Asian Journal of Economics, Business and Accounting
2(2): 1-18, 2017; Article no.AJEBA.31454

SCIENCEDOMAIN ***international***
www.sciencedomain.org

Holistic Analysis of the Financing Gap between Financial Institutions and Small and Medium Enterprises (SMEs) Business-projects

Asare Joseph[1*]

[1]Finance and Administration of Business-Projects, Department of Management and Administration, University of Economics and Law 'KROK', P.O.Box 65, 30-32 Laherna St., 03113, Kyiv, Ukraine.

Author's contribution

The sole author designed, analyzed and interpreted and prepared the manuscript.

Article Information

DOI: 10.9734/AJEBA/2017/31454
Editor(s):
(1) Anna Saniuk, Institute of Computer Science and Production Management, University of Zielona Gora, Poland.
Reviewers:
(1) Sule Olatunji Eniola, University of Port Harcourt, Nigeria.
(2) Sangeeta Sharma, Maharishi Dayanand University, Rohtak, India.
Complete Peer review History: http://www.sciencedomain.org/review-history/17892

Original Research Article

Received 6th January 2017
Accepted 7th February 2017
Published 20th February 2017

ABSTRACT

It is an indisputable fact that Small and Medium-sized Enterprises (SMEs) are the engine for the growth of every economy; particularly the Ghanaian economy which is SME dominated. Unfortunately, the SME sector in Ghana is constraint by many factors such as lack of external financing; technology and information; management; legal; policies and processes. This research empirically examines how the factors which have created SME financing gap can be arranged in a pyramid and matched with the 3M Pyramid of the methodological frame work. Also, the study aim is to logically develop SMEs project financing model to help bridge SMEs financing gap. This study used questionnaire and interview as the survey instrument. Questionnaires were administered to a selected sample, consisting of 31 randomly selected respondents. They include: 10 heads of credit and SME officers of banks; 12 heads of credit and SME officers of Savings and Loans and Microfinance institutions; 5 equity firms investment analysts; 1 cooperative society credit manager and 3 SME owners operating in Accra – Ghana. The T-values are significant at .01 levels for technology and information, management; finance and economic, legal; policies and processes. T-value of amount on the part of SMEs owners is significant at .05 levels. The result of T-tests shows these have significant effect on SMEs projects financing. The result further showed that knowledge

**Corresponding author: E-mail: asaredada@gmail.com;*

economy factors influence SMEs financing as measured through the 3M pyramid. It also revealed a positive significant correlation between the total scores of the knowledge economic factors and SMEs financing gap ($P < 0.01$) and a significant P-value =0.000 (less than 0.05) for predicting the relation between Knowledge economic factors and SMEs financing gap. The study proved that there is the presence of a strong positive relationship between SMEs projects funding and Knowledge economy factors.

Keywords: Enterprise; pyramid; funding; institutions; economic; clientele; gap.

1. INTRODUCTION

Small firms are the engines that hold the economic growth of Ghana. This is because the small size of the Ghanaian economy means that there is limited number of big companies in the country. Available data from the Registrar General Department of Ghana indicates that about 90% of companies registered are small and medium-sized enterprises. Small enterprises employ between 6 and 29 employees with fixed assets of up to hundred thousand dollars ($100,000) whilst medium enterprises employ between 30 and 99 employees with fixed assets of up to one million dollars ($1,000,000) [1].

In spite of the crucial role SMEs play in the socio-economic development of Ghana, lack of adequate financing is their major challenge to growth. Typically, most large enterprises start as small enterprises, their ability to invest and grow play a very crucial role in any economy aspiring to grow. Mensah (2004) indicated that many factors that militate against SMEs access to funds in Ghana include: the relatively new and lack of consistent track record of profitability that would indicate the ability to repay; lack of assets that can be used as collateral and their vulnerabilities to financial distress and failure [1]. The above mentioned factors have created a financing gap between financial institutions and SMEs projects funding in Ghana. This study examines how this funding gap can be addressed by means of the 3M Pyramid and security destabilizing factors pyramid [2].

The financial sector in Ghana comprises commercial banks; rural and community banks; savings and loans companies and non- bank financial institutions [3]. These institutions also lend to the SMEs. However, due to the high rate of default among most of the SMEs and other high risks associated with their operations, financial institutions tend to be very cautious of lending to most SMEs in Ghana. Very few financial institutions in Ghana have developed clear policies and project financing products that take into consideration the funding needs of SMEs. Few financial institutions have SME desks or department. A GTZ survey which aimed at providing insight into financial institutions financing of SMEs in Ghana identified the following: financial institutions view SMEs with caution and as such there is no separate SMEs lending policies and lending requirements are handled stringently. Also, financial institutions find it difficult to integrate SMEs financing into their existing organizational systems and structures. Lastly, financial institutions systems and procedures used to finance SMEs are just a mere modification of what they use for their existing corporate clientele [4].

2. THE PROBLEM STATEMENT IN GENERAL VIEW

In most economies, the contribution of small and medium manufacturing, service and business enterprises is significantly greater than that of large enterprises when it comes to productive employment; innovations and optimum utilization of dormant resources. In Ghana SMEs contribute vastly to the economic output and export of goods and services. They play an important role as the engine of growth of the Ghanaian economy, registering about 90% of businesses in Ghana with about 70% contribution to GDP, accounting for 85% of manufacturing employment and 75% of general employment [5]. Unfortunately, the SME sector of the Ghanaian economy faces several impeding factors which hinder the growth and funding of SMEs projects in Ghana. Out of these several impeding factors, lack of finance is the major impediment. Several reasons can be attributed to this lack of finance, which includes poor development of the financial sector coupled with low intermediation. Also, the absence of effective institutional and legal structures that facilitate proper management of SMEs lending risks; cost of borrowing; rigid interest rates and poor structuring of the SME sector.

These challenges SMEs face in seeking funding for their projects have been worsened by the current knowledge economy. Currently defined, a knowledge economy is characterized by the generation and adoption of new knowledge created by scientific research; technological development; investments in intangible assets; adoption of best practices; openness to socio-economic and cultural innovations [6]. This calls for a scientific research to be conducted to come up with a holistic methodological pyramid based on security system model factors to enable national economies bridge the gap between financial institutions and SMEs projects financing.

3. ACTUALITY OF THE STUDY

The financial sector in Ghana comprises of banks and non- banking financial institutions, which are grouped into Class 1 Banking, General Banking, ARB APEX Bank, NBFIs [7]. Almost all the above categories of institutions provide some form of financial services to SMEs. However, because of the high default rate among most of the SMEs and other risks associated with the sector, financial institutions are very careful of lending to SMEs in Ghana of late. In spite of these, few financial institutions have developed clear policies that take into consideration the financing needs of SMEs and have developed financial products and services to finance SMEs. Few financial institutions have SME desks or department. The realization of these financing gaps prompted the government of Ghana and its development partners to put in place many interventions to support the growth of SMEs in the country. These intervention schemes can be categorized into official schemes and Financing provided by financial institutions [8]. However, in all the above cases SMEs who were the main targets did not experience much impact of those interventions.

This study through the use of the 3M pyramid shows the various levels of the factors that have created huge financing gap between financial institutions and SMEs in Ghana. Also, the study uses the 3M pyramid to show the methodological framework that financial institutions managers need to work within to enable them mitigate most SME credit risks they face. Through the use of the 3M pyramid, this study has also shown how certain financing methodology, methods and methodic used by financial institutions have contributed to SME projects financing Gap. Furthermore, the study shows the connections between certain factors in the Knowledge economy and how they contribute in creating SMEs projects financing gap. More so, the study has developed SMEs financing pyramid and SMEs projects financing mechanism in a form of a model that will help in addressing this challenge. Lastly, the study offers useful information based on the 3M pyramid security destabilizing factors pyramid to support the existing scholarly knowledge and recommend a further research to be conducted on analysis of the financing gap between financial institutions and SMEs project financing in Ghana.

