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Factors Affecting the Performance of Small and Medium-scale Enterprises in the East Mamprusi District of the Northern Region of Ghana

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Abstract: This study investigated the factors affecting the performance of Small and Medium-scale Enterprises (SMEs) in the East Mamprusi District (EMD) of the Northern Region of Ghana. It also identified the impacts of these factors on SMEs development and expansion, and established the strategies that can be adopted to improve performance. The target population was 200 respondents which comprised various SMEs in the study area. The data for the research was collected by use of structured questionnaire which were randomly administered on the 200 SMEs to solicit their responses. Regression and correlation analyses were employed to establish the relationships between the various factors and performance (profit). The study revealed among other things that sole proprietorship dominates the ownership pattern of the SME sector in the district. It was also clear in the study that Age of the business, Sufficient funds, Proper management and Type of business had significant influence on the performance of the selected SMEs. Further analysis also indicated a strong correlation between profit margin and the predicted variables. The research recommended some policy interventions and strategies, including intensifying adult literacy programmes, and establishing small loaning system.

Keywords: Factors, Ghana, Performance, Small and Medium Enterprises

I. Introduction

Globally, the contribution of SMEs to the growth of national economies is significant. In the developed economies such as Germany and the United Kingdom small businesses are recognized as the main engines for growth and development. Indeed, studies conducted in recent years in developed markets, including the Freedman studies done in the United Kingdom, confirm that small businesses account for the highest number of registered companies and make significant contributions to economic growth and prosperity.

Since the 1960s to date, SMEs have been given due recognition especially in the developed nations for playing very important roles towards fostering accelerated economic growth, development and stability within several economies [1]. According to [1], they make-up the largest proportion of businesses all over the world and play tremendous roles in employment generation, provision of goods and services, creating a better standard of living, as well as immensely contributing to the Gross Domestic Products (GDPs) of many countries.

In Ghana, readily available data on SMEs is scarce but statistics from the Registrar General's Department suggests that 92 per cent of companies registered are micro, small and medium enterprises. SMEs in Ghana have also been noted to provide about 85 per cent of manufacturing employment, contribute about 70 per cent to Ghana's GDP, and therefore have catalytic impacts on economic growth, income and employment. SMEs therefore have a crucial role to play in stimulating growth, generating employment and contributing to poverty alleviation, given their economic weight in Ghana and other African countries [2].

Over the last few decades, the contributions of the SMEs sector to the development of the largest economies in the world have beamed the searchlight on the uniqueness of the SMEs; and this have succeeded in overruling previously held views that they were only "miniature versions" of larger companies ([1]; [3]; [4]). However, it appears that considering the enormous potentials of the SMEs sector, and despite the acknowledgement of its immense contribution to sustainable economic development, its performance still falls below expectation in many developing countries including Ghana [5]. This is because the sector in these developing countries has been bedeviled by several factors militating against its performance, and leading to an increase in the rate of SMEs failure. This research work therefore, seeks to identify and analyse the factors that affect the performance of SMEs in the East Mamprusi District. It will also consider the constraints to the development of the sector, and to highlight the role governments, internal and external support institutions have to play in promoting the sector in the district. The study should be helpful to small business consultants, policy planners and government agencies that need to gain a better understanding into the main challenges facing SMEs in the district.

II. Problem Statement

There is growing recognition of the important role SMEs play in economic development. They are often described as efficient and prolific job creators, the seeds of big businesses and the fuel of National, Regional and District economic engines [6]. SMEs are important players to national development, whether one considers the situation of a developed economy or a developing economy. Aside being important sources of employment and income in many developing countries, SMEs with their flexible nature have a better adaptability to changing market conditions, making them better suited to withstand cyclical downturns. The dispersion of SMEs across the nation also promotes better distribution of income, and generates additional value in raw materials and products, even as they bring about efficiencies in domestic markets. SME development can encourage the process of both inter and intra-regional decentralization; and, they may well become a countervailing force against the economic power of larger enterprises. Interest in the role of SMEs in the development process continues to be in the forefront of policy debates in most countries [7]. Governments at all levels have undertaken initiatives to promote the growth of SMEs. In Ghana, SMEs are now exposed to greater opportunities than ever for expansion and diversification across the sectors. Despite their commendable contribution to the national economy, SMEs in East Mamprusi District are still faced with some challenges which are handicap to their development and competitiveness both locally and globally. As a result, there is a need to research into the factors affecting the growth and performance of SMEs in the East Mamprusi District of the Northern Region of Ghana. The interest of the researchers is to analyse the most pressing factors and suggest the ways to improve the businesses of the people.

