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ACCESSIBILITY TO NON-BANK CREDIT AND THE GROWTH OF MICRO AND SMALL ENTERPRISES IN THE SEKONDI-TAKORADI METROPOLIS, GHANA

Frederick Koomson

ABSTRACT

Access to credit has been consistently cited as a major constraint to the growth of micro and small-scale enterprises. Research has shown that enterprises that are not able to access credit from banks often rely on non-bank sources. It is based on this that the study set out to examine the accessibility of MSEs to non-bank credit and how non-bank credit affects their growth. In order to achieve the set objectives, 96 MSEs of five non-bank financial institutions were sampled for the study. Questionnaires were used to collect data from both the non-bank financial instutions and the MSEs. Data from the study were mainly analysed using the Chi-Square Test of Independence and log linear resgression analysis.

  Findings show that MSEs' accessibility to non-bank credit was affected by inadequate information about credit availability, high interest rates and cumbersome procedure for credit acquisition. Most of the non-bank credit advanced to MSEs were inadequate and were often disbursed at wrong times. Credit received by MSEs mainly went to increasing working capital. This was attributed to the high rate of inflation that forces MSEs to demand credit for re-capitalisation. Firms that accessed larger amount of credit experienced increases in profits. Based on the findings the study recommends to non-bank financial institutions to make the procedures for credit acquisition less cumbersome, provide information about credit availability and to grant adequate and timely loans to MSEs. In order to access credit in time, MSEs are to put in timely application of credit as this will give non-bank credit institution amply time to process the application.

Keywords

Accessibility, non-bank credit, MSEs, Growth, Ghana.

Introduction and background to study

The importance of micro and small enterprises (MSEs) to the economies of developing countries has been widely recognized. It has been observed by Kayanula and Quartey (2000) that MSEs are able to mobilise funds which otherwise would have been idle. MSEs also promote indiginous technology, while most of them use mainly local resources. In terms of MSEs' contribution to employment, McPherson and Rous (2010),

Moyi (2010) and ILO (2015) have noted that MSEs employ 25 percent of the working age population in most developing countries since a greater percentage of the labour force in developing countries can be found in the informal sector. In addition, MSEs give entreprenurial trainning through apprenticeship for future business leaders.

Based on the realisation of the contributions of MSEs to developing economies, various efforts have been put in place by governmental and non-governmental organisations to address the instituional needs of the sector. Policy makers and donors have expended increasing amounts of resources on MSEs support and promotion (McPherson & Rous, 2010). However, in spite of the interventions and support for MSEs, the growth of the sector is constrained by a number of factors as indicated by Moyi (2010) and Simwa and Sakwa (2013). These constraints include inadequate managerial know-how, lack of markets for products, and high cost of inputs (Chowdury, Islam & Alam, 2013; Kayanula & Quartey, 2000). Aside from these contraints, inadequate finance has been consistently cited in many surveys as a principal constraint on the growth and development of MSEs in developing countries (Nahamya, Ajanga, Omeke, Nasinyama & Tumnine, 2013).

According to Wajohi (2009) and Shinozaki (2012), the most dominant factor that has the greatest effect on the growth of MSEs is credit. This is attributed to the high rate of inflation in developing countries which forces firms to demand credit for capitalisation and re-capitalisation in order to increase growth. The financial constraints faced by MSEs, according to Oliveira and Fortunato (2006), impact thier growth negatively. . In their quest to access credit, MSEs may tend to look to bank or non-bank sources. The former has been found to crowd out MSEs as banks are not eager, according to Aryeetey, Baah-Nuakoh, Duggleby, Hettige and Steel (1994), to undertake long-term or high risk lending. As a result, MSEs will opt for non-bank credit, all other things being equal.

MSEs' choice for non-bank sources of credit has been explained by the Theory of Rational Expectation (Locas Jr., 1972; Sargent, 1972). The theory assumes that firms are rational and for that matter, MSEs would be expected to rely on the informal and non-bank financial institutions for credit if they come to the realisation that bank credit is expensive and not easily accessible (Muth, 1961).

