

RESEARCH PAPER

**ASSESSING THE EFFECTIVENESS OF CREDIT RISK MANAGEMENT TECHNIQUES OF MICROFINANCE FIRMS IN ACCRA.**

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**ABSTRACT:**

*One fundamental problem faced by the Microfinance industry in Ghana during the period 2003-2007 was the technique adopted for credit risk management by the Microfinance firms (MFFs). This problem prompted this deductive study which was to assess the effectiveness of the techniques adopted by the MFFs to manage their credit risks during that period. The research examined the effectiveness of the techniques used by the firms. It was carried out with the support of a 5-member team from the Institute of Professional Studies, Accra, who assisted during the data collection phase of the study. The study was conducted using 20 Micro-firms in Accra which were randomly selected. The study established that the small MFFs were more vulnerable to credit risk than the bigger firms. The study came out with the recommendations that the MFFs should invest in computerised systems that would enable them compute and assess on a continuous basis, their credit risks track records and generate reports on credits granted. The firms should encourage their clients to insure against risk that might affect their businesses, invest in quality manpower so that they could assess their clients efficiently and help in managing their clients risk bearing portfolio. It was also recommended that the continuous use of written policies that guided most of the firms on credit granting should be encouraged by all the firms.*

**Keywords:** *Risk, Creditworthiness, Microfinance, Firms, Management, Loan,*

**INTRODUCTION**

The study covered the period 2003 - 2007 and mainly focused on MFFs located in Accra the capital of Ghana in West Africa. This period was selected due to the substantial growth in Small and Medium Scale-Enterprises (SMEs) which increased the demand for credit facilities in Ghana. Another reason for the choice of this period was that, several press and research reports on businesses in Ghana indicated that,

credit advancement to SMEs had been increasing within the period (Asiama and Osei, 2007). With this increment, the study sought to find out the credit management techniques put in place to ensure sustainable credit recovery. It also examined the effectiveness and appropriateness of the techniques used to recover the credits granted. The research was based on the assumption that credit recovery rates of 70% and above was high and below 70% was low.

Ghana witnessed a growth of the Microfinance industry from 2003 to 2007. A study conducted indicated that SMEs contributed between 23% and 30% to the annual GDP of Ghana (Asiama and Osei 2007). Most of these enterprises depended on credits granted by MFFs to support their day to day operations. In spite of the growth of the industry, there were several management problems befalling the industry among which was the management of credit risk. Preliminary studies conducted revealed that one major problem that affected the MFFs was the difficulties pertaining to the recovery of credits granted (Steel and Andah, 2003). Questions might be asked on how those institutions managed their credit risk: What were the methods employed by the MFFs in managing their credit risks? What were the credit recovery rates and the techniques put in place to improve the recovery rates? How effective were the techniques adopted by those firms? The awareness of those problems provided the needed motivation for this study.

#### **Credit Granting by Microfinance Institutions**

According to Steel and Andah (2003), microfinance refers to small financial transactions to low income households involved in micro-enterprise (both urban and rural), using non standard methodologies such as character-based lending, group guarantees and short-term repeat loans. In practice, the term is often used more narrowly to refer to loans and other services from providers that identify themselves as MFFs. Microfinance is meant to reduce poverty since it is directed towards the poor people in the economy and the effectiveness of the functions is dependent on having well defined credit granting criteria (Microfinance Gateway, 2009). The basis for an effective credit risk management process is the identification and analysis of existing potential risks inherent in all products and activities.

Sinkey (1989) indicates that the determination of creditworthiness of commercial banks is dependent on five conditions known as, the

'five Cs' of credit management. These are character (good citizen), capacity (a cash flow), capital (measured by the borrower's net worth), and position. The rest are collateral (i.e. quality of the asset pledged) and conditions about the economic measures of a borrower's vulnerability to environmental changes such as economic downturns (credit crunch). Credit granting by MFFs depend mostly on information systems and analytical techniques that enable management to measure the credit risk inherent in all balance sheet activities.