III. Objectives of the Study

The main objective of this study is to analyse factors affecting the performance of SMEs in the East Mamprusi District. The Specific Objectives of the Study are to:

- (a) Identify the factors affecting the growth of SMEs in the study area.
- (b) Give an overview of the development potential of SMEs in the study area
- (c) Inquire whether there is a significant difference between performance (profit) and the factors identified.

IV. Literature Review

A. Definition of SMEs

SMEs have been identified differently by various individuals and organizations, such that an enterprise that is considered small and medium in one country is viewed differently in another country. Each country tends to derive its own definition based on the role SMEs are expected to play in the economy and the program of assistance designed to achieve that goal ([8]; [9]). Various definitions are given for small-scale enterprises in Ghana but the most commonly used criterion is the number of employees of the enterprise [10]. In defining SMEs in Ghana, [11] classified small-scale enterprises into three categories. These are: Micro - employing less than 6 people; Very small - employing 6-9 people; and Small - between 10 and 29 employees. In its Industrial Statistics, the Ghana Statistical Service (GSS) considers firms with fewer than 10 employees as small-scale enterprises and their counterparts with more than 10 employees as medium and large-sized enterprises.

B. Problems Facing SMEs

Despite the potential role of SMEs to accelerated growth and job creation in developing countries, a number of bottlenecks affect their ability to realize their full potential. According to Stephanou and Rodriguez (2008), SMEs in both developed and developing countries are bedeviled with a number of problems which are caused by complex and multi-dimensional factors. SMEs development is hampered by a number of factors, including finance, lack of managerial skills, equipment and technology, regulatory issues, and access to international markets [12]; [13]. Some of the constraints faced by SMEs in Ghana include the following: lack of access to finance, low demand for output, technology, raw materials, labour and management, infrastructure, marketing and business environment problems ([10]; [13]; [14]).

C. Review of related works

Reference [15] analyzed the factors influencing the growth rate of small and medium-sized enterprises (SMEs) in Algeria and explores the extent to which their success or failure depends on the wider business climate. They also examined different internal factors that may be responsible for the unstable and limited growth of SMEs. Their results revealed that the growth of SME is hampered by several interrelated factors, which include environmental, internal and external factors that are beyond the SMEs' control.

To investigate the factors affecting the performance of SMEs in the manufacturing sector in Malaysia, [16] used the Contingency Theory developed by [17] to support their research, and the results showed that there was a significant negative relationship between ineffective entrepreneurship and performance of SMEs. The results also

proved a significant positive relationship between the use of marketing information as well as the application of information technology and performance of SMEs.

Reference [18] examined the impact of socio-economic characteristics on the performance of small-scale enterprises. The study also identified the salient impacts of socio-economic traits on the development and expansion of SMEs in the country. Results from their study showed that socio-economic characteristics of small scale entrepreneurs tend to influence the performance and productivity of SMEs. Further analysis showed that gender, age and educational qualification had significant influence on the performance of the selected SMEs. The paper suggests integrated approach to the development of individual entrepreneurial capacity and promotion of sustainable small-scale enterprises.

In analyzing the determinants of small scale enterprises participation in credit market in the Wa Municipality of Ghana, [19] found a positive correlation between unobserved factors affecting participation and choice of credit sources. The results also revealed that entrepreneur's decision to participate in the credit market is significantly influenced by age, household size, education, income and wealth. The study recommended that appropriate educational packages both formal and informal such as evening schools and adult literacy programmes should be organised for owners of small scale enterprises.

