires distributed and collected from some selected SMEs.

The questionnaire was in Likert scale of 1 to 4 with 1 as strongly disagree and 4 as strongly agree.

Data was analyzed and interpreted by using Statistical Package for Social Science (SPSS) computer software program. A logistic regression analysis was employed. Logistic regression applies maximum likelihood estimation after transforming the dependent into a logit variable (the natural log of the odds of the dependent occurring or not). In this way, logistic regression estimates the probability of a certain event occurring. Note that logistic regression calculates changes in the log odds of the dependent, not changes in the dependent variable as in the Ordinary Least Square regression does.

Ln (odds)= ln $(\hat{Y}/l - \hat{Y}) = \beta_0 + \beta_1 X_{1i} + \beta_2 X_{2i}$ + $\beta_3 X_{3i+} \beta_4 X_{4i+} \beta_5 X_{5i+} \beta_6 X_{6i+} \beta_7 X_{7i+} \beta_8 X_{8i+} \beta_9 X_{9i+} \beta_{10} X_{10i}$(1)

Result and interpretations

Table 1: Logistic regression analysis of predications of performance of SMEs

Variables in the equation

		В	S.E.	Wald	Df	Sig.	Exp(B)
Step 1 ^a	Internal	.111	.237	.218	1	.641	1.117
	External	032	.131	.060	1	.806	.968
	Constant	1.380	.534	6.677	1	.010	3.976

The table 1 above shows the summary of logistic regression of the internal and external factors that affect the performance of SMEs in Nigeria. The result revealed that both the internal factors and Where:

 \hat{Y} is the predicted probability of the event which is coded with1= Non-performance; 0= otherwise (performance)

I- \hat{Y} = is the predicted probability of the other decision

X= is the predictor variable representing other independent variables for internal and external variables.

 X_{1i} = Risk taking

 X_{2i} = communication/Business skills

 X_{3i} = Ability to take decisions

 X_{4i} = Management skills

 X_{5i} = finances

 X_{6i} = Government Policies

 X_{7i} = corruption

$$X_{8i}$$
 = Marketing

$$X_{9i} = ICT$$

 $\beta_2 X_{2i}$ X_{10i} = infrastructure

the external factors influence the performance of SMEs.

The coefficient of model, i.e the Exp (B),the Exp(B) represents the ratio-change in the odds of the event of interest for a one-unit change in the predictor. The Exp(B)for the internal factors shows a negative effect on the dependent variable which means that it is 1.117 times less likely to

influence the performance of SMEs. The result also revealed that the external factors are 0.968times more likely to influence the performance of SMEs. Hence, it showed that the external factors are more influential than the internal factors on the performance of SMEs.

Table 2: Explanatory PowerModel Summary

	-2	Log Cox &	Snell R Nagelkerke	R
Step	likelihood	Square	Square	
1	207.547^{a}	.001	.002	

Table 2 above compares the explanatory power of the models constructed by referring to Cox & Snell R Square of 0.001 and Nagelkerke R Square of 0.002, and finds that the values of these two indicators are not much different.

		В	S.E.	Wald	Df	Sig.	Exp(B)
Step 1 ^a	Internal			.007	3	1.000	
	Internal(1)	-20.462	1.873E4	.000	1	.999	.000
	Internal(2)	388	2.083E4	.000	1	1.000	.679
	Internal(3)	-20.416	1.873E4	.000	1	.999	.000
	External			18.052	5	.003	
	External(1)	955	1.172	.664	1	.415	.385
	External(2)	308	1.187	.067	1	.795	.735
	External(3)	.382	1.284	.089	1	.766	1.465
	External(4)	-1.974	1.080	3.341	1	.068	.139
	External(5)	18.632	7.275E3	.000	1	.998	1.235E8
	Constant	22.748	1.873E4	.000	1	.999	7.573E9

Table 3: Detailed Logistic regression analysis of predications Performance on SMEs

The table 3 above shows the detailed Logistic regression analysis of predications Performance on SMEs. The value of Exp(B) for risk taking showed a value of 0.000 which implies that a one unit increase in risk takingshowed that finances do not have any significant effects on the performance of SMEs.