It has been proven that without unduly high risk, innovative techniques increase credit the availability of credit (Attuel-Mendes and Laurence, 2008). One of the credit rating models that could be applied to make MFFs credit rating and evaluation more objective is linear discrimination analysis which is a statistical technique for classifying the members of a portfolio according to their characteristics (Mao, 1976).

There is another model known as Loan Pricing Model which is typically a spreadsheet programme that takes a variety of information and calculates the loan rate needed to meet the institution's goals. The Loan pricing model is used for pricing individual loans based on the risk involved, rather than the entire portfolio and uses information such as loan volume, interest rate, cost of funds, operating expenses and loan terms to calculate a projected Return on Capital Employed (Micro Capital Story, 2009). The credit granting techniques used by MFFs make them face a number of risks (including financial, operational and strategic risks) in the pursuit of their objectives and are therefore required to develop and implement credit risks policies and strategies which should be approved and periodically reviewed by the Board of Directors (Bruett, 2004). To reduce the problems of moral hazard and adverse selection lenders MFFs are to use a risk management strategy which involves the combination of trust and monitoring (Berggren and Nilson, 2009). Research has shown that credit evaluation by MFFs reduce their price of financing

(Garmaise and Natividad, 2010).

The MFIs in Ghana include the Savings and Loans Companies, the Credit Unions, the Rural and Community Banks and the 'Susu' System. The Savings and Loans companies are non-banking institutions which are restricted by the Bank of Ghana to a limited range of savings. Financial NGOs which include MFFs like Sinapi Aba Trust, ECLOF and Cedi Foundation were also regarded as one of the Savings and Loans companies. The Credit Unions are regulated co-operative depository institutions where the creditors and the borrowers are the shareholders (Sikkos, 1994) and they are regulated by the Ghana Credit Union Association. The 'Susu' system is made up of Susu Collectors, Susu Associations, Susu Clubs and Susu Companies which provide savings products to help clients to accumulate their own savings over time periods ranging from one month to two years (Asiama and Osei, 2007). The susu collectors are the most visible and extensive form. In Ghana, even though, they mobilize savings, the central bank has refrained from attempting to regulate them, leaving them to try to improve the reputation and quality of the industry through self-regulation.

#### **METHODOLOGY**

The study adopted a cross sectional study approach that sought to find out the procedures employed in managing credit risk and the effectiveness of those procedures. The study utilised both qualitative and quantitative techniques for its analysis. According to statistics from Bank of Ghana as at 2007, there were 48 registered Non-Bank Financial institutions and six registered Rural Banks. The research covered 20 firms from the total of 54 MFFs in Accra which were selected using the stratified random sampling method. The MFFs were stratified based on their forms. The forms (strata) of the micro-finance firms for the purpose of this study were the traditional (commercial) banks with micro-finance sections, rural banks, savings and loans companies, credit unions and the 'susu' associations. These firms were further classified by

size - large and small. The classification considered the number of branches the firm had and the size of the firm's business office. For the purpose of the research, two firms each were randomly selected from the large traditional banks, the small traditional banks and the credit unions. Three large and seven small savings and loans companies, two 'susu' associations as well as two rural banks were selected. The sample selected was determined by the number of firms existing in the market and the intensity of credit risk problems identified during a preliminary study carried out by Asiamah and Osei (2007). The study targeted credit managers and/or staff of the credit management departments of the firms.