Often times, the inability of firms to grow has been attributed to lack of access to financial resources (Lawson, 2007). Access to credit has been found to associate directly with output, technology adoption, size of employees, enterprise management, market share (Cristina, Pedro & Pedro, 2014), profit and enterprise growth (Shinozaki, 2012, Yiu, Su & Xu, 2012). Davidson and Wiklund (2000) have noted that MSEs' growth can be explained from resource-based approach when the focus of enterprise growth is on resources such as expansion of business activities, financial resources, and education of staff. This assertion is supported by the Resource-based Theory, which stresses the importance of financial resources for enterprise

Author Details:
Research Fellow, Institute for Development Studies, University of Cape Coast, Ghana
Email: fkoomson2@ucc.edu.gh / frederick_koomson@yahoo.com / paakumkoomson@gmail.com

growth. Authors like Obwori, Iravo, Munene and Kaburi (2012), Simwa and Sakwa (2013) and Mwangi and Wanjau (2013) have all used this theory to explain the relationship between credit and enterprise growth.

According to Nkurunziza (2005), firms that use credit grow faster as compared to those that do not. However, Malesky and Taussig (2009) warned that micro credit does not necessarily result in enterprise growth- particularly in situations where borrowers use loans for unintended purposes. Aside from access to credit as a motivating factor for enterprise growth, Gupta, Guha and Krishnaswami (2013) have identified vision and the motivation of entrepreneurs as contributing factors to credit accessibility and enterprise growth.

One of reasons for liberalising Ghana's financial market in the 1980s was to make credit available to MSEs. This led to the emergence of many micro-enterprise finance institutions, some of which are state-owned. Some of these institutions include: The National Board for Small-Scale Industries (NBSSI) and Empretech Ghana Foundation. These institutions were set up by the state to provide technical and financial support to small enterprises some of which are in the Sekondi-Takoradi metropolis.

The Sekond-Takoradi Metropolis was selected for the study because the metropolis is the third most industrialised in Ghana after Accra-Tema and Kumasi. There are more than 50 major firms, and together with small and micro enterprises employ about 60 percent of the active labour force (Sekondi-Takoradi Metgropolitan Assembly (STMA), 2012). There are many economic activities in the metropolis. This is partly due to the direct contact the metropolis has with the rest of the world via the habour. Key among the economic activities in the metropolis are fishing, cocoa processing, cement manufacturing, electrical engineering, food processing, paper making and printing, rubber manufacturing, engineering, cigarette manufacturing and wood processing.

The STMA 2012 end of year report listed, among other things, inadequate infrastructure, poor marketing of the metropolis and inadequate finance for MSEs as factors that constrain economic activities in the metropolis. The inadequate access of MSEs to finance has appeared in almost every end year report off the STMA. As part of the solution to MSEs poor accessibility to credit, some non-bank financial intermediation have been provided through MSEs support institutions. In addition, certain private, non-governmental and quasi-governmental financial institutions have been established to ensure the rapid growth and development of MSEs. This is because the sector has been identified to champion the development of the metropolis in particular and the nation in general. The STMA was selected for the study because it plays host to a number of MSEs from the aforelisted various sub-sectors and also on account of the fact that it has many non-bank financial institutions.

The objective of this paper is to examine the accessibility of MSEs to non-bank credit and how the size of credit affects the growth of MSEs in the Sekondi-Takoradi metropolis. The rest of the paper is organised as follows: A summary of the literature related to credit accessibility and enterprise growth followed by a conceptual framework for credit and enterprise growth. This is followed by the

methodology of the study. The final sections present the results and discussion of field data and the conclusions with policy recommendations respectively.

Review of related literature

A critical review of the literature on enterprise growth identifies four main theoretical approaches (Davidson & Wiklund, 2000). These theoretical strands, according to Gupta, Guha and Krishnaswami (2013), are the motivation, adaptation, strategic and the resource-based perspectives. Out of these perspectives, the resource-based, which stresses the importance of financial resources for enterprise growth, best underpins this study. According to the authors, there are unlimited opportunities in the market place and enterprises exploit their growth opportunities by deploying resources. The theory espouses that conditional on survival, firms that use credit grow faster compared to their counterparts that do not use credit (Nkurunziza, 2005).

According to Gupta, Guha and Krishnaswami (2013), enterprise growth may follow a linear/predictable path or take a fairly opportunistic or unpredictable path. Irrespective of the path that enterprise growth take, resources would have to be deployed for enterprise growth to take place. This assertion was espoused in an earlier study by Mateev and Anastov (2010). In a study on factors that explain enterprise growth, Mateev and Anastov concluded that enterprise growth is related to size, finanacial structure and productivity. Based on their findings, one can argue that the prime mover of the size of enterprise and productivity is the financial resources available to the enterprise.