Variables in the Equation

The value of Exp(B) for communication/business skills showed a value of 0.735 which implies that a one unit increase in communication/business skills showed that communication/business skills showed that communication/business skills 100(0.679-1) i.e 32.1% less likely than manager skills, to effect n the performance of SMEs and shows no significant effect, because of the P-value >0.05.

The value of Exp(B) for ability to make decisions showed a value of 0.00 which implies that it has no effect on SMEs performance compared to management skills. The result shows no

Table 4: Explanatory Power Model Summary

	-2	Log Cox & Si	nell R Nagelkerke	R
Step	likelihood	Square	Square	
1	164.359 ^a	.186	.297	

Table 4 above compares the explanatory power of the models constructed by referring to Cox &

significance on the performance of SMEs, since the P-values are >0.05

Consequently, the values of Exp(B) for finances, government policies, and marketing of the products of SMEs showed a negative impact on SMEs performance with 61.5%, 26.5% and 86.1% respectively. This implies that a one unit increase in finances, government policies, and marketingshowed a less likely effect on the performance of SMEs, and they have no significant effect, since the P-values are >0.05.

The values of Exp(B) for corruption and the implementation of information and communication technology show a positive relationship to the non-performance of SMEs. This implies that corruption in Nigeria and ICT are 1.465 and 123487114.17 times more than infrastructure respectively, to affect the performance of SMEs in Nigeria.

Snell R Square of 0.186and Nagelkerke R Square of 0.297, and finds that the values of these two

indicators are much different and it showed that there is a 29.7% relationship between dependent and independent variables, it shows a weak effect.

Conclusion

In conclusion, the study revealed that SMEs face a lot of challenges which can be classified into internal and external factors. The study empirical analyzed these factors using the logistic regression method. The result showed that the major factor that determined the nonperformance of the SMEs in Nigeria, are majorly the external factors. It also revealed that in the external factors, the major hindrances to SMEs performance are corruption and infrastructure (ICT). While the other external factor while are finance, government policies and marketing of the SMEs are less likely to affect the performance of SMEs. However, these factors do not significantly affect the performance of SMEs. Based on the results, role and importance of SMEs cannot be over-emphasized. Therefore to achieve the desired objective of achieving growth and development through SMEs, there must be a severe fight against corruption in Nigeria. The fight against corruption must be total, and must start from the grass-root with citizens first, then to the leaders. This is because, leadership or leaders start from the grass-root. The tackling of corruption leads to the tackling of other problems that have potentials of hindering the performance of SMEs.

References

- Apulu, I., & Latham, A. (2011). Drivers for information and communication technology adoption: A case study of Nigerian small and medium sized enterprises. *International Journal of Business and Management*, 6(5), 51-60.
- Baloyi, J.K. (2010). An Analysis of Constraints Facing Smallholder Farmers in the Agribusiness Value Chain: A Case of Farmers in Limpopo Province. Masters Thesis, Unpublished. University of Pretoria, Pretoria.