V. Methodology

A. Study Sample

The data for the research was collected by use of structured questionnaire which were randomly administered on 200 (Male = 70, Female = 130) SMEs located in East Mamprusi District to solicit their responses. The 200 questionnaires were administered personally by the researchers to randomly selected SMEs in the District. Personally administering the questionnaires provided the opportunity to ask follow-up questions on some salient points raised in the questionnaire. The data collected from the survey were analyzed statistically using Statistical Package for the Social Sciences (SPSS) 20.0. Multiple Linear Regression model was employed to determine impact of each of the factors on the performance of SMEs in the study area. This model also attempted to explain the relationship between two or more variables. Descriptive analysis in the form of bar charts, and tables were also employed to represent the data for interpretation.

B. Study Variables

The type of variables that were derived from the research problems and the objectives of the study include: Gender, Age of business (experience), Educational background, Sufficient funds, Type of business and Proper Management.

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \varepsilon$$

Where:

Y = Performance of small scale enterprises measured in term of profit

X₁ = Age of business (years), X₂ = Educational background (dummy variables), X₃ = Sufficient funds, X₄ = Proper management (dummy variable),

X₅ = Gender, and X₆ = Type of business

ε = Stochastic error term

β₀ = base constant

β₁, β₂, β₃, β₄, β₅, β₆ = regression coefficients

Assumptions of the Model:

1. The error term is random.
2. The independent variables do not depend on each other.
3. The error terms are independent of each other.
4. The mean of the error component is zero.
5. The variance of the error component is the same for each value of X
6. Each error component (random variable) follows an approximate Normal Distribution.

VI. Results and Discussion

A. General Characteristics of SMEs Obtained From the Survey

❖ Age of Respondents

Analyses of the age of respondents revealed that 90.0% of the respondents were within the working age group of 18-45 years and therefore with adequate training and financial support the sector could improve its contribution towards the economic development of the country. Table 1 shows the age distribution of the respondents.

Table 1: Age of Respondents

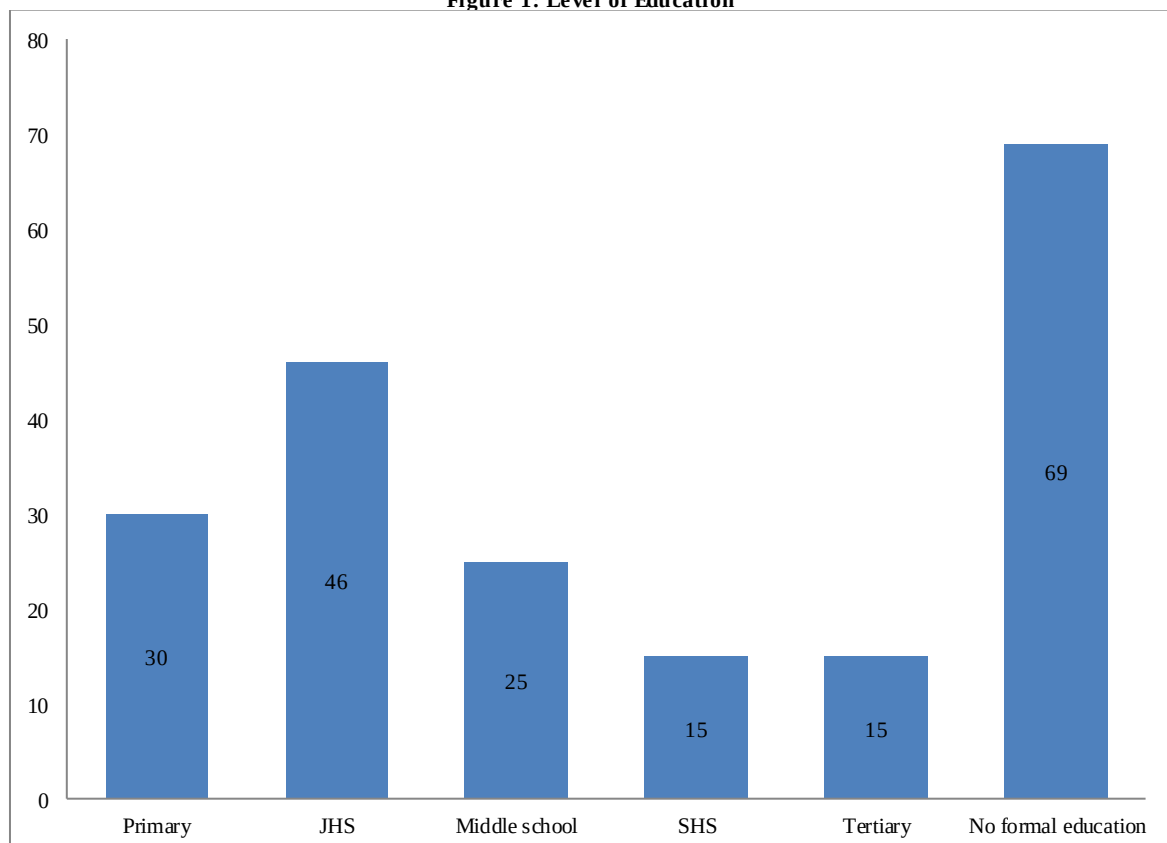
Age of Respondents (Years)	Frequency	Percent (%)
18-25	35	17.5
26-30	62	31.0
31-35	45	22.5
36-40	38	19.0
41+	20	10.0
Total	200	100