Enterprise growth has many connotations. According to Kruger (2004) and Amoah-Mensah (2013), enterprise growth may be defined in terms of revenue generation, value addition or expansion, while others measure enterprise growth using mainly market position, product quality or customers goodwill. This was amply demonstrated by the research of Mac An Bhaird and Lucey (2010), Shinozaki (2012), Yiu, Su and Xu (2012) and Osei-Assibey, Bokpin and Twerefou (2012). According to Nthenge (2013), the effect of credit on the growth of MSEs can be measured by using its output, assets, technology adopted, and also by using the number of employees, market share and profits (Mwangi & Wanjau, 2013; Simwa & Sakwa, 2013). Even where factors such as the number of family workers, level of fixed assets, higher labour cost and the general economic environment is controlled credit significantly increased enterprise growth(Babajide, 2012). Access to credit has also been found to significantly increase expenditure on assets. A study in Nigeria by Abdulsalam and Tukur (2014) showed that firms that access credit increase their assets.

Closely related to credit and aquisition of assets is technology adoption. In a technologically changing world, the ability of an enterprise to take advantage of technological change and to adapt to new or mordern methods of production often adds to the growth of enterprise. Various studies (Moyi, 2013; Wang, 2013) show that volume of credit positively associate with adoption of new technology since technology change is expensive and requires some amount of external finance. As an enterprise gets access to external finance, the assumption is that capital

-labour ratio will increase. This may lead to the employment of more labour, that is, if the increase in finance is not invested in labour saving techniques of production (Mwangi & Wanjau, 2013). Simwa and Sakwa (2013) found positive, but small, effects of credit on the number of paid employees in MSEs. On the other hand, if MSEs are not in a position to pay for additional labour then the use of unpaid family labour becomes the best option.

For several reasons, many MSEs either refuse to declare their profits or under estimate it. However, literature shows that access to credit has a positive effect on income and profit. Gitonga (2010) for example, found the effects of credit on enterprise income and profit to be cummulative among repeated borrowers. Gitonga (2010) and Wang (2013) found that higher incomes and profit resulting from credit are often associated with increase capacity utilisation, diversification of goods and services sold or lower cost of supplies and raw materials. However, it is not automatic that once an enterprise gets access to credit, the effects on enterprise growth, often measured by profits, should be positive. Several studies have found some negative effects of credit on enterprise growth. Malesky and Taussig (2009) cautioned that the effects of credit on enterprise growth could be limited when credit is provided without cost reduction or sales increasing measures in a highly competitive markets and in some cases where credit funds are diverted and not invested in the enterprise. Also, in situations where the the loan size is too small it will constrain the ability of the firm to raise production to an efficient level. Lastly, when credit is granted to MSEs that are already

operating at an effective and efficient level of production, the effect of credit on growth may not be realised.

MSEs accessibiltiy to credit is explained by a number of factors. These factors include information on the character of the borrower's credit worthiness or the ability to provide collateral or guarantos of sound financial statnding (Kira & He, 2012); technical feasibility and financial viability of firms; banking culture of firms; and cost of borrowing (interest rate). For example, the macro-economic environment could affect MSEs accessibilty to credit. As Lawson (2007) has avered, higher interest rates reduce MSEs' demand for credit and may lead to adverse selection of applicants with corresponding higher risk of failure and non-repayment. According to Osei-Assibey et al (2012), information on the character of the borrower's credit worthiness, technical feasibility and financial viability of firms largely determine MSEs access to credit because credit institutions prefer to lend to firms that are capable of paying back. In this respect, a good banking culture will enhance a borrower's chances of accessing credit.

The nexus between credit and MSEs' growth as presented in Figure 1 assumes that when firms benefit from credit facilities, the credit is immediately invested. Investment may take different forms – adoption of technology through the purchase of machines, equipment and tools; addition to working capital; hiring of labour and the purchase of raw materials. If these are effectively combined, it results in increases in output and if matched by a corresponding increase in demand will result in increased profits, all other things being equal. It is important to note that the

framework uses profit as proxy for enterprise growth (Gitonga, 2010). However, the framework acknowledges that the effects of credit on enterprise growth may be constrained by some intervening variables. These variables include: small market size, inadequacy of credit, diversion of credit and the allocation of credit to already efficient enterprises.