4. ANALYSIS OF THE LATEST RESEARCH, INCLUDING ATTEMPTS TO SOLVE THE PROBLEM, HIGHLIGHTING OF ITS UNSOLVED PART

It is a well established fact that small and medium enterprises are the engines of growth of national economies [9,10,11]. This has therefore generated a lot of interest from both policy makers; entrepreneurs; for profit and not for profit organizations and the academia. In order to better understand the SME concept, many professionals have come up with varied explanations of what SMEs means. However, definition of SMEs varies from one economy to another. A growing number of studies and reporting organizations consider SMEs as an organization that employs no more than 250 persons and has a working capital of less than 50 million dollars ($50,000,000) [12]. The Ghana Statistical Service (GSS) regards firms with less than 10 employees as small-scale enterprises and those with more than 10 employees as medium and large enterprises. However, the GSS in its own account made an ironic statement by indicating that it considers companies with up to 9 employees as SMEs.

Also, in Ghana the value of fixed assets that SMEs own has also been used to define them. However, the National Board for Small Scale Industries (NBSSI) in Ghana uses both the “fixed asset and number of employees the firm has to define SMEs. It defines small-scale enterprise as a firm with not more than 9 workers, which has plant and machinery (excluding land, buildings and vehicles) not exceeding 10 million Ghanaian cedis (2.85 million dollars). On the other hand, the Ghana Enterprise Development Commission (GEDC) also uses 10 million Ghanaian cedis limit in valuing plant and machinery. All these are clear indications that certain factors have contributed to the SMEs financing gap and provision of funds in its entirety cannot help grow the Ghanaian SME sector. Further, Steel & Webster [9] and Osei et al. (1993) have also provided some definition of SMEs. Scott and Rosa [13] provide qualitative definition of SME by arguing that an SME is one which has three characteristics: First, management is independent and usually managers are also the owners. Second, capital is supplied by individual or small group that holds ownership of the business. And Third, areas of operations are mainly local.

Also, Abor J and Quartey [14] in their study noted that the issue of finance is so crucial that the development and growth of the SMEs sector are always linked to it. Therefore in order to understand the performance of the SMEs, one needs to first understand how they fit into the financing schemes of the financial institutions in Ghana. The study however indicates that there is general level of dissatisfaction among customers of financial institutions. They argue that in order to address these problems, more flexible provisions of long term finance should be encouraged. They further argued that the remittance of the financing schemes to the SMEs should be broadened in order that problems associated with SMEs financing can be curtailed. Sadly, their study failed to comprehensively identify and develop a model based on the factors that have contributed to SMEs financing gap for a better understanding. Also, their study did not develop SMEs financing security system based on identified factors that would help curtail the challenges that has led to SMEs financing gap in Ghana.

A further study by HFC bank [15] concluded that SMEs in Ghana tend to be marginalized or have limited access to credit. Coupled with the fact that there is lack of informal support in the form of personal savings and their ability to adopt modern technology tends to be affected. It is instructive to note that lack of access to finance can easily cripple the operations of any business since essential resources like human resource; physical resource and technology cannot be accessed. With low level of investment in those areas; sales and profit will suffer as they cannot get adequate amount of production. Unfortunately, most studies have not put in much effort to arrange the various elements that have contributed to the financing gap in a pyramid form. This unsolved part of addressing SMEs financing challenges is what this study seeks to address.

Even though several empirical evidences have established the importance of adequate financing to SMEs growth and development in developing economies, these studies have rather made varied recommendations that would help in addressing the root causes of SMEs financing gap but diminutive attempts have been made to put these elements into a pyramid and economic security system. Whereas in some countries small business equity markets have been established to help raise equity capital, other countries have instituted state grants to assist small businesses. In Ghana however, the situation is a moral persuasion where appeals are often made by policymakers to lenders to grant credit to small and medium enterprises [16]. But these financial institutions are usually not willing to lend to most SMEs except few that are able to make convincing arguments about the future scalability and sustainability of their businesses.

Most SMEs in Ghana in one way or the other run or implement business-projects that require adequate funding. The International Project Management Association (IPMA) defines project as a unique; temporary; multidisciplinary and organized endeavor to realize agreed deliverables with predefined requirements and constraints. The IPMA further stated that a project is a time and cost constrained operation to realize a set of defined deliverables (the scope to fulfill the project's objectives) up to quality standards and requirements [17]. However, with the right financing of SMEs these cost and time constraints would be overcome. According to Khan and Jain, finance is the art and science of managing money. Also defined, finance is a simple task of providing the necessary funds (money) required by the business of entities like companies; firms; individuals and others on the terms that are most favorable to achieve their economic objectives. According to entrepreneurs, finance is concerned with cash. It is so, since every business transaction involves cash directly or indirectly. Further, most academicians define finance as the procurement (to get, obtain) of funds and effective (properly planned) utilization of funds. It also deals with profits that adequately compensate for the cost and risks borne by the business [18]. The above definitions of finance clearly show that financing of SMEs require critical analysis of all the various factors that influence the acquisition; utilization and the management of funds for SMEs projects.

5. THE PURPOSE OF THE RESEARCH AND THE RESEARCH QUESTION

The purpose of this research is to empirically examine how the factors which have created SME financing gap can be arranged in a pyramid and matched with the 3M Pyramid of the methodological frame work. Also, the purpose is to logically develop SMEs project financing mechanism in a model form to help bridge SMEs financing gap.

In other to achieve these goals the research will try to find answers to these questions:

- What are the key knowledge economy factors that have created the financing gap between financial institutions and SMEs projects financing in Ghana?
- How can those factors be arranged in a pyramid to match the 3M pyramid?
- To what extent has each of those factors contributed to creating the financing gap?
- What model would help to bridge the financing gap between financial institutions and SMEs projects financing?
- What financing scheme will be ideal in funding SMEs projects in Ghana?

6. THE RESEARCH METHODOLOGY

This study used a survey research methodology. Questionnaires were administered to a selected sample from a specific population of SMEs owners; financial institutions SMEs credit officers and managers. The term 'survey' is applied to a research methodology designed to collect data from a specific population or a sample from that population and typically utilizes a questionnaire or an interview as the survey instrument [19]. A quantitative questionnaire was used to obtain data from individual respondents about themselves and their work (factors that affect financing of SMEs projects and lending to SMEs owners). Also, some of the respondents were interviewed to allow for probing questions, this number of interviews conducted was less because the distinct advantages in using a questionnaire versus an interview methodology is that questionnaires are less expensive and easier to administer than personal interviews. Also, questionnaires often lend themselves to group administration, and allow confidentiality to be assured [20].

Further, studies have shown that missing data and haphazard mistakes in data collection are often the biggest causes of error in a survey. In other to avoid mistake or missing of any data is the reason for choosing this method. The primary data of this study was gathered by means of interviews and questionnaire and involved quantitative techniques. A considerable number of face-to-face interviews were conducted with financial institutions heads of credit and SME departments. Also, some selected equity firms were interviewed alongside some well known SMEs owners. Two different sets of questionnaires were given to financial institutions SME loan officers; managers and SME owners as part of the data collection.