❖ **Level of Education**

Education provides a basis for intellectual development, which the entrepreneur requires to be in successful business. The study revealed that 69 respondents (34.5%) had no formal education, 30 respondents (15.0%) had primary education, 46 respondents (23.5%) had JHS education, 25 respondents (12.5%) had middle school education and 15 respondents (7.5%) had secondary education while the remaining 15 respondents (7.5%) had attended either vocational, colleges of education, polytechnics or Universities. The distribution revealed that while majority had acquired one level of education with a greater percentage (34.0%) ending at the JHS level, some of the respondents had no formal education. The low level of education of entrepreneurs limits their capacity to deal with their customers confidently, prepare business plans, appreciate the dynamic nature of their businesses, keep accurate records and participate actively in their training sessions.

It was found out that level of education impacted heavily on the access to support services especially credit facilities by small enterprises. They did not have the managerial competence and trustworthiness required by financial institutions to merit the provision of bigger credit. Entrepreneurs could not keep proper records of daily transactions and did not have any business plan to guide their operations, as usually required by banks in the demand for credit. Figure 1 shows the level of education of the respondents.

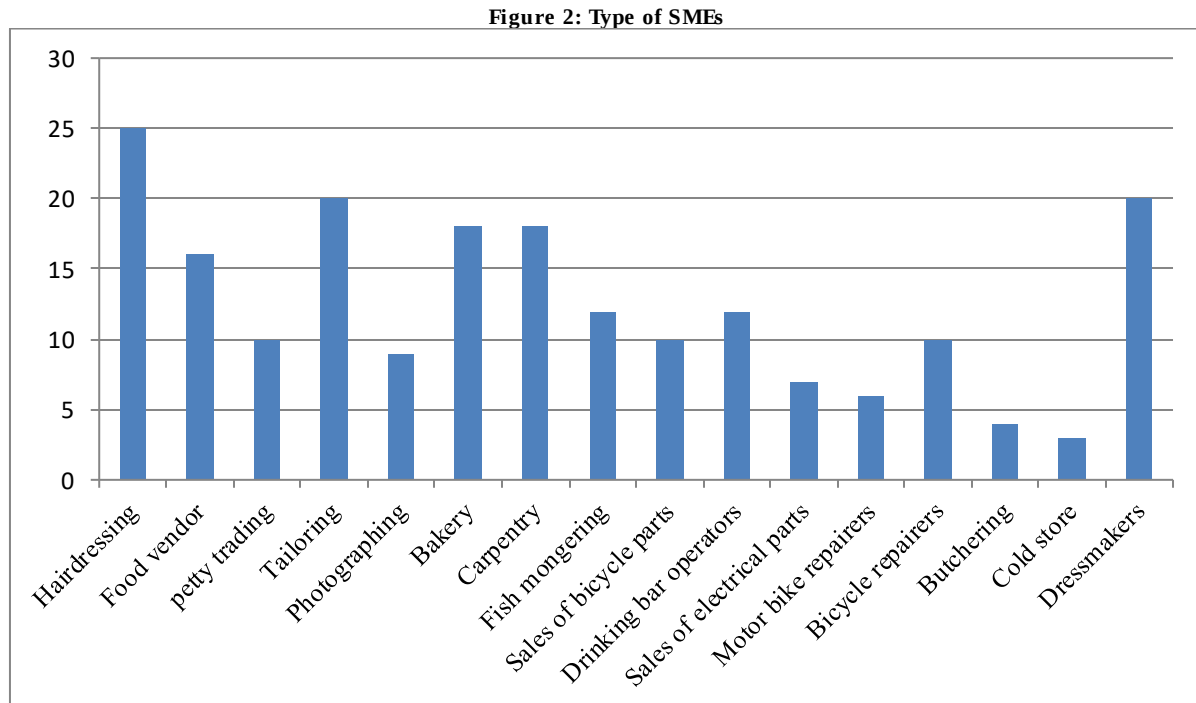
Figure 1: Level of Education



❖ **Type of Business**

The 200 enterprises considered for the study were into one of the following, Hair dressing, Food vendors, Petty trading, Dressmaking, Photographing, Bakery, Carpentry, Tailoring, Fish mongering, Sale of Bicycle parts, Electrical appliances, Motor Bike repairs, ten Bicycle repairs, Butchering, and cold store management. The people of the district are not restricted to the engagement in any kind of SME, and due to this there exist several types of

SMEs in the study area. Figure 2 shows a representation of the number of SMEs that responded to the questionnaire.



❖ **Type of Business Ownership**

The survey results showed that 81.0% of the enterprises are individually owned otherwise known as sole proprietorship or one-man business with the rest owned by two or more. This can be attributed to the lack of trust among the entrepreneurs. More than 90 percent of the sole proprietors said they have never considered teaming up with other entrepreneurs to form partnership for various reasons including mistrust, and inability to read and write due to illiteracy among the active population. The general high level of sole proprietorship is a setback to resource accessibility, especially credit. Under such circumstances, the enterprise relies solely on the limited skill of the entrepreneur, who cannot single-handedly employ all the modern management techniques such as accounting, costing, financial and planning among others. Another limitation that largely depends on the prevailing ownership structure is lack of continuity of operation that may result in the event of the death of the owner, if there is no one with sufficient business capacity in the family to take over its operations and management. This group is mainly made up of artisans who work in open spaces, temporary wooden structures, or at home, and employ few or in some cases no salaried workers. They rely mostly on family members or apprentices.