Methodology

The study adopted the quantitative research design which was both analytical and correlational. The target population comprised the clients of five traditional non-bank financial institutions in the metropolis (NBSSI, EMPRETEC, ARCCU, Standard Grassroots and Sinapi Aba Trust). It was learnt from the

Figure1; framework for credit and enterprise growth
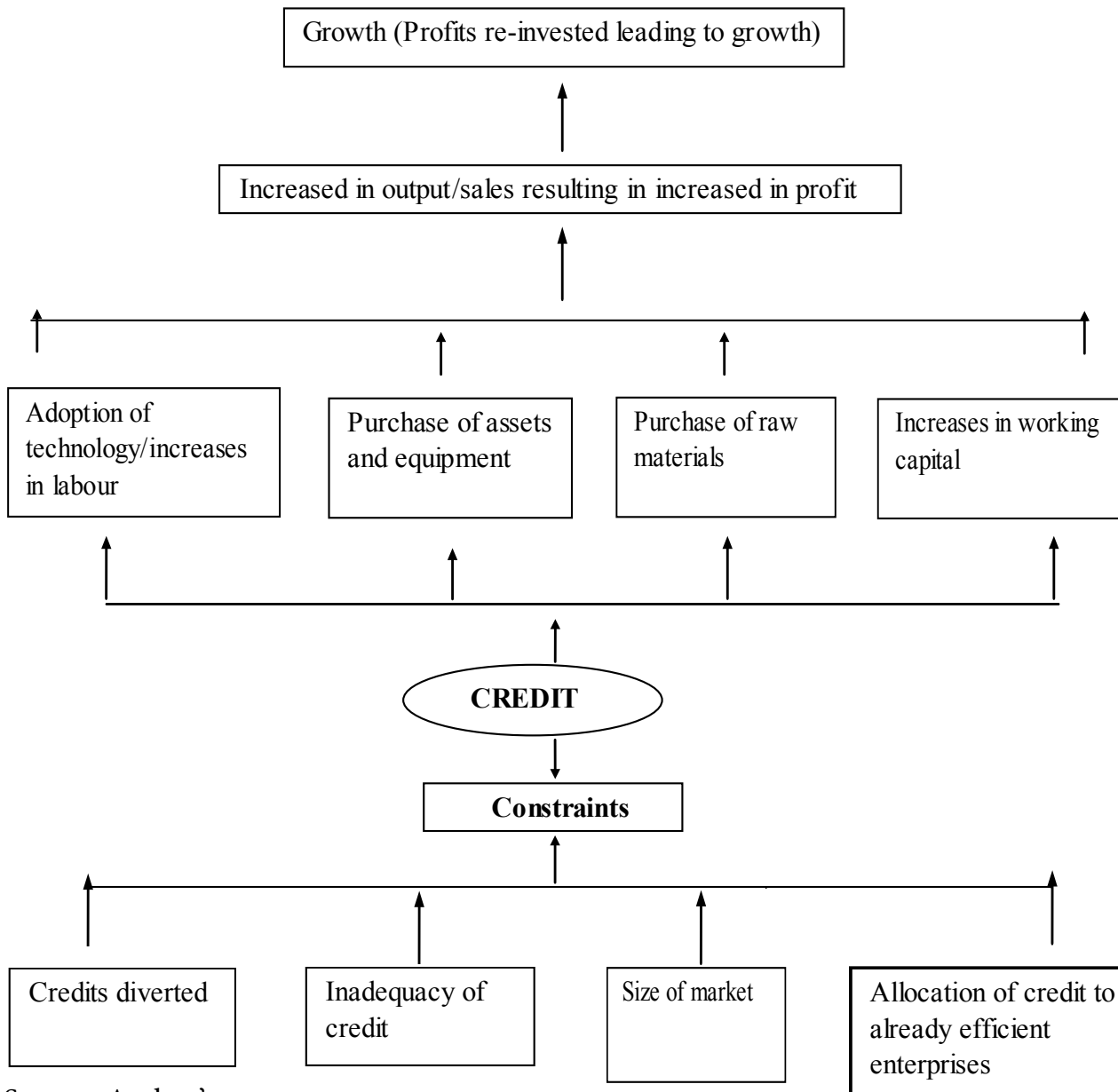
Source: Author's construct

Business Advisory Centre, the institution mandated to provide advisory services to MSEs, that the exact number of MSEs in the metropolis could not be known due to the high entrance and exit rates. Coupled with this limitation is the fact that the majority of MSEs do not register with the Registrar General's Department, an authorised body for the registration of businesses in Ghana. However, as of the time of the study 683 MSEs were in good standing in the books of the Registrar's Department. In view of this, an estimated number of 1000 was given to be the population of MSEs in the Sekondi-Takoradi metropolis. Out of this, about 31.5 percent were in the food industry, dressmaking and garment – 30 percent,

the formula pq $(z)2/E2$ (Foddy, 1998) where p = the proportion estimate, $q = 100 - p$, z = the value of the confidence level, E = maximum error tolerated. Given the formula, $[(50*50)*(1.96)2] / (10)2 = 96.04$, a sample of 96 was drawn for the study. In order to ensure representativeness, a multistage sampling procedure was adopted. First, all the firms that have benefited from credit, from 2008 – 2013, were stratified into sub-sectors. The proportionate sampling procedure was then applied followed by a simple random sampling.