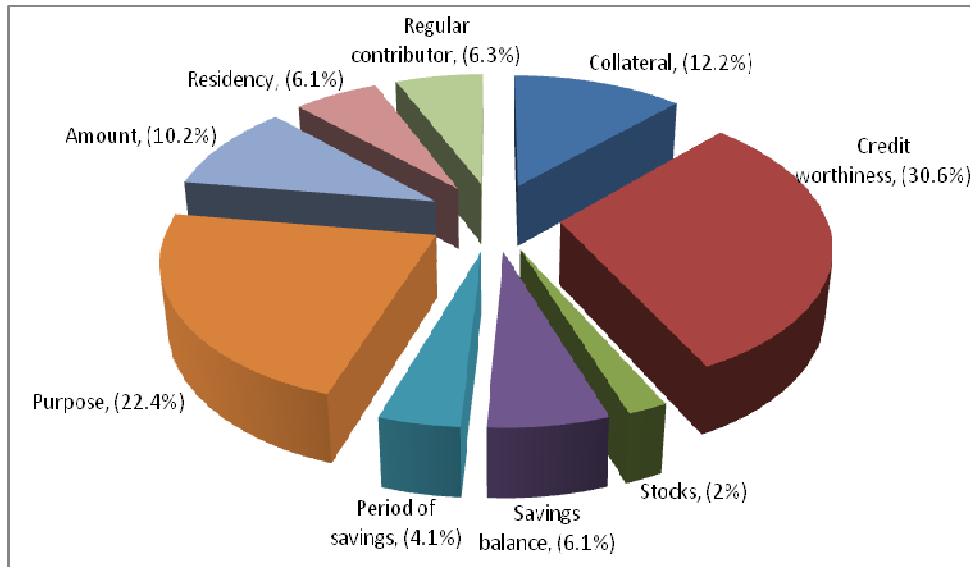
#### **RESULTS**

The team mailed questionnaire to the 20 sampled MFFs in Accra out of which 19 representing 95% were answered and returned. Out of the nineteen firms, one of them had been in operation since 1986, six commenced business between 1996 and 2003 while the remaining 12 commenced business between 2005 and 2007. The study revealed that eleven of them were licensed and supervised by the Bank of Ghana, seven by the Credit Union Association (CUA) while one was supervised by Money Lenders Association. It was realised that all (100%) the respondents had written policies that guided them in their credit granting process but 94.7% (18) of them periodically reviewed their policies. It was again revealed that seven of the respondents trained their staff four times in a year, four of them twice and one once in a year. Three of them trained their staff every month while the other three representing 15.8% were undecided on the number of times their staffs were trained in a year. The pie chart below (Fig. 1) demonstrates the type and frequency of the factors used in granting credit. In determining the credit worthiness of clients, Fig. 2 below indicates eleven (57.9%) of the firms considered character while nine (47.4%) considered savings and cash flow before granting credits. Moreover, three (15.8%) of them each considered guarantor/collateral, business type

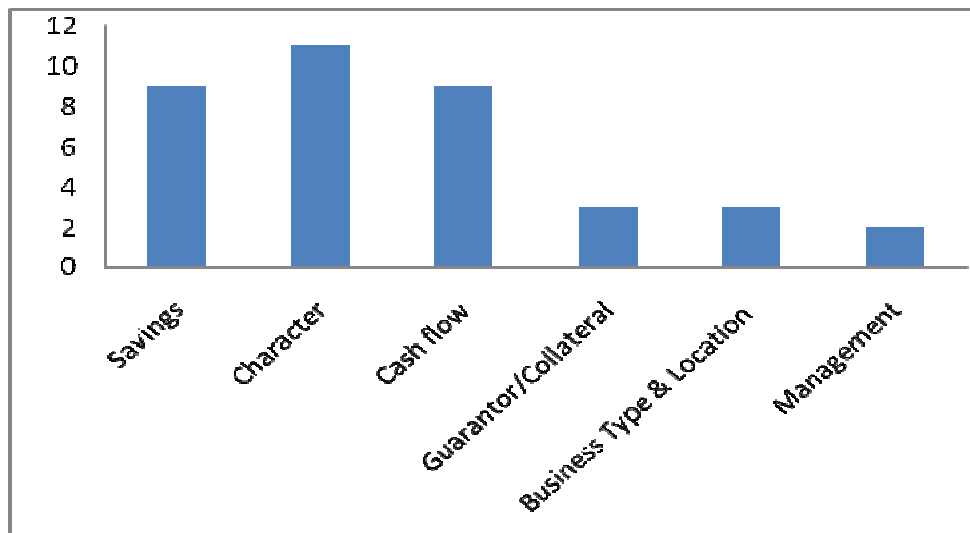
and location whiles the remaining two (10.5%) considered the quality of management of the client's firm.