❖ **Management**

About 63% of SME owners or managers in East Mamprusi District lack managerial training and experience. Business owners in the study area develop their own approach to management, through a process of trial and error. As a result, their management style is likely to be more intuitive than analytical, more concerned with day-to-day operations than long-term issues, and more opportunistic than strategic in its concept.

❖ **Funds**

The data gathered during the study revealed that business owners had challenges with finance. The problems of finance given by respondents include the following; 77% of respondents said they were not able to keep records of income and expenditure, 67% of respondents said inadequate funds and failure of debtors to settle their debts on time, 54% respondents indicated irregular flow of revenue and high inflation rate, and finally 70% of respondents said that high banks interest rates makes borrowing in financial institutions very scaring. The pragmatic and coping strategies which are being adopted by some business owners to solve their liquidity problems include negotiations for credit purchases and arrangements for loans from friends and relatives.

❖ **Uses of Profit made by SMEs**

The source of capital for these SMEs suggests the channel at which the returns of these SMEs will be used. Most of the operators use the profit made in running the sustainability of the livelihood of the family members since the

source of capital was from relatives. The survey results depicts that 60.0% use their profit in solving family problems, 27.5% invest their profit back into the business, 10% save in the bank, and 5% use it for other purposes.

B. Regression Analysis Results

The main objective of this analysis was to identify some of the factors affecting businesses in the study area, and also to find the relationship that exist between performance (profit) and the various factors (Gender, Age of business, Educational background, Sufficient funds, Type of business and Proper Management) of SMEs for the study. Six variables were used to explain and predict the effects of the factors on profit margin. The multiple coefficients of correlation determined the strength of the relationship between the dependent and independent variables. In this study, Performance (Y), and the variables (Xi-n) shows a regression coefficient of 0.887 which was found to be highly significant. Analysis of variance for the regression analysis yields an F-value of 250.858 which was significant at 0.01. This confirms the regression equation as a model of determinants of the impact of the factors on the performance of the selected enterprises. Table 2 shows the model summary.