The interview and questionnaires were administered through field visit. Phone calls and emails were used to set up interview appointments and for questionnaires administration. This study is a social research that employs empirical methods and empirical statements, where an empirical statement is a descriptive statement about what "is" the case in the "real world" rather than what "ought" to be the case. Moreover, the quantitative aspect of the study consists of numerical data. This was collected and analyzed using mathematically based methods in particular statistics. Data collected from each group of participants is presented separately to enable the study attain the desired level of importance. The analysis of relevant data was done using Microsoft Excel software, models and tables for the qualitative and quantitative analysis of the results.

7. DEMOGRAPHIC PROFILE OF THE RESPONDENTS

The quality of a study is often better with sampling than with a census [21]. A simple random sampling was used to select 31 respondents, consisting of 10 heads of credit and SME officers of banks; 12 heads of credit and SME officers of Savings and Loans and Microfinance institutions; 5 equity firms investment analysts; 1 cooperative society credit manager and 3 SME owners. The demographic characteristics of the respondents are presented in Table 1.

Table 1. Demographic characteristics of the respondents

Profile	**Category**	**Number**					**Frequency**
		Banks	**Savings and loans / Microfinance**	**equity finns**	**Cooperative society**	**SME owners**	
Gender	Male	7	10	3	1	2	74.2%
	Female	3	2	2	0	1	25.8%
Total		**10**	**12**	**5**	**1**	**3**	**100.0%**
Ages	20-34yrs	6	8	2	0	0	51.6%
	35-49yrs	4	4	3	0	1	38.7%
	50 yrs+	0	0	0	1	2	9.7%
Total		**10**	**12**	**5**	**1**	**3**	**100.0%**
Position		**Head of Credit operations manager or SME loan officer**		**Brach manager investment analysts**	**Manager**	**Owner**	
Educational Level	Non	0	0	0	0	0	0.0%
	Certificates Diploma	0	2	0	0	3	16.1%
	Degree	7	8	3	1	0	61.3%
	Master PhD	3	2	2	0	0	22.6%
Total		**10**	**12**	**5**	**1**	**3**	**100.00%**
Tenure of Work	Below 5yrs	6	9	3	0	0	58.1%
	6-10yrs	4	3	2	1	1	35.5%
	11-15yrs	0	0	0	0	1	3.2%
	16 yrs +	0	0	0	0	1	3.2%
Total		**10**	**12**	**5**	**1**	**3**	**100.0%**

The Table 1 which represents gender distribution of respondents indicates that male dominates the Ghanaian financial institution and SME industry as far as credit work, SMEs financing; and SME ownership are concern. The above demographic Table 1 showed that males were the majority, 74.2% of the respondents were males while the remaining 25.8% represented females.

Also, the above Table 1 showed the age distribution and positions of the respondents as follows: majority of the respondents were within the age group of 20-34 years, representing 51.6%. This is followed closely with those within the age bracket 35-49years. This group constitutes 38.7% of the respondents. Only 9.7% respondent were found to be 50 years and above. Respondents from the banking, savings and loans, and microfinance institutions hold various positions as head of credit, operations manager, and SME loan officer. Also, respondents from the equity firms hold positions as branch manager, and investment analyst. The positions of cooperative societies and SMEs respondents are managers and owners respectively.

Further, form Table 1 the Educational level of the respondents can be said to point out that none of the respondents was found to be illiterate. A little above 16% of the respondents hold certificates or diploma qualifications, a further 16.3% of the respondents hold bachelors degree. Overall, 22.6% of the respondents hold either masters degree or PhD. These statistics indicates that all the respondents could read, write, clearly understood the research topic, and every question posed to them.

Additionally, the tenure of work of respondents according to Table 1 showed that majority of the respondents, 58.1% have less than 5years working experience in their respective industry. This is followed by those with less than 6-10 years working experience constituting 35.5% of the total respondents. Those who have had 11-15years working experience constituted 3.2% while other remaining minority, 3.2% have had 16 years or more working experiences on their respective work. These records indicate that all the respondents have thorough knowledge on the research topic and were able to provide adequate and right information.

8. MEASURE

In this study impact of SMEs project financing gap is the independent variable and Knowledge economy factors are the dependent variable. To measure the financing gap I used the 3M pyramid and the Security destabilizing factors pyramid, which is destabilizing factors, risks; dangers; and threats. Participants were asked to par these both pyramids elements with the following Knowledge economy factors: technology and information, management, finance and economic, and legal, policies and processes. Using a 5-point Likert scale, where 1 represents strongly disagree; and 5 strongly agree [22]. Total score may range from 31 to 155 level of disagreement to agreement. The high scores indicate higher agreement and the extent of these factors contribute to financing gap. To assess the relationship between the 3M pyramid elements and business environment factors, I performed T-tests, ANOVA; and Regression.

Table 2 shows the difference between the mean scores of business environment factors contribution to SMEs financing gap that is dependent on the 3M pyramid elements. The T-values are significant at .01 levels for technology and information, management; finance and economic, legal; policies and processes to help bridge SMEs financing gap. T-value of amount of technology and information, management; finance and economic, legal; policies skills and knowledge on the part of SMEs owners are significant at .05 levels. The result of T-tests shows these have significant effect on SMEs projects financing. Table 2 below mean and standard deviation of knowledge economy factors contributing to SMEs financing gap of various dimensions are shown here.

Table 3 predicts the current knowledge economic factors effects on SMEs financing.

The Table 3 is a predictor of the current knowledge economy factors causing SMEs financing gap ANOVA. The Table 3 shows that knowledge economy factors influences SMEs financing as measured through the 3M pyramid. It also revealed a positive significant correlation between the total scores of the knowledge economic factors and SMEs financing gap ($P < 0.01$). Furthermore, results in Table 3 shows a significant P-value =0.000 (less than 0.05) for the prediction relation between Knowledge economic factors and SMEs financing gap.

Table 4 proves simply the presence of a prediction relation between knowledge economy factors and the dependent variable (SMEs financing gap).

The strong point of the relationship is shown in Table 4 with the help of the values of intercept (0.852) and slope for Knowledge economy regression line (0.822). This suggests that for an improvement in one of the Knowledge economy factors; the respective SME owner can significantly predict 0.822 chances of getting funding from financial institutions. Further, a slope of 0.682 for Knowledge economy factor is produced when the test utilizes standardized independent and dependent variables. To measure the potency of a forecast relation through ‘Beta’ may indicate some overstated results. As a result a traditional measure ‘coefficient of determination’ was calculated. The SMEs scores on Knowledge economy factors exhibit nearly high positive association ($r = 0.682$) with their projects funding opportunities.

Table 2. Knowledge economy factors contributing to SMEs financing gap

N	Factor	N	Mean	SD	T
1	Information and technology	31	3.9	.421	31.64.
2	Finance and economics	31	4.3	.516	3.54
3	Management	31	4.1	.566	2.88
4	Policies and legal	31	4.7	.515	4.15

P>0.05, P>0.01

Table 3. Predictor of current knowledge economy factors

Model	Sum of Squares	Df	Mean squares	F	Sig
Regression	30.228	1	30.228	126.880	.000
Residual	50.452	198	0.266		
Total	82.660	199			

Table 4. Dependant variable: SMEs projects financing gap

	Un-standardized coefficient		Standardized coefficients	T	Sig
	B	Std error	Beta		
Knowledge economy factors	0.822	0.048	0.682	18.279	.000

Table 5. Summary regression for Knowledge economy factors

R	R square	Adjusted R square	Std. error of the estimate
0.682	0.468	0.464	0.3381

Lastly, above Table 5 show summary regression for Knowledge economy factors and SMEs projects financing.

From the above Table 5, there is the presence of a strong positive relationship between SMEs projects funding and Knowledge economy factors, this suggests that SMEs future projects funding could be predicted on the basis of how well they are able to mitigate the impacts that Knowledge economy factors have on their business. Above Table 5 indicates an 'R^{2}' value of 0.468 that shows nearly 50% of the variance in SMEs projects financing gap can be accounted for by SMEs ability to manage the knowledge economy factors.