The study also showed that five (26.3%) of the

MFFs required cash and cash equivalents, four (21.1%) other business assets, four (21%) guarantors, two (10.5%), two (10.5%), and one (5.3%) shops/business premises, household appliances and stocks respectively with one (5.34%) for mortgages.



**Fig. 1: Credit granting factors**  
 Source: Field Data, 2009

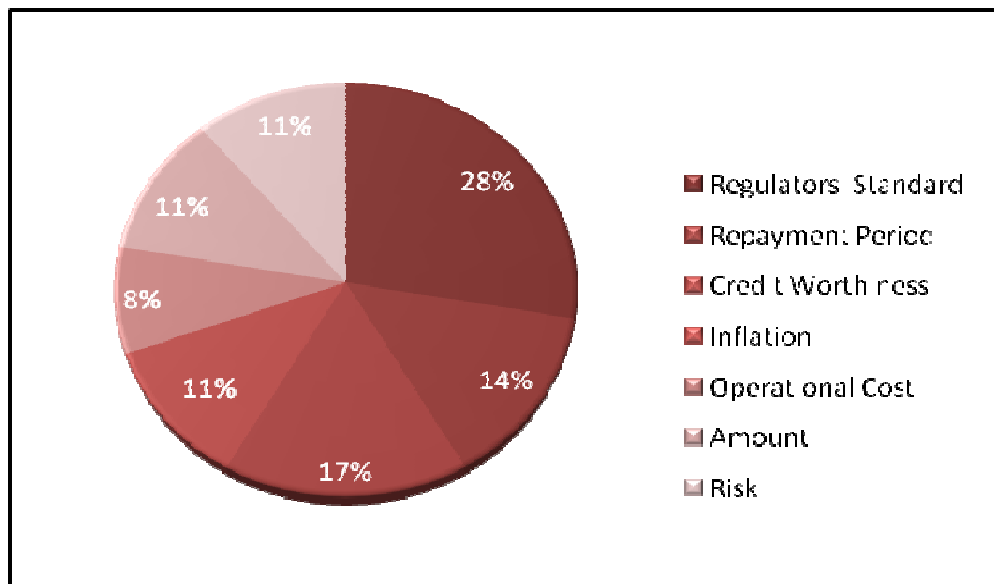


**Fig. 2: Credit worthiness factors**  
 Source: Field Data, 2009

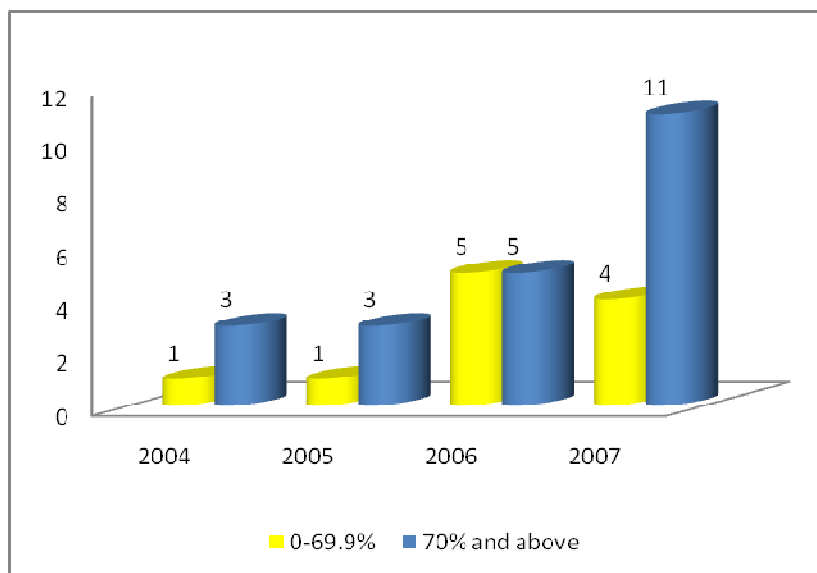
As indicated in Fig. 3 below, 28% considered regulators’ standards; 17% and 14% the credit worthiness of the client and the repayment period for the loan respectively; 11% inflation; 8% operational cost in the determination of interest charged on loan. Sixteen (84.2%) of the MFFs persistently monitored the clients business after credit was granted while three (15.8%) did not. The study also revealed that 50% of the MFFs indicated that monitoring of clients businesses helped them to detect early warning signals while 25% used monitoring to ensure that loans were used for the agreed purpose. Twenty-one percent stated that monitoring helped in giving pieces of advice to clients on how to manage their businesses whereas a few (4%) indicated that it enabled them to assess the performance of the client’s accounts. The result also revealed that eleven of the respondents undertook micro insurance policies to cover the credit risks inherent in their activities but seven did not.

year 2005. In 2006, five achieved a recovery rate of 70% and above while the other half recovered below 70%. There was an increase in the number of MFFs that recovered 70% and above from five in 2006 to eleven in 2007 as well as a 20% drop of recovery below 70% from five in 2006 to four in 2007. The interview revealed that prior to the application most of the MFFs required their customers to meet some basic conditions such as applicant possessing a national ID, being in business for not less than six months, being an active account holder for at least 3-6 months depending on the organisation. Past credit history with the MFFs and other financial institutions, account operation, and in some cases, the applicants’ behaviour towards other debt obligations (e.g. light bills, school fees etc.) were considered. The financial institutions visited the business premises of the applicants to assess the client’s stocks (inventories), sales books, the business operation cycle (stock – cash replenishment cycle), the viability and permanency of the location and the financial statements. Other relevant information was also gathered from the client’s business partners and/or neighbours.