Data were collected from both primary and secondary sources. The primary data were collected using questionnaires. The questionnaire was the most appropriate as it enabled

Table 1: Distribution of sample by sub-sector

Sub-sector	Number	Percent
Food	24	25.0
Furniture	21	21.9
Dressmaking	21	21.9
Electrical	11	11.5
Hairdressing	7	7.3
Construction	6	6.2
Others	6	6.2
Total	96	100.0

wood and furniture – 19.6 , electrical – 10 percent;with others comprising 8 percent. A sample size of 96 MSEs was drawn using

respondents to consult their files to retrieve relevant information/data. The questionnaire was pre-tested in the Cape Coast Metropolis.

The area was selected because of accessibility and the fact that the metropolis equally has a lot of MSEs that have benefited from credit facilities. Some problems were identified with some items and they were corrected before the final fieldwork. The secondary data came from financial statements of the enterprises, even though some of the enterprises did not observe proper book-keeping practices. As a result, most of the sampled enterprises relied on recall for data related to sales and profits.

Data were collected in March 2013. The staff of the selected financial institutions accompanied the researcher to the work places of their sampled clients who had benefited from credit. Informed consent was sought and the respondents were assured of anonymity and confidentiality with respect to the information given. Data from the field were analysed using the Statistical Product and Service Solutions (SPSS) software version 19. Accessibility to credit was categorised as follows:

- Right quantity at right time: this is de fined as accessibility
- Right quantity at wrong time: this is defined as accessibility
- Wrong quantity at right time: this is defined as accessibility
- Wrong quantity at wrong time: this is defined as no access

Firm growth was measured primarily in terms of changes in profits, employment (workers), working capital, equipment and sales. Employment was measured using the number of supporting staff, both paid and apprentices while the value of assets of the firm was used to measure equipment. Profits, as used in the analysis represent net profit. In order to determine enterprise growth, a simple log linear regression analysis was done and the coefficient tested to establish the effects of size of credit on the growth indicator variables. The choice of this analytical too was informed by the works of Mburu (2009), Hill et al (2010) and Mwololo (2011) as these authors have used regression model to examine the effect of credit on enterprise growth. The log linear model is given as:

Log profit = a + b (log size of credit)
Log number of workers = a + b (log size of credit)
Log working capital = a + b (log size of credit)
Log equipment = a + b (log size of credit)
Log sales = a + b (log size of credit

Where: a is the constant and b is the coefficient of the independent variable. The results and discussion are presented in the next section.

Results and discussion
Credit accessibility

In order to examine MSEs' accessibility to credit, the firms were asked to indicate their source of information on credit availability. About 43 percent got to know of the credit institution through friends, family and church members as compared to 34.4 percent of the MSEs that got the information through public education – radio and television and market place education. The rest (20.8%) of the firms got to know of the credit institution by attending business meetings. The details are presented in Table 2.

Table 2: Sources of information on credit institutions

Source of information	Frequency	Percent
Friends, family and church members	41	43.0
Public education (Radio and television)	33	34.4
Business meetings	20	20.8
Others	2	1.8
Total	96	100.0

Source; Field data, 2013

The next issue that the study explored with respect to credit accessibility is the extent to which loans requested for were granted. The financial records of the non-bank financial institutions show that, on the average, 63.3 percent of loans requested for were granted. Sinapi Aba Trust granted the highest (77.3%) request, followed by Standard Grassroots (70.8%). NBSSI, ARCCU and EMPRETEC granted between 41 percent and 43 percent. Regarding MSEs' accessibility to credit, the firms indicated the timing and adequacy of loans received. The majority (61.5%) of the MSEs were of the view that the amount they often receive as loans were inadequate and that the loans were often granted at wrong times (Table 3).

Table 3: Credit accessibility

Accessibility	Frequency	Percent	Category	Percent
Adequate at the right time	12	12.5	Accessibility	
Adequate at the wrong time	15	15.6	Accessibility	38.5
Inadequate at the right time	10	10.4	Accessibility	
Inadequate at the wrong time	59	61.5	No accessibility	61.5
Total	96	100.0		100.0

Source; Field data, 2013

As can be seen in Table 3, the majority (61.5%) of the MSEs were of the opinion that the quantum and the timing for credit delivery in the metropolis were not good. The availability of loanable funds also affected MSEs' accessibility to non-bank credit. This view was shared by the credit institutions as all them admitted that in most cases the timing of loan application by MSEs was wrong and this was due to the bureaucracy involved in loan disbursement. The major reason assigned for the delay was that credit institutions needed enough time to assess the viability and credibility of applicant.