9. THE ANALYSIS OF SMES ACTIVITIES IN GHANA

This study revealed that SMEs in Ghana can be grouped into urban and rural ventures. The urban SMEs can be subdivided into "structured" and "unstructured" enterprises [23]. The structured ones mostly have paid employees with a formal office space, whereas the unstructured SME is mainly made up of artisans who work under shades in open space, home; usually operates in provisional metal or wooden structures, they tend to employ few people; and in some cases with fixed paid workers. The study also showed that the unstructured SMEs mostly rely on their close relatives and in some cases on apprentices for support. The rural ventures are usually made up of family members, individuals with trade skills; food production, etc. Most SMEs in Ghana are involved in several activities including: food vending, animal rearing, crop farming, retailing, baking, etc.

The study further revealed that the nature of SMEs businesses are determined by where they are located, financial and other resources available; market, skills; economic trend; and customer needs identified. Those in the rural areas are mainly into animal and crop farming with few of them engaged in retailing, and food vending. The distribution and retailing businesses are associated with those in urban centers. However, the manufacturing business can be both found in the rural and urban areas, but majority are located in the urban centres. The Fig.1 illustrates the value chain activities of most SMEs in Ghana. Since the Ghanaian economy is agro based, most SMEs in the country are directly or indirectly linked to agriculture.

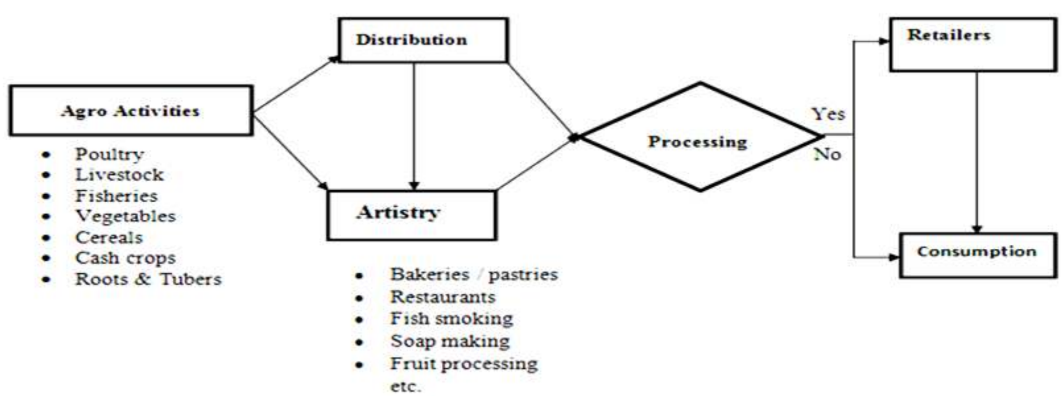

Fig. 1. SMEs activities in Ghana

From the diagram in Fig. 1 some of the SME owners are engaged in primary agricultural activities such as vegetables, cash crop, root and tuber farming. Others also engage in livestock rearing, poultry and fishery. These constitute the first stage of the SMEs value chain process.

The next stage of the value chain process is processing and direct distribution. Under this, the produce is either distributed to the retailers for sale to the final consumers or they must first be processed before onward distribution to the retailers. As can be seen above those SMEs that engage in agro processing are into activities such as fruit processing, fish smoking; bakeries, restaurant operations etc. The final activity is the retailing of these produce. This is the stage where the final products of the value chain are sold to the end users. It can be inferred from the above diagram that SMEs in Ghana are dependent on one another in order to stay in business. Therefore a slowdown in the activities of SMEs in one sector will affect the businesses of the other SMEs in the other sectors of the chain.

10. EXAMINATION OF BANKS ACTIVITIES WITH SMES AND OTHER CUSTOMERS IN GHANA

Data gathered on banks through this study revealed that a lot of activities go on between SME and banks in Ghana. Some of the major activities are accounts opening for SMEs, accepting cash deposits from SMEs; loaning to SMEs, assets financing; and equity management services. This study discovered that the motives of each of the parties involved in these activities differs, whereas the banks undertake such activities to maximize profits, SME owners aim at securing financial and other supports from the banks to grow their business through these activities.

It came to light that the major goals of most SMEs for working with banks are to have a bank account with them and operate it for some time before they can access credit facility, to prove to their suppliers that they are in a serious business, and for fear of being attacked by thieves. Interestingly, information gathered revealed that the banks do not have much interest in how SME owners manage or run their businesses, they are rather very much interested in the deposits; their repayment capacity and prompt repayments of loans. The study uncovered also that most banks provide after-loan support services which are only geared towards ensuring that client pays all the loan amount and its accompanying interest on time without any default. The banks on the other hand perceive SMEs who operate with them as business owners who believe in loans and always need loans to run their businesses. For instance, one SMEs credit officer of a financial institution stated this during an interview, *'SMEs always want our money but they do not want to run their savings accounts with us'*.

10.1 SMEs and Salaried Workers Lending Activities with Banks

In analyzing data gathered for the comparison, the simple mathematic mean average method was used; mathematic mean average = sum / size [24]. Data gathered showed that most branches of banks receive an average of ten (10) to thirty (30) SME loan applications, and twenty (20) to fifty (50) salaried workers loan applications per month.

- Average monthly SME loan applicants $\frac{\mathbf{10+30}}{\mathbf{2}} = \mathbf{20}$ applicants
- Average monthly salaried workers loan applicants $\frac{\mathbf{20+50}}{\mathbf{2}} = \mathbf{35}$ applicants

The study showed that out of these numbers; only about five (5) of the SME loan applicants will be successful, whereas over twenty (25) of the personal loan applicants will be granted their personal loan request.

- Therefore, SME loan applicant success rate is $\frac{5}{20} x\ 100 = 25\%$
- As against personal loan applicants success rate of $\frac{25}{35} x\ 100 = 71\%$
- Percentage of other corporate loan application success rate is 100 - 25+71 = 4%

The above calculations show that salaried workers loan applications have 46% (71-25) more chances of getting financial support from banks over SME loan applicants. This revelation is very worrying because SMEs are the building blocks of every economy and must be given much financial and other support by banks. The Fig 2 is a pie chart representation of the above data analysis.

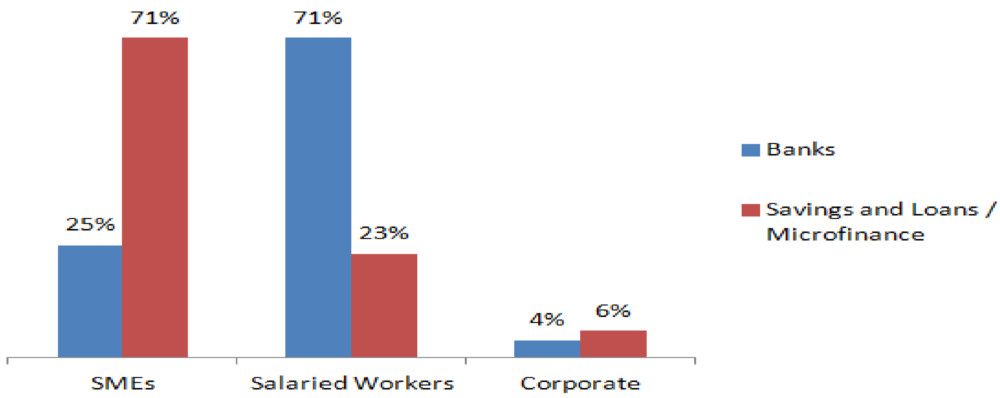

Fig. 2. Financial institutions funding support

The Fig. 2 indicates that, only 25% of SME loan applicants can secure financial and other support from banks. This percentage is very worrying and clearly indicates that banks are not the best partners for SMEs growth in Ghana. Another important issue that came to light through this study is that the few successful SME loan applicants normally get financial and other forms of support ranging from GHs 10,000 up to GHs 90,000 or $2,600 up to $23,300. This amount is usually given from a period of three (3) years up to five (5) years. It is only in a special case that the support may be extended beyond five (5) years. This long repayment period helps to ease the repayment pressure on SMEs. The study unveiled that most banks give the support at a *'business killer'* interest rate ranging from 28% to 31% per annum. Therefore, the average lending rate is $\frac{\mathbf{28+31}}{\mathbf{2}} = \mathbf{29.5}\%$