Table 2: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.942 ^a	.887	.883	.264	.887	250.858	6	192	.000

a. Predictors: (Constant), funds, gender, Age of business, Mgt, Education level, Business type

In addition to this study was that, the six salient variables accounted for 94.2% of the total variation in explaining the effect of the factors on the performance of the selected enterprises. However, four of these explanatory variables was found to have significantly contributed to the dependent variable (performance) and the significant variables are return on Age of the business (X₁), Sufficient funds (X₃), Proper management (X₄) and Type of business (X₆). Table 3 shows the multiple regression results.

Table 3: Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
1 (Constant)	.318	.198		1.608	.109
Age of business	.138	.035	.268	3.893	.000
Education level	.033	.042	.083	.775	.439
Gender	.099	.084	.064	1.178	.240
Proper management	.347	.091	.222	3.823	.000
Business type	.112	.019	.684	5.784	.000
Sufficient Funds	.506	.109	.275	4.652	.000

a. Dependent Variable: profit

Correlation analysis also reveal that type of business (Correlation coefficient of 0.924) and Proper management (Correlation coefficient of 0.708) were seen to have a strong positive correlation with performance. It was concluded in this analysis that Age of the business, Sufficient funds, Proper management and Type of business had significant influence on the performance of the selected small-scale enterprises in the study area.

VII. Conclusion

The objective of this study was to investigate into the factors affecting the performance of Small and Medium-Scale Enterprises (SMES) in the East Mamprusi District (EMD) of the Northern Region of Ghana. It was also to identify the impacts of these factors on their development and expansion, and established the strategies that can be adopted to improve performance.

From the study, it was established that SMEs in the research area are mainly involved in sole-proprietorship businesses which are mainly microenterprises and as such lack the necessary collateral to qualify for loans. Some were family based, mainly made up of artisans who work in open spaces, temporary wooden structures, or at home, and employ few or in some cases no salaried workers. They rely mostly on family members or apprentices. These explains why operators use their profit in solving family problems instead of saving in the bank or investing it back into the business for expansion.

The study findings revealed that majority of SMEs are female-owned businesses, which more often than not are home-based compared to those owned by males; they are operated from home and are mostly not considered in official statistics. This clearly affects their chances of gaining access to financing schemes. It was also revealed

that greater percentage of SME owners or managers in East Mamprusi District possesses limited formal education and also lack managerial training and experience. They develop their own approach to management, through a process of trial and error. As a result, their management style is likely to be more intuitive than analytical. The lack of technical know-how and inability to acquire skills and modern technology also impede growth opportunities. The research also concluded that the type of business, proper management, sufficient funds and age of business (experience) contribute significantly to the profit margin of SMEs in the study area. This study confirms the findings of other researches such as [1], [5] and [20] that SMEs are faced with socio-economic factors that affect their performance and growth.

VIII. Recommendations

The following actions were suggested to be taken by Government in conjunction with the district assemble and other stakeholders to improve the performances of SMEs in East Mamprusi District of the Northern Region of Ghana.

- This study suggests that, to improve access to credit to SMEs, entrepreneurs should be encouraged to form cooperatives since financial institutions believe peer pressure often reduces the risk of default.
- The government through tax incentives can encourage certain training institutions and Non Governmental Organizations (NGOs) to provide training to entrepreneurs on simple record keeping and managerial know-how.
- Since majority of small enterprises lack finance, government should establish friendly small loaning system. This would include low interests rates to ensure the continuity of these businesses. SMEs have the potentiality of transforming the economy of a crippling nation. As such, every effort should be made to boost their growth.
- The creation of a system of education and training on different aspects of SME activities for entrepreneurs is crucial to the development of the sector.