The difference in the type of enterprise and credit accessibility was tested using the Chi-square test of homogeneity. At the 5 percent level of significance, the study found no significant relationship between type of enterprise and credit accessibility ($\chi2 = 5.434$, p-value = 0.22). The factors identified to affect MSEs' accessibility to credit included access to information about credit availability, viability of firm (30.8%), high interest rates (27.2%), good banking culture (14.4), availability of loanable funds (14.0%) and cumbersome procedures for loan acquisition (13.6%) (Table 4).

Table 4: Factors that affect MSE's accessibility to non-bank credit

Factors	Frequency	Percent
Viability of firm	75	30.8
High interest rate	66	27.2
Good banking culture	35	14.4
Availability of loanable funds	34	14.0
Cumbersome procedures for loan acquisition	33	13.6
Total	243*	100.0

Source; Field data, 2013   * Multiple responses exist

The credit institutions indicated that information on clients or would-be borrowers play a major role in loans granted. These include nature of business, years of operation, banking culture of applicants and volume of sales and profits. According to the credit institutions, such information enables them to determine the credit worthiness of applicants.

The findings were similar to Osei-Assibey et al (2012). In a study on microenterprise finance preference, the authors found that information on the character of the borrower's creditworthiness, technical feasibility and the financial viability of firms largely determine their access to credit. All the financial institutions interviewed mentioned that loans were given to firms already into businessand viable firms with good track record.

The viability of firms was analysed through the business plan, giving details about sales and profits in previous years. The finding is similar to Mac An Bhaird and Lucey (2010). According to these authors, credit institutions prefer lending to firms that are capable of paying back the amount borrowed with interest thereof. Contrary to the findings of Mac An Bhaird and Lucey (2010), Aryeetey et. al. (1994) earlier found that micro enterprise finance institutions generally place primary emphasis on personal character and experience and much less on project viability.

With regard to interest rate as a factor that affects credit accessibility, the various credit institutions charged different interest rates. While EMPRETEC Ghana charged between 30 percent and 35 percent, NBSSI charged 20 percent compared to Grassroots Financial and ARCCU that charged 30 percent. The lowest interest rate (19%) was charged by Sinapi Aba. The different interest rates charged by the institutions reflected in the number of firms that approached them for loans. However, considering the rate of inflation at the time of the study, which was around 16 percent, the real interest rate ranged from 3 percent to 19 percent. About 27 percent of the MSEs were constrained by these high interest rates. Following from the findings, Lawson (2007) has averred that higher interest rates reduce demand for credit. The result is similar to what Mwololo (2011) found. According to Mwololo, high interest rates reduce access to credit and lead to adverse selection of applicants with corresponding higher risk of failure and non-repayment. Another important contributory factor for credit accessibility among MSEs was banking culture. Even though the study

was limited to non-bank credit, one of the sampled credit providers (EMPRETEC) insisted that beneficiaries of credit ought to have bank accounts, preferably a current account. According to the credit manager of EMPRETEC Ghana, loan beneficiaries were made to sign monthly post-dated cheques covering the principal and the interest. . This practice, as alluded to by the manager, ensured a good recovery of loans. The managers of ARCCU and Standard Grassroots maintained that loan applicants could only be granted loans after a minimum period of six months savings. These findings confirm those of Osei-Assibey et al (2012) that firms that develop a very good banking culture stand a better chance of accessing credit.

Related to the availability of loanable is the time that loan applications take as well as the procedure for loan acquisition. About 13.6 percent of the responses on the factors affecting non-bank credit accessibility related to cumbersome procedures. MSEs opined that the procedures involve the provision of collateral and guarantors. However, only 33.3 percent of the firms confirmed that the need to provide collateral and guarantors of sound financial standing was a constraint to credit accessibility. In effect, firms that are able to provide collateral increase their accessibility to finance (Kira & He, 2012; Mac An Bhaird, 2010).