10.2 Analysis of Savings and Loans, and Microfinance Companies Activities with SMEs in Ghana

The study through data collected revealed that the major activity between SME and savings and loans, and microfinance institutions is loans facilities provision. The research also discovered that provision of credit facilities and other forms of financial support constitutes about 95% of these institution's activities with SMEs in Ghana. The loans activities are business loans which include: long-term loans, short-term loans; overdraft, assets financing; and co-ownership financial support. Other activities include trade financing (pre-financing), working capital; project financing and clearing loans. The study further revealed that the motives of each of the parties involved in these activities seem to coincide. The savings and loan and microfinance institutions have realized that banks in Ghana are not interested in assisting SMEs with financial and other support they need to grow. This guided their mission to develop and customize their products in a way that will favor the growth of SMEs. These institutions cannot face the stiff competition in the banking industry and therefore see SMEs as their major source of growth.

It is worth noting that SMEs in Ghana also believes the savings and loans and microfinance institutions are the right institutions that are there to solve their financial problems and help them grow. It is very perturbing to notice that most of these savings and loans and financial institutions are financially handicapped. As stated by one of the Chief Executive Officers "*we have huge liquidity problem and this prevents us from mobilizing funds to meet SMEs needs*". These institutions do not have the capacity to meet the financial needs and other support needed from them by SME; the study discovered. It also came to the fore that the major goals of most SMEs for working with savings and loans and microfinance institutions are to: have access to credit facility and other financial support, prove to their suppliers that they secure funds to pay for their supplies; and deposit for a short time as a result of fear of being attacked by thieves.

Captivatingly, information gathered revealed that savings and loans and microfinance institutions have much interest in how SME owners manage or run their businesses, they are also very much interested in the deposits (but not the primary goal); their repayment capacity and prompt repayment of loans. The study also brought to the fore that most of these institutions also provide after-loan support services (including business management advice, accounts and records keeping; cash management, etc.). These are geared towards ensuring that client pays the loan amount and its accompanying interest on time without any default and for business growth as well. The savings and loans and microfinance institutions perceive SMEs owners as the right partners for growth. For instance, one of the credit managers stated that *'SMEs are partners for growth, we believe in growing together'*.

Using the simple mathematic mean average method, mathematic mean average = sum / size data of data analysis, the data gathered showed that most savings and loans and microfinance institutions receive an average of fifty (50) to one hundred and twenty (120) SME loan applications and about five (5) to twenty (20) salaried workers loan applications per month.

- Average monthly SME loan applicants $\frac{\mathbf{50+120}}{\mathbf{2}} = \mathbf{85}$ applicants
- Average monthly salaried workers loan applicants $\frac{\mathbf{5+20}}{\mathbf{2}} = \mathbf{13}$ applicants

Out of this about sixty (60) of the SME loan applicants will be successful; whereas, only about three (3) of the personal loan applicants will be granted their personal loan request.

- Therefore, SME loan applicant success rate is $\frac{60}{85} x\ 100 = 71\%$
- As against personal loan applicants success rate of $\frac{3}{13} x\ 100 = 23\%$
- The percentage of other individual loan application success rate is 100 – (71+23) = 6%

The above calculations show that SME loan applicants have 48**%** (71-23) more chances of getting financial support from savings and loans and microfinance over salaried worker loan applicants. This revelation is very encouraging because SMEs are the conner stone of every economy and must be given the needed attention and support. From Fig. 2, 71% of SME loan applicants can secure financial and other support from savings and loans and microfinance. This percentage is very hopeful, it clearly indicates that the best partners for SMEs growth in Ghana is the savings and loans and microfinance institutions.

Another important issue that came to light through this study is that successful SME loan applicants normally get financial and other forms of support ranging from GHs 5,000 up to GHs 40,000 or \$1300 to \$10,300. This amount is usually given for a period of three (3) months up to twenty four (24) months. It is only in a special case that the support may by extended up to thirty six (36) months. This short repayment period usually put much pressure on SMEs due to the high interest rate at which the financial support if secured at. The study unveiled that most of these institutions give the support at interest rates ranging for 29% to 36%. Therefore, the average lending rate is $\frac{\mathbf{29+36}}{\mathbf{2}} = \mathbf{32.5}\%$ annum, this is a little above the commercial banks average lending rate.

10.3 Evaluation of Financial Support Application Process and Time, and Causes of Disqualification

The research revealed the following as the loan application process SME loan applicants are taken through before they are given any financial support by the banks. The below loan and other financial support to SMEs processing time is almost the same for both banks and savings and loans and microfinance institutions. The financial support process begins with the submission of loan applications, in the case of banks SMEs are expected to submit an official written loan application letter to the bank. However, the study showed that most savings and loans and microfinance institutions already have printed loan application forms which they sell to all SME loan applicants at a cost ranging from GHs10 to GHs20 cedis (\$2.5 to \$5). The research also brought to the fore that most banks take two to six weeks to process SME loans. Therefore, the average loan applications processing time of banks is $\frac{\mathbf{2+6}}{\mathbf{2}} = 4\text{weeks}$. However, some processing time can even take up to twelve weeks or more.

Fig. 3 illustrates the entire loan process of banks.

It is very vital to also notice that savings and loans and microfinance institutions take one(1) week up to four (4) weeks to process SME loan applications. Therefore, the average SME loan applications processing time by Savings and loans, and microfinance institutions is $\frac{\mathbf{1+4}}{\mathbf{2}}$ weeks and 3 days.