As depicted in Fig. 4 below, in 2004, three achieved at least 70% of loan repayment, whilst one could not. Similar result was shown for the



**Fig. 3: Factors determining interest on credit**  
 Source: Field Data, 2009



**Fig. 4: Credits recovered**

*Source: Field Data, 2009*

At the end of the assessment, the responsible Credit Officer presented the report to the Credit Committee for review and approval or rejection. Where the applicant met the MFF's criteria for creditworthiness the loan was approved. Usually, credits above a certain limit such as GHC 1,000 could only be approved by an appropriately designated authority depending on the organization. The study also identified that the MFFs had systems in place which enabled them to keep track of credits granted. Thirty-five percent of the firms (mostly the well established ones) had special software programmes such as Custom Ware, Bankers Ream (BR), Sikambra and Micro Banker that prompted them on the repayment dates of loans, to generate reports on each client and the total credit portfolio. However, 15% of the firms still depended on the manual system where loan records/ledgers were used to check daily and/or weekly due repayments and informed clients accordingly. This allowed the MFFs to identify clients' payments and outstanding balances.

#### **DISCUSSION OF RESULTS**

MFFs are required to develop and implement

credit risks policies and strategies which should be approved and periodically reviewed by the Board of Directors. The policies should reflect the firm's risk tolerance and the level of profitability the firms expect for incurring various risks (Bruett, 2004). From the data analysed, all the nineteen MFFs had written credit policies out of which Eighteen (95%) periodically reviewed and applied their policies. One (5%) MFF respondent neither periodically reviewed nor consistently applied their credit policies. It could also be deduced from the analysis that, the MFFs considered profitability in setting their interest rates. This was because the firms considered factors such as credit risk, inflation, operational costs, credit worthiness of clients and duration for repayment in determining their interest rate which would help to achieve their desired level of profitability (Micro Capital Story, 2009).