Usefulness of credit

The data suggests that MSEs used the loans they received to increase working capital, labour, purchase of equipment and assets, which is related to technology, and raw materials. These effectively combined increase

the firm's output, sales and profits. Even though this process is impeded when credit is diverted, as espoused in the conceptual framework, or the size of market is small, there was no such case with the sampled firms. The rest of the details on the uses of credit, as indicated by the respondents, are captured in Table 7. It can be seen in the table that the majority (73.9%) of the MSEs used the loans to increase working capital. This was attributed to the high rate of inflation in Ghana which forces firms to demand credit for capitalisation and re-capitalisation in order to meet recurrent expenditure and to increase growth. The finding confirms those of Mburu (2009), Hill et al (2010) and Mwololo (2011). In a study in Nairobi, Kenya (Mburu and Mwololo) and New York, USA respectively, the authors found that most of the firms that accessed credit invested it in working capital, equipment, raw materials while others used the credit to hire labour.

Table 7: Usefulness of loans

Usefulness	Frequency	Percent
Increase working capital	71	73.9
Purchase of equipment/assets	11	11.5
Purchase of raw materials	10	10.4
Adoption of technology	3	3.1
Employment of additional workers	1	1.1
Total	96	100.0

Source; Field data, 2013

Volume of non-bank credit and enterprise growth

This section addresses issues pertaining to the effects of size of credit on the growth of firms. Various factors were identified to contribute to enterprise growth, namely: working capital, labour, assets of the firm, equipment and working capital. The details of the descriptive statistics of these variables are presented in Table 5.

Table 7: Usefulness of loans

Variable	Minimum	Maximum	Mean	Median	Skewness	Standard deviation	Quartile deviation
Size of credit	500	20 000	850	1000	-2.61	172.4	400

Profit	200	3500	1620	2000	-1.18	322	300
Sales	1000	60 000	3800	4000	-0.8	250	320
Workers	1	7	3.3	3	0.32	0.9375	2
Equipment	300	50 000	1200	1000	2.2	90.9	120
Working capital	500	15 000	2800	3500	-1.2	583.3	520

Source; Field data, 2013

With respect to the size of credit, the minimum was Gh¢500 while the maximum was Gh¢20000. The distribution of size of credit was negatively skewed (skewness = -2.61) indicating that the size of credit secured by the majority of the sampled firms was more than the mean (Gh¢850). The median size of credit received was Gh¢1000 with a quartile deviation of Gh¢400. The minimum monthly profit earned was Gh¢200 compared to a maximum of Gh¢3500. The median monthly profit was Gh¢2000 (mean = 1620, skewness = -1.18) with a quartile deviation of Gh¢300. Similar to size of credit and monthly profit, the distribution of monthly sales was also negatively skewed (skewness = -0.8).

While the minimum monthly sales was Gh¢1000, the maximum was Gh¢60000. The median monthly sales was Gh¢4000 (mean = Gh¢3800) with a quartile deviation of Gh¢320. The next distribution examined was working capital. The minimum was Gh¢ 500 as compared to a maximum of Gh¢ 15000. The working capital of the majority of the sampled firms was higher than the mean (Gh¢2800) working capital. The median working capital was Gh¢ 3500 (skewness = -1.2) with a quartile deviation of Gh¢520. The distribution of the value of equipment was positively skewed (skewness = 2.2). The value of equipment for the majority of the sampled firms was lower than the mean (Gh¢ 1200). The median equipment value was Gh¢1000 with a quartile deviation of Gh¢ 120. The distribution of the number of workers, on the other hand, approximated normality. The mean number of workers was approximately 4 (median = 3, skewness = 0.32) with a standard deviation of 2.

As indicated in the conceptual framework, labour, equipment, working capital and technology, if effectively combined, should lead to enterprise growth, measured primarily by increases in profits. Using profits as a proxy for growth stems from the conceptual framework that assumes that firms invest credit and that investment takes different forms – purchase of equipment, increases in working capital, increases in labour (workers) and sales. A simple log linear regression result using size of credit as the independent variable and the growth indicators as the dependent variables is presented in Table 6.

Table 6: Regression results

Variable	Method	R2	F	P-value	Coefficient
Working capital	Linear	0.708	38.79	0.000**	1.1245
	Log	0.704	38.08	0.000**	15.8832
	Growth	0.689	35.51	0.000**	0.0729
Workers	Linear	0.495	15.66	0.001**	0.5180
	Log	0.483	14.98	0.001**	7.2540
	Growth	0.455	13.31	0.001**	0.0910
Equipment	Linear	0.308	7.13	0.017*	1.6319
	Log	0.290	6.54	0.021*	22.4257
	Growth	0.283	6.33	0.023*	0.1818
Sales	Linear	0.089	11.66	0.001**	0.9938
	Log	0.082	10.66	0.001**	13.2570
	Growth	0.064	8.18	0.005**	0.0891
Profit	Linear	0.104	13.89	0.000**	1.0456
	Log	0.096	12.69	0.001**	13.9554
	Growth	0.079	10.34	0.002**	0.1022