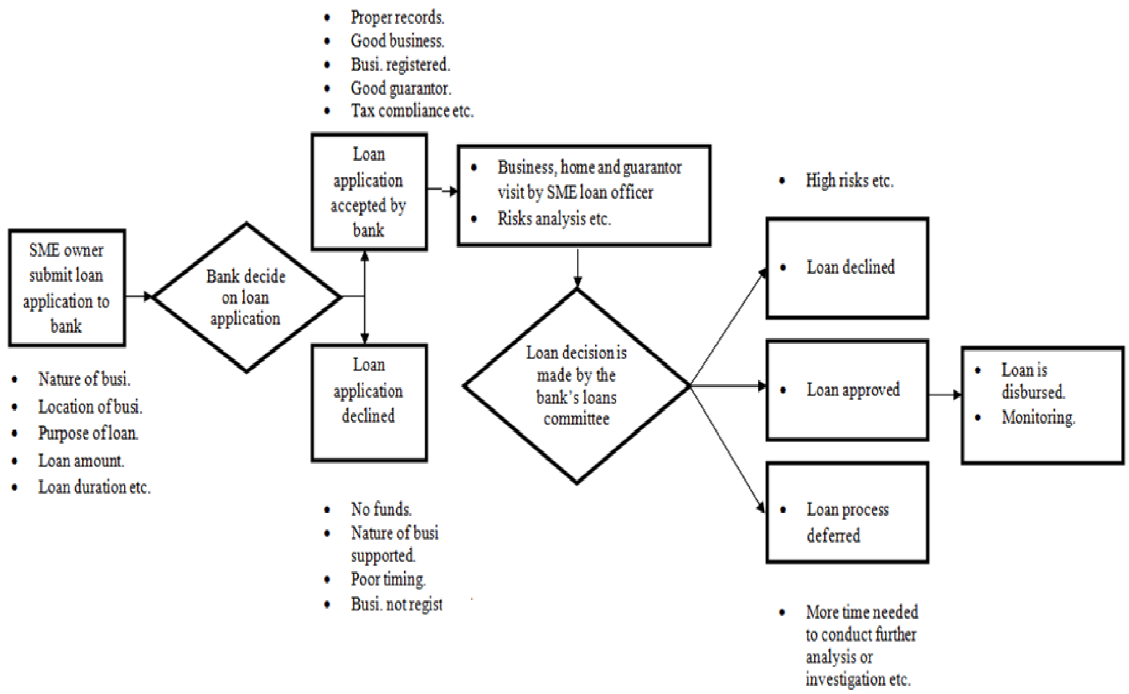

Fig. 3. Financial institutions loan process model

In an attempt to establish what prevents SMEs from securing financial and other support from banks showed that most financial institutions encounter numerous challenges in their attempt to finance SMEs. Those interviewed identified the following reasons as the main hindrances in SME financing:

i. Limited financial resources, this study uncovered that most financial institutions in Ghana operate with depositor's funds. This put them off from giving long term loans to SMEs; their fear is that any default on the part of borrowers will put pressure on them in fulfilling the cash withdrawal needs of other customers.
ii. The high interest rate on loans (28% - 35%) tends to affect the repayment capacity of SME loan applicant.
iii. Most SMEs do not keep proper books of accounts and other records on business transactions. This makes it very difficult for the banks to verify information provided during loan application.
iv. False information during loan application process and on business site visit is also another factor which affects SMEs chances of getting financial and other supports form bank.
v. Poor structuring of SMEs, the SME sector in Ghana is not well structured. This makes it very difficult to establish the exact business that a particular client operates, most SMEs owners tend to follow what others in the business are doing well in and tries to venture.
vi. Inability to provide the needed collateral; most SMEs is not in position to provide the required collateral demanded by the banks.
vii. No registration, it came to light through this study that some business owners have been in successful and active SME business for over five years without registering their business.

11. ANALYSIS OF EQUITY FIRMS ACTIVITIES WITH SMES IN GHANA

The study recoded that very few equity firms exist in Ghana which also provide financial and other forms of support to SMEs. Sadly some of them have started folding up because of lack of growth and venture capital funds to manage. The research also uncovered that these equity firms seek to provide risk capital in the form of equity, quasi-equity (by debts that has some traits of equity) such as having flexible repayment options or being unsecured; this is usually due to the legal status of the firm (example charities organizations), they also provide profit-sharing facilities to entrepreneurial businesses in Ghana. These equity firms also offer business development service to investee business as part of their value proposition. By combining finance and business development services the equity finance firms in Ghana are able to leverage its analytical approach to better mitigate risk, improve the business models of SMEs and realize sustainable returns on their investments. This is a clear indication that SMEs in Ghana when given the needed support will be highly profitable.

Also, through the research that most of the equity firms in Ghana largely get their funds from external sources (abroad), which is from other equity firms; investors, private organizations, pension funds; trust fund and/or charity organizations. Their primary activities entail: capital management for investors and small & medium-sized enterprises (SMEs), provision of business development services; and ensuring superior economic & social returns to stakeholders across each target sectors. It became very promising through this research that equity firms have realized the financing gap between financial institutions and SMEs in Ghana. As a result they have extended their services to include: food services providers, financial services; educational institution support, real estate; consumer goods, healthcare and Agribusiness. A careful analysis of data collected revealed that most of the few equity firms in Ghana who are doing well in business require funding ranging from GHs400,000 to GHs20 million (US$100,000 and US$5 million) from each investor to undertake the above activities.

11.1 The Basic Conditions SMEs have to Fulfill to Qualify for Equity Firms Support

The study data collected also revealed that SMEs in Ghana apart from having the basic requirements which other financial institutions demand from them such as *'business registration documents'* must also meet the following conditions, must have a sales volume of less than GHs32million ($8 million); a net worth excluding land and building of less than GHs4million ($1 million), employs not more than 100 people at the time of investment; must be small sized, simple and informal structure with knowledgeable sponsors; growth opportunities and have market leadership potential.

Furthermore, the data analyzed showed that aside the above points most of the equity firms expect a 25% return or more on their investments. Further, they do not want their investment to cause any dilution to the SME owner's business. It is worth noting that most of the equity firms are interested in partnering with SMEs that are already doing well, they always want to be sure of making profit on their investment before they invest. This was summarized by one of the equity firm managers during an interview when he said *'in order to safeguard our investment, we always make sure that we only partner SMEs that are liquid and prudently managed"*.

Interestingly, unlike the case of financial institutions where SMEs approach them for support, this is not so in the case of equity firms. The study identifies below as the means through which equity firms choose their clients: equity firms usually identify SMEs that are doing well on their own, conducts economy and SME owner's competencies analysis; determines what is lacking in the business which has become an obstacle for massive growth, identifies opportunity for profitability; growth and expansion, conducts risks analysis; and lastly a contact with SMEs for partnership.

The research further revealed that equity firms normally invest in SMEs and become part of the business for a period ranging from three (3) to seven (7) years or even more. One of the equity firm's investment analysts said this during an interview, *'we are consultants with money'*. As part of their investment package, equity firm also offers business advice and participates in the management and strategic planning of the business.

Regrettably, this study recorded that equity firms in Ghana do not invest in many SMEs in a year. This is largely due to lack of funds because the volume of funds needed for investment is usually huge. Data gathered also revealed that most of the equity firms in Ghana invest in between one (1) and three (3) SMEs in a year. The study further identified the following as some of the challenges that equity firms face: lack of funds and corporate governance issues (reporting, monitoring, data collection etc.,); accepting to co-manage the business (SMEs) was also identified as another major challenge equity firm's face.

12. SYSTEM-HOLISTIC APPROACH TO ANALYZE SMEs FINANCING GAP FACTORS

The research data gathered revealed that SMEs have the potential to accelerated growth and job creation in Ghana. Despite this potentials a number of factors affect their ability to realize their full prospective. The study identified the following as the major factors which are hampering SMEs development, they are information and technology; management, finance and economic; regulatory issues (government policies) and lack of access to both local and international markets (this falls under economic issues). The study further identified lack of support services and higher operational cost as other major factors negatively impacting on the development of SMEs in Ghana. This study has grouped and matched each of the above challenges SMEs face into a pyramid based on the 3M pyramid and Security factors pyramid which shows the factors that must be considered to ensure activity continuity of businesses in the current knowledge economy [25].

The Fig. 4 shows the various security factors in the current knowledge economy and SMEs funding factors that financial institution and SME owners must take strategic actions to mitigate. Therefore, this study based on its findings have developed the below system holistic approach of financing SMEs. Analyzing data gathered through the research based on the above pyramid revealed that the entire players involved in SMEs financing believe that the single most important factor hampering the growth of the SME sector is the lack of finance. However, this study has proved that the knowledge economy factors indicated in the above pyramid have accounted for this, the research therefore explained the factors which are: Technology and information, Management, Finance, and legal, policies and processes.