The firms are to have a well-defined credit granting criteria which should include a clear indication of their target market, a thorough understanding of the borrower as well as the purpose and structure of the credit and its

source repayment (Sinkey, 1989). All the MFFs interviewed clearly defined their target market. They also had a clear credit granting process as indicated by their lending processes. In addition, the organizations had policies that guided them with regards to whether to reschedule the repayment period, restructure or refinance credit or loans but some did not follow the policies consistently (Bruett, 2004). Similarly, it was reflected that the most important factor considered by MFFs in credit granting was credit worthiness of clients. Even though some of them (12.2%) required collateral, more attention was paid to the ability and willingness of the client to repay the loans. Other factors such as guarantor/collateral, business type and location and the quality of management were considered. In addition, those factors helped them to understand the financial condition of all borrowers and they were able to promptly detect all problem loans for remedial action to be taken. Most of the MFFs considered cash and cash equivalent (liquid) as a form of security in granting credits. It was also established that most of the firms had a system in place for monitoring the clients business after credits were granted.

The study analysed the credit risk management process and control based on the Basel Committee's recommendations in the year 2000 on credit risk management, which examines the appropriateness of the credit risk environment, credit administration, measurement and monitoring process; adequacy of control over credit risk and soundness of the credit granting process. Based on the analysis the study ranked the techniques according to the following order of priority:

- Character (29.5%)
- Cash flow & Savings (24.3%)
- Guarantor/collateral (8.1%)
- Business type and location (8.1%)
- Management of the client (5.4%)

In order to ensure adequate control over credit risk, financial institutions are required to establish a system of independent, ongoing assess-

ment of credit risk management process and the results communicated to the board for remedial action. MFFs should have established systems that enable them to grant credits within the level approved by senior management or board of directors. The systems should enable them to monitor and ensure that the laid down criteria for credit granting were consistently applied (Micro Capital Story, 2009). However five (26.3%) of the firms assessed, even though their credit granting criteria were not consistently adhered to, saw very high improvement in their credit recovery rates. It was further revealed that traditional banking methodologies (e.g. use of collaterals and landed properties) were being introduced by some of the traditional banks with micro-finance departments (12.2%),

#### **CONCLUSION**

In the assessment of the effectiveness of credit risk management of MFFs in Accra, it was revealed that the MFFs had written policies that guided them on credit granting and its related risks. Most of the firms periodically reviewed and consistently applied their credit policies in order to reflect the firms' risk tolerance and the level of profitability the firms expected. The firms trained their credit staff to make them more effective in managing their credit risk. In addition some of the firms undertook micro insurance policies to cover their credit risk. It was however, revealed that most of the firms still relied solely on the manual systems in tracking their clients. The study concluded that most of the techniques used for the management of credit risk by MFFs in Accra within the period (2004-2007) were not quite effective. It was also concluded that the best technique for determining the credit worthiness of clients was to study their character, savings and cash flow.

#### **RECOMMENDATIONS**

Based on the findings it was recommended that the MFFs should invest in computerized systems (technologies) that would enable them compute and assess on continuous basis their credit risks track and generate reports on credits

granted.

The firms are to undertake insurance policies to cover loans granted to clients and also encourage their clients to insure against risks that might affect their businesses. To have good customer care which will enable the firms to compete very well, the MFFs are to keep a close relationship with their clients by constantly visiting them not only to receive payments, but also to assess their performance, character and offer appropriate technical and financial advice.

To equip the workforce with the know-how for such financial business the firms are to invest in quality manpower and constantly offer training to help the workforce, efficiently assess the clients and manage their credit risk bearing portfolios.

To quickly take remedial action where problems exist, the MFFs are to keep records of credits granted and recovered on total portfolio in order to assess performance instead of considering only the net spread (profit) as a measure of performance.

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