References

- [1] Ugwushi, B. (2009) SMEs Key Failure-Factors: A Comparison between the United Kingdom and Nigeria. *Kent Business School, University of Kent, Canterbury Kent, United Kingdom*.
- [2] Joshua, A. and Quartey, P. (2010) Issues in SME Development in Ghana and South Africa. *International Research Journal of Finance and Economics*, 39(2), 219-228.
- [3] Al-Shaikh FN (1998), Factors for small business failure in developing countries. *Advances in Competitiveness Research*, 6(10), 75-87.
- [4] Gaskill, L. R, Van, H. E., Manning, R. A. (1993). A factor analytic study of the perceived causes of small business failure. *Journal of Small Business Management*, 31(4), 18-30.
- [5] Arinaitwe, S. K. (2006), Factors Constraining the Growth and Survival of Small Scale Businesses. A Developing Countries Analysis. *Journal of American Academy of Business, Cambridge*, 8(2), 167-179.
- [6] Millinux, A. W. (1997). The Funding of Non-Financial Corporations (NFCs) in the EU (1971-1993): Evidence of Convergence. Mimeo, Department of Economics, University of Birmingham.
- [7] Feeney, L. S. and A. L. Riding. (1997). Business Owners' Fundamental Tradeoff: Finance and the Vicious Circle of Growth and Control, *Canadian Business Owner*, November.
- [8] Aworemi, J., Remi A. J. and Abdul-Azeez, I. A. (2010), Impact of Socio-Economic Factors on the Performance of Small-Scale Enterprises in Osun State, Nigeria. *International Business Research*, 3(2), 92-99.
- [9] Anamekwe, C. (2001), Micro and Small-Scale Industries in Nigeria: Problems and Prospects. Being paper presented at Workshop on Grassroots Advocacy and Economic Development. September 11-13.
- [10] Kayanula, D. and Quartey P., (2000), The Policy Environment For Promoting Small And Medium-Sized Enterprises in Ghana and Malawi. *Finance and Development Research Programme, Working Paper Series Paper No. 15*, University of Manchester.
- [11] Osei, B., Baah-Nuakoh, A., Tutu, K.A. and Sowa, N.K (1993). Impact of Structural Adjustment on Small-Scale Enterprises in Ghana, in Helmsing A.H.J and Kolstee T. H(eds), *Structural Adjustment, Financial Policy and Assistance Programmes in Africa, IT Publications*.
- [12] Seibel, H. D. (1996). Coping with Scarcity: Microenterprise Strategies in Nigeria. *Saarbrücken, Verlag für Entwicklungs Politik*, 1-10.
- [13] Aryeetey, E., A. Baah-Nuakoh, T. Duggleby, H. Hettige, and W. F. Steel, 1994. "Supply and Demand for Finance of Small Scale Enterprises in Ghana", Discussion Paper No. 251, World Bank, Washington, DC.
- [14] Baah-Nuakoh, A. (2003), Studies on the Ghanaian Economy: the Industrial Sector. Woeli Publication. Accra.
- [15] Bouazza, A. B., Diabate, A. And Othman A. (2015) Establishing the Factors Affecting the Growth of Small and Medium-sized Enterprises in Algeria. *American International Journal of Social Science*, 4(2), 80 – 88.
- [16] Krishna, M., Annie, T., Caroline, C., Chang S. W., Jonathan, T., Yong, P. and Tan, K. L., (2012) A Study on Factors Affecting the Performance of SMEs in Malaysia. *International Journal of Academic Research in Business and Social Sciences*, 2(4), 93 – 99.
- [17] Stephanou, C. and Rodriguez, C. (2008). Bank Financing to Small and Medium-Sized Enterprises (SMEs) in Colombia. Policy Research Working Paper No. 4481, Washington D. C.: World Bank.
- [18] Remi, A. J., Abdul-Azeez, I. A., and Opoola, N. A. (2010) Impact of Socio-Economic Factors on the Performance of Small-Scale Enterprises in Osun State, Nigeria. *International Business Research*, 3(2), 92 – 97.
- [19] Samuel, S., Paul, K. N., and Naasegnibe, K. (2014) Participation in the credit market by small scale enterprises in Ghana: Evidence from Wa Municipality. *African Journal of Business Management*, 8(9), 292-299.
- [20] Rondinelli, D.D. (1983). "Implementing Decentralization Programmes in Asia: A Comparative Analysis", *Public Administration and Development*, 3(3), 181-208.