12.1 Technology and Information

- Lack of ICT training and skills,
- Poor documentations and records keeping,
- Lack of creativity and innovation,
- Inability to use e-commerce to market produce etc.

It came to the fore through the research that most SMEs face difficulties in gaining access to suitable technologies and information. In most cases SME tends to utilize foreign technology in a form of shared ownership or leasing which do not promote profitability due to the high cost associated with using such technology [26].

This is what one SME owner said when I sought to find out his understanding of technology in business operations, *'I don't know anything about computer, people say internet business is very risky; plenty thieves'*. This study noted that the rate of technological changes and fast spreading of information has become a destabilizing factor [27] which limits SMEs access to finance.

12.2 Management

- Poor structuring of the SME,
- Poor / lack of managerial skills,
- Lack of strategic and succession plan,
- Little or no accounting and financial management skills,
- Resistance to change (culture) etc.

Data gathered showed that most SMEs owners lack the managerial skills needed to run their business to accomplish desired goals and objectives by using available resources efficiently and effectively. They lack the managerial functional skills to effectively plan, organize; direct, control and coordinate business activities and market [28]. This research can attest that some equity firms are aware of the weakness in SMEs operations; this has been proven by an equity firm's investment analysts' statement he made during our interview.

'SMEs owners lack the skills needed to develop strategic plans to grow their businesses, they lack the managerial and marketing skills and that is why they are always failing'. Also, some microfinance managers said this during an interview '*most SMEs owners need proper training more than finance, some of them don't know proper cash and general business management and records keeping, yet they are asking for financial support'* . The study noted that poor management on the part of SMEs tends to be very risky [29] for their business growth and funding.

12.3 Finance and Economic

- Inflationary rate,
- A comparatively undeveloped financial sector with low levels of intermediation,

- High cost of borrowing and rigidities interest rates,
- Lack of ready market,
- Lack of collateral,
- High business operations cost etc.

During an interview almost all financial institutions heads of credit indicated the need to provide long-term funding to SMEs, most of them said *'we do not have the capacity to give them long –term loans and low interest loans, what we need is external long term funding for SMEs'*. The research further noted that the poor performance of the Ghanaian economy over the past years has affected savings; this has limited most financial institutions' ability to give long-term financial support to SMEs. Lack of Finance and poor economic growth the research revealed puts SMEs in danger [30] in terms of accessing funding and growth of their businesses.

12.4 Legal, Policies and Processes

- Lack of institutional and legal structures that facilitate the management of SME lending risk,
- Unfavorable terms and conditions,
- Taxes and tax laws,
- Start-up registrations process and requirements etc.

This research identified regulatory constraints as one major factor that poses serious challenge to SME development and although there have been some reforms. For example, the high costs of starting a business, such as licensing and registration requirements put extreme and needless pressure on SMEs. Further, the tax law and tax collection system in Ghana are not well structured, this usually create unwarranted problem for SMEs in their tax declaration. This was attested by some financial institutions heads of credit when they stated this during our interview, '*the central bank laws are not SMEs financing friendly'*. Also, some SMEs owner stated this during an interview *'financial institutions financing policies are business killer'*. Some also said *'the government taxes will collapse our businesses'*. These statements clearly show how laws and policies have created gaps in SMEs financing, these factors are major threats [31] to SMEs financing and growth. The research have developed the factors hampering SMEs growth into the below pyramid to help better understand the gaps between financial institutions and SMEs financing, and to also prove the need to fund SMEs in Ghana.

Destabilizing factors, the research identified the destabilizing factors as certain processes, phenomenon and behaviors whose influence have changed the situation surrounding the financing of SMEs projects. These factors have created unfavorable conditions for SME businesses and continue to determine SME businesses nature and how it should be operated in Ghana.

Risks, this study uncovered the major risk SMEs face as lack of managerial skills; this challenge can lead to the likelihood of the onset of negative results. This risk can also create a chance for a loss in profit, material and/or financial resource to occur through the poor management of the business. The study discovered management factors as a major risk which has created SME financing gap.

Danger, data collected through this study also revealed that the dangers SMEs face make them feel insecure. The major danger faced is finance and economic, this causes them to believe that some business environment situations and behaviors carry insecurity and harm; and can have some negativity on their operations. The study further revealed that most of the dangers involved in SME financing is not harmful, but can be implemented only through a certain threat (legal, policies and processes).

Threats, the study also discovered that SMEs face certain threats which need to be dealt with cautiously. These threats the study identified are business entity's activity or real actions of certain persons (legal entity or natural person) that cause specific material or moral damage (harm) to SMEs. This research identified regulatory constraints as one major factor that pose serious challenge to SME development.

This study has therefore developed the below Fig. 4 mechanism which is based on the 3M pyramid, security destabilizing factors and the SMEs project financing gap factors to help bridge the funding gap between SMEs and financial institutions.

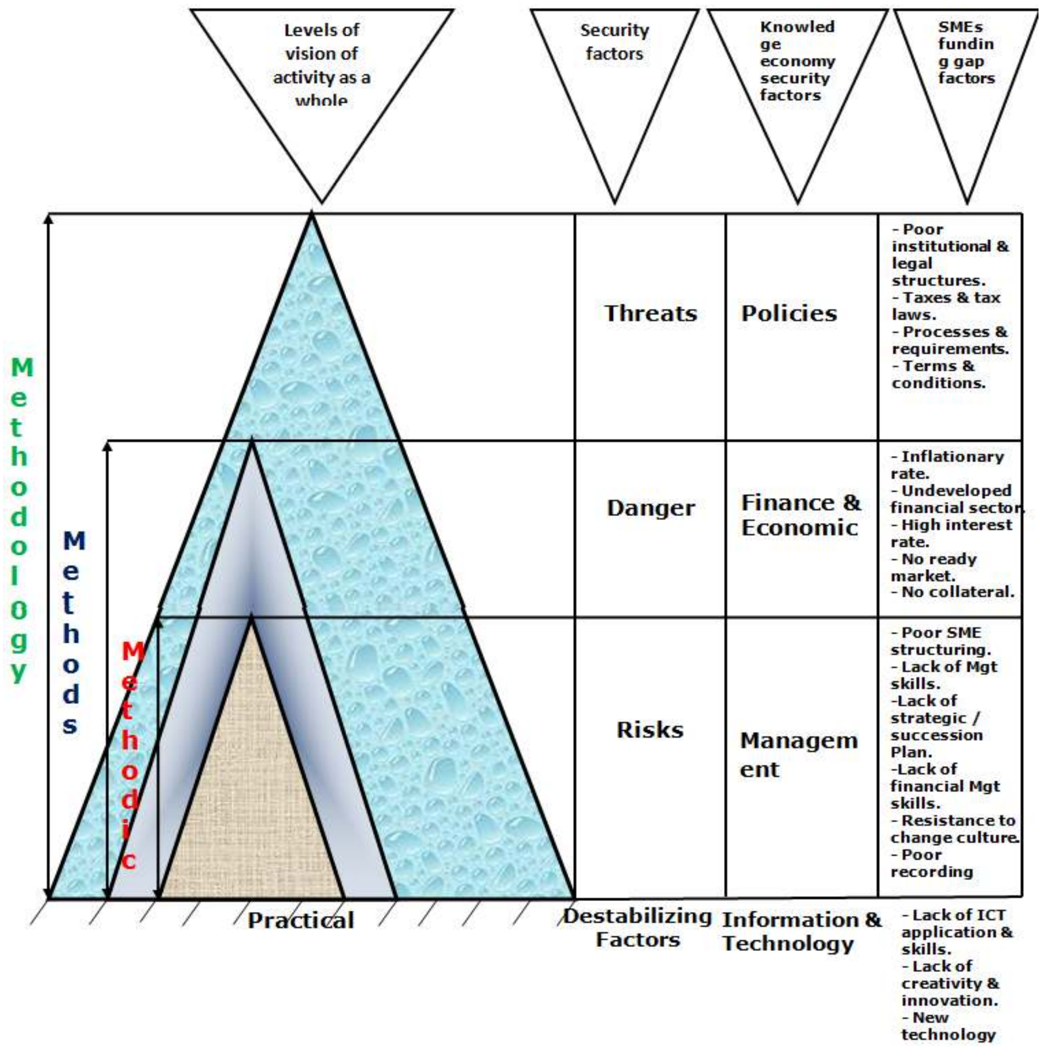

Fig. 4. System holistic approach to SMEs financing

The above model shows that in other to bridge the funding gap both SME owners and financial institutions must pay critical attention to information and technology, management practices; finance, economic policies; economic indicators, legal and government policies. It is very fundamental to apply the appropriate methodic, methods and methodology depending on the level of security factors, knowledge economic factors and SMEs financing gap one is challenged with. This will ensure the successful funding of SMEs projects.