- Burns, T., & Stalker ,G.M.(1961). *The management of innovation*. London: Tavistock.
- Demirbas, D., Hussain, J.G., Matlay, H. (2011). Owner-managers' perceptions of barriers to innovation: empirical evidence from Turkish SMEs. Journal of Small Business and Enterprise Development, 18(4), pp.764-780.
- Drew, S. (2003). Strategic Uses of E-commerce by SMEs in the East of England. *European Management Journal*, 21(1), pp. 79-88.
- Fatoki, O.O, & Garwe, D. (2010). Obstacles to the growth of new SMEs in South Africa: A principal component analysis approach. *African Journal of Business Management*, 4: 729-738.
- Fiedler, F. (1964). A Contingency Model of Leadership Effectiveness in L.Berkowitz (ed.). Advances in Experimental Social Psychology, 149–90.
- Harvie, C. and Lee, B. (2008). "Small and medium enterprises in East Asia: Sectoral and regional dimensions, *Studies of Small* and Medium Enterprises in East Asia, Volume IV. Cheltenham, United Kingdom, Edward Edgar Publishing.
- Hofstede, G. (1984). *Cultural Consequences: International Differences in Work Related Values.* Beverly Hills, CA: Sage Publications.
- Jones, G.K. and H.J. Davis, 2000. "National culture and innovation: Implications for locating global R&D operations", *Management International Review*, vol. 40, No. 1, pp. 11-39.
- Looi, H.C. (2005). E-Commerce adoption in Brunei Darussalam: Quantitative analysis of factors influencing its adoption. *Communications of the Association for Information Systems*, 15(3), pp. 61-81.
- Luczak, C. and S. Mohan-Neill, (2009). A theoretical framework for service SMEs based on culture, market orientation and network benefits", *Academy of Marketing Studies*, vol. 14, No. 2, pp.15-19.

- Meso, P., Musa, P., & Mbarika, V. (2005). Towards a model of consumer use of mobile information and communication technology in LDCs: the case of sub-Saharan Africa. *Information Systems Journal 15*, pp. 119-146.
- Nakata, C. & Sivakumar, K. 1(996). "National culture and new product development: an integrative review", *The Journal of Marketing*, vol. 60, No. 1, pp. 61-72.

NigeriaBusinessInfo.com

- Oshagbemi, T.A. (1983). Small business management in Nigeria. Lagos: Long Man Publishers.
- Riinvest, (2001). *Financimi i zhvillimit te NVMve*. Prishtinë: Instituti Riinvest.
- Pasanen, M. (2006). SME Growth Strategies: A Comparison of Young and Long-lived Firms. PhD Thesis, Unpublished. University of Kuopio, Kuopio.
- Sarosa, S., & Zowghi, D. (2003). Strategy for Adopting Information Technology for SMEs: Experience in Adopting Email within an Indonesian Furniture Company. *Electronic Journal of Information Systems Evaluation*, 6(2), pp. 165-176.
- Shane, S. (1995). "Uncertainty avoidance and the preference for innovation championing roles", *Journal of International Business Studies*, vol. 26, pp. 47-68.
- Shane, S. (1993). "Cultural influences on national rates of innovation", *Journal of Business Venturing*, vol. 8, No. 1, pp. 59-73.
- Subrahmanya, M.H.B., Mathirajan, M., & Krishnaswamy, K. N. (2011). Importance

of technological innovation for SME growth: Evidence from India. World Institute for Development Economics Research, 3.

- Scupola, A. (2009). SMEs e-commerce adoption: perspectives from Denmark and Australia. *Journal of Enterprise Information Management*, 22(1/2), pp. 152-166.
- Shafeek, S. (2009). Enhancing the Strategy for Developing Small Growth Potential Firms in the Eastern Cape. From <u>http://www.accademicjournals.org/AJBM</u> (Retrieved 22 September 2010).
- Stokes, D., & Wilson, N. (2006). Small Business Management and Entrepreneurship. South-Western Cengage Learning: DP Publications Ltd.
- Thong, J.Y.L. (1999). An Integrated Model of Information Systems Adoption in Small Businesses. Journal of Management Information Systems, 15(4), pp. 187-214.
- Teo, T.S.H., & Ranganathan, C. (2004). Adopters and non-adopters of business-to-business electronic commerce in Singapore. *Information & Management, 42,* pp. 89-102.
- Thomas, A.S. & Mueller, S.L. (2000). "A case for comparative entrepreneurship: Assessing the relevance of culture", *Journal of International Business Studies*, vol. 31, No. 2, pages 287-301.
- Woodward, J. (1965). *Industrial organization theory and practice*. London, U.K.: Oxford University Press.
- World Bank (2000). Anticorruption in Transition: A Contribution to the Policy Debate. Washington, D.C.