** Significant at the 99% confidence level
* Significant at the 95% confidence level

The first issue examined with respect to the effect of credit on enterprise growth is how the volume of credit received explain working capital. The overall explanatory power was high and significant (R^2 = 0.704, F-statistic = 38.08) (Table 6). The results showed that credit significantly explains working capital (b = 15.8832, growth coefficient = 0.0727, p-value = 0.000) (Table 6). In effect, increases in the size of credit leads to increase in working capital. The findings are in line with Mwololo's (2011) claim that most MSEs in developing countries rely on credit for growth.

With respect to the effect of size of credit on number of workers, the majority of the MSEs interviewed had added one or more workers. While two of the firms reduced their number of workers as a result of the credit they received, 29.2 percent of them did not add to the number of workers. The highest number of workers added was 13. The effect of credit on the number of workers employed was direct and significant (b = 7.254, p-value = 0.000) with a growth coefficient of 0.0729 (Table 6). The findings are similar to those of Hill et al (2010) and Moyi (2010). The authors opined that credit leads to increases in the number of workers, though the effects may be small.

The study also examined with respect to the effect of size of credit on enterprise growth is value of assets. The results of the study showed that only 11.5 percent of the MSEs used their credit to purchase tools, equipment and machines. This was attributed to the high non-response rate as only 15 percent of the sample provided information to this effect. Based on the number of non-response (85%), the valid sample of 16

firms was not large enough for any reliable inferences to be made.

The effect of size of credit on sales was also explored. Even though the concept of sales as an indicator of firm growth is questionable due to the possibility that high expenses may erode the value of profits and result in a negative growth, an increase in sales of an enterprise may be a good sign that the enterprise is doing well. Findings from the study show increases in sales after firms had accessed credit, and the sale increased with the size of credit. Increases in sales due to credit was found to be statistically significant (b = 13.257, p-value =0.001, growth coefficient = .0891) (Table 6). This confirms Cristina et al (2014) assertion that credit positively affects sales. In a study involving 54 firms in Spain, Cristina et al found that firms recorded higher sales after they had accessed credit.

The framework for the study uses profits as proxy for enterprise growth. The major issue that emerged from the field was that many of the firms did not have authentic data to support declarations of profits and so relied on recall to estimate their profits. While some of the firms refused to declare their profits others probably underestimated them for fear of taxation. All the same, the figures given by the sampled firms did show positive effect of size of credit on profits. It was observed from the study that entrepreneurs take their daily housekeeping money from the firm's returns. This housekeeping money is assumed to be their salary even though they do not officiary earn salary. Therefore, profit quoted by the firm is assumed to exlude their salaries. The data showed a significant positive effect of size

of credit on enterprise profits (b = 13.9554 with a growth coefficient of 0.1022, p-value of 0.002) (Table 6). This corroborates the findings of Gitonga (2010), Hill et al (2010), Mwololo (2011) and Wang (2013). While Gitonga and Wang found a positive effect of credit on enterprise profit, Hill et al and Mwololo explained further that the effect of credit on enterprise profits is higher when credit is invested in new technology, although opportunities for such investment vary across sectors and usually comes with increased risk.

Conclusions and policy recommendations

It became evident from the study that factors that affect MSEs' accessibility to non-bank credit are demand and supply driven. From the supply, side non-bank financial institutions were constrained by availability of loanable funds, viability of applicants' firms and poor banking culture of applicants. MSE's accessibility to non-bank credit is affected by inadequate information about credit availability, high interest rates and cumbersome procedure for credit acquisition. Most of the non-bank credit advanced to MSEs is less what they needed and are often disbursed at the wrong time even though the credit received mainly went to increase working capital. This is attributed to the high rate of inflation that forces MSEs to demand credit for re-capitalisation. Firms that access larger amount of credit experience increases in profits.

Based on the conclusions of the study it is recommended that non-bank financial institutions make information about credit availability readily accessible to MSEs. Also reduction in the cost of borrowing will increase MSEs access to credit. . In addition, non-bank credit institutions should grant adequate and timely loans, preferably two weeks after loan application, to MSEs and make the procedures for credit acquisition less cumbersome. A study of this nature should have examined the extent to management practices affect effective utilisation of credit. This would have given a broader picture about the issue investigated. Also, the findings of the study were limited by authentic data as most of the MSEs relied on recall for information that related to sales and profits.

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