13. CONCLUSION

From the study, it is evident that proper financing of SMEs is very crucial for SMEs growth and progress as well as for national economic development. This is necessary since SMEs play crucial role in the socio economic development of every economy through job creation and contribution to GDP growth. The fact is, about 80% of Ghanaians are employed by SMEs. It is however instructive to note that despite this; banks in Ghana are reluctant to finance their activities. Only 25% of the overall loans granted by banks usually go into the funding of SMEs activities. It can therefore be deduced that since banks have the largest capital base among all the financial institutions in Ghana, their failure to prioritize SMEs financing makes it difficult for SMEs to get adequate funding.

Further, equity firms also constitute a very reliable source of funding to the SMEs. They usually partner them to run their businesses while making sure that they do not end up diluting their activities and diverting them away from their core functions.

The failure of SMEs to access reliable funding is a major gap in their operations, this is not only due to financial institutions reluctance to be a reliable partner in that regard but also as a result of certain vulnerabilities and institutional weaknesses associated with their operations. Based on these revelations this study has developed SMEs project financing gap pyramid and SMEs projects funding mechanism model which are all based on the concept of the 3M pyramid and Security destabilizing factors pyramid to help bridge the funding gap.

Lastly, this study concludes that there exists a financing gap between financial institutions and SMEs projects financing and this can only be solved by applying the system holistic approach to SMEs financing model this study has developed.

COMPETING INTERESTS

Author has declared that no competing interests exist.

REFERENCES

1. Mensah S. A review of SME financing schemes in Ghana, presented at the UNIDO regional workshop of financing small and medium scale enterprises. Accra, Ghana; 2004.
2. Rach V, Rach D. Risk management in project implemented in transitional economy: Financial products for the real sector in Ukraine. Proc. of International Conference. Kyiv. 2014;25-26.
3. Addotei AC. The challenges of financing small and medium scale enterprises (SME) in the Ashanti region (a case study of Stanbic Bank (Gh) ltd); 2012.
4. Gesellschaft TZ. Promotion of small and micro enterprises financial sector market study. Republic of Ghana Final Report; 2001.
5. SME Awards in Ghana; 2014.
   Available:http://www.smeghanaawards.com/introduction
6. Joseph A. Multi-metric definition of knowledge economy. Project Management and Development of Production. 2015;84-90.
   UDC 005.94:005.22
   Available:http://www.pmdp.org.ua/images/Journal/53/9%20text_Asare.pdf
7. Bank of Ghana. Working Paper, A Note on Microfinance in Ghana; 2007.
   Available:https://www.bog.gov.gh/privatecontent/Research/Working%20Papers/Microfinancing(1).pdf
8. Ghana Financial System Stability Assessment Update. IMF Country Report No. 03/396; 2003.
9. Anheier, Seibel; 1987. Steel, Webster; 1991. Aryeetey et al.; 1994. Gockel, Akoena; 2002.
10. Abor J, Biekpe N. Small business financing initiatives in Ghana. Problems and Perspectives in Management; 2006.
11. Anheier HK, Seibel HD. Small scale industries and economic development in Ghana. Business Behaviour and Strategies in Informal Sector Economies, Verlag Breitenbech, Saarbruckh, Germany; 1987.
12. Gibson T, Van der Vaart HJ. A less imperfect way of defining small and medium enterprises in developing countries; 2008.
13. Scot M, Rosa P. Opinion: Has firm level analysis reached its limits? Time for a rethink. International Small Business Journal. 1996;14(4):81-89.
14. Abor J, Quartey P. Issues in SMEs in Ghana and South Africa. International Research, Journal of Finance and Economics Issue. 2010;39:218-228.
   (Accessed on 14 June 2011)
   Available:http://www.eurojournals.com/irjfe_39_15.pdf
15. HFC Bank. World investment news-pre-report Ghana. World investment news; 2004.
   Available:http//www.winne.com/ssa/Ghana/reports/2016/cp/hfc/index.phd
16. Kwashie AP, Agyapong D. Alternative model for financing SMEs in Ghana; 2012. Available:http://www.ijac.org.uk/images/frontImages/gallery/Vol._1_No._5/14.pdf
17. International Project Management Association. Individual competence baseline for projects and programs

management. International Project Management Association, Nijkerk; 2015.
18. Gaurav A. Whsat is finance? Meaning definition features of finance. 2011. Available:http://kalyan-city.blogspot.com/2011/11/what-is-finance-meaning-definition.html#comment-form
19. Robson C. Real world research: A Resource for social scientists and practitioners-researchers. Blackwell, Oxford; 1993.
20. Mark RL. Introduction to behavioral research methods. 4th Edition. Publishers. Allyn, Bacon; 2003. ISBN:0205396763 (ISBN13: 9780205396764).
21. Deming WE. Sample design in business research. New York: John Wiley & Sons; 1960.
22. Renis L. A technique for the measurement of attitudes. Archives of Psychology.1932; 22(140):1932-55.
23. Addotei AC. The challenges of financing small and medium scale enterprises (SME) in the Ashanti region (a case study of Stanbic bank (Gh) ltd); 2012.
24. Kalid A. Calculus, better explained: A guide to developing lasting intuition. Kindle Edition; 2015. ISBN: 1470070707
25. Rach V. Methodology of an enterprise economic security management [unpublished lecture notes]. Materials of the educational master program on Project management. KROK University, Kiev, Ukraine; Note Provided at Lecture Given; 2014.
26. Organisation for Economic Co-operation and Development. Enhancing the Competitiveness of SMEs through innovation, Conference for Ministers responsible for SMEs and Industry Ministers Bologna, Italy; 2000.
27. UNICRI. Destabilization: the threat to the Global village, freedom from far magazine; 2016.
Available:http://f3magazine.unicri.it/?p=584
28. Fayol H. Administration industrielle et générale; prévoyance, organisation, commandment, coordination, control (in French). Paris, H. Dunod et E. Pinat. 1917; OCLC 40224931.
29. Glyn AH. Defining risk. Financial Analysts Journal. CFA Institute. 2004;60.
Available:http://www.sfu.ca/poitrasfajrisk04.pdf
30. The Free Dictionary. Meaning of danger. Available:http://www.thefreedictionary.com/danger
31. Brauch HG, Oswald SÚ, Mesjasz C, Grin J, Kameri-Mbote P, Chourou B, Dunay P, Birkmann J. Coping with global environmental change. Disasters and Security; 2011. ISBN 978-3-642-17775-0

Peer-review history:
The peer review history for this paper can be accessed here:
http://sciencedomain.org/review-history/17892