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A CRITICAL APPRAISAL OF RISK MANAGEMENT STRATEGIES OF MICROFINANCE INSTITUTIONS IN GHANA**ALHASSAN BUNYAMINU****LECTURER****BANKING & FINANCE DEPARTMENT
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ACCRA****ABSTRACT**

*This research seeks to subject the risk management strategies employed by Microfinance Institutions (MFIs) in Ghana to critical appraisal. The researchers consequently focused on ten (10) MFIs as a representative sample of MFIs from various regions in Ghana. They include: Greater Accra, Eastern, Central, Western, Ashanti, Northern and Brong Ahafo Regions. The researchers used questionnaire constituted by open and close ended questions. Original data collection was facilitated by targeting the clients, staff and management of MFIs in the country. The STEPWISE method of Regression Analysis was used establish the inter-relationship between Microfinance Risk Management and independent variables such as Need for Standard Procedure for Delinquency Follow-up, Sanctions against Defaulters, Need for Better Loan Collection & Disbursement Strategies, Provision of credit advice and Demand for collateral as factors contributing to microfinance risk management. The study revealed that **Demand for collateral** and **Provision of credit advice** are the significant contributors to **Microfinance Risk Management** at 0.05 level of significance. The study additionally established that the upsurge in loan repayment default poses a considerable threat to operational excellence and organizational prosperity. These challenges notwithstanding, the micro finance business climate in Ghana is favourable with most MFIs posting high returns on investments.*

KEYWORDS

micro finance, risks, strategies, loans, default.

1. INTRODUCTION

Microfinance organisations are fast becoming a dominant force in the Ghanaian economy. The microfinance concept in Ghana originates from the practice of what is termed as “susu”. The “Susu”, was aimed at mitigating the widespread poverty that has engulfed low income earners in Ghana. This was to provide those within the low income bracket a window of opportunity to access credit because; such low income earners are unattractive when Commercial Banks are considering loan provision [1]. The industry, over the years has evolved greatly, thanks to the enactment of a plethora of favourable financial sector policies such as:

- Provision of subsidized credits in the 1950s;
- Establishment of the Agricultural Development Bank in 1965 specifically to address the financial requirements of the fisheries and agricultural sector;
- Establishment of Rural and Community Banks (RCBs), and the introduction of regulations such as commercial banks being required to set aside 20% of total funds portfolio, to promote lending to agriculture and small scale industries in the 1970s and early 1980s.
- Paradigm shift from a restrictive financial sector regime to a liberalized regime in 1986;
- Promulgation of PNDC Law 328 in 1991 to facilitate the establishment of various categories of non-bank financial firms, including savings and loans companies, and credit unions [2].

These favourable financial policies have sparked the emergence of three main types of micro finance organisations:-

- Formal finance providers such as savings and loans companies, rural and community banks, as well as some development and commercial banks;
- Semi-formal finance suppliers such as credit unions, financial non-governmental organizations (FNGOs), and co-operatives;
- Informal suppliers such as “susu” collectors and clubs, rotating and accumulating savings and credit associations (ROSCAs and ASCAs), traders, moneylenders and other individuals.

Formal finance providers such as savings and loans companies and rural community banks are institutions authorized and permitted under Bank of Ghana’s regulations to accept deposits and provide credit facilities to the public [2]; Semi-formal suppliers such as credit unions, financial non-governmental organizations (FNGOs), and co-operatives also have approval to collect contributions and provide micro credit [3]; Informal suppliers are those in the category of credit unions, financial non-governmental organizations (FNGOs), and cooperatives, susu collectors and clubs, rotating and accumulating Savings and Credit Associations (ROSCAs), traders, moneylenders and other individuals who are not allowed under Bank of Ghana’s Regulations to offer or receive deposits and loans facilities to the general public [2].

The underlying significance of these regulatory frameworks is to safeguard existing and emerging MFIs in the country from operational hazards [4]. In contemplating strategies to minimize operational risks and enhance productivity, risk management has become pivotal in most organization’s strategic thinking and management. Risk management is the process whereby organisations systematically and consciously address the risks inherent in their activities with the goal of achieving sustained benefit within each activity and across the portfolio of all activities [6]. As a cardinal function, it is imperative that every organization, particularly Microfinance Industries have some plausible strategies to manage their risks. Indeed, the opportunity for success in Microfinance firms is largely contingent on the risk management strategies employed. According to [4], the rate at which Microfinance Institutions are folding up in Ghana is assuming alarming proportions. It is against this background that this work sets its sights on critically appraising risk management strategies of Microfinance Institutions in Ghana.

2. LITERATURE REVIEW**2.1 MEANING OF RISK MANAGEMENT**

Risk management is a systematic process that comprises identifying, analyzing, and responding to the risks associated with a project [7]. Techniques such as scrutiny of documentation and information gathering through brainstorming and expert discussions are used to identify risks associated with a project [8]. At this juncture the identified risks and their potential ramifications are recorded in a risk register [7]. The risk register is then analysed to determine the degree of priority that should be given to different risks and design appropriate response mechanisms and actions needed to cushion shocks in the wake of the risks occurring [7].

2.2 MICROFINANCE AND RISK MANAGEMENT

The Consultative Group to Assist the Poorest (CGAP), in the World Development Report 2000/1(WDR) on poverty posits that microfinance organizations should focus on the poor in modeling their risk management strategies. The CGAP further suggests that microfinance organizations should segment their targeted clients into those whose financial standing is weak due to poverty and those whose financial pedigree is relatively strong because they can be described as moderately rich. The CGAP consequently developed the *focus argument* that the poor who have pressing financial needs have the propensity to put to productive use the loans contracted from microfinance organizations and save to facilitate loan payments in order to ensure continuous access to credit facilities. Not everyone agrees with this line of argument though. According to [9], the marginal propensity of the poor to save lags behind their marginal propensity to consume. This erodes their ability to make savings.

2.3 RISK MANAGEMENT STRATEGIES FOR MICROFINANCE INSTITUTIONS

Designs a framework that deals with general risk management strategies of Microfinance Institutions (MFIs) [10]. She underlines the need to treat risk once it is uncovered. The risk treatment options she identified include: Avoidance, Transfer, Retention and Reduction. Avoidance means eschewing activities that could carry risk. Risk transfer according to [10] is to pass on risk and/or liability from one party who frowns on the risk to another party who embraces and takes over the risk at a fee or premium. [10] Asserts that all risks that are not avoided or transferred are retained by the MFIs. Lopez referred to this practice as retention. [10] Also regards the situation where appropriate schemes and techniques are used to diminish the possibility of the occurrence of risks and their inherent consequences as reduction. Risk avoidance, transfer and reduction are the most effectual forms of risk management. They are preferable mechanisms of risk management because the liability for default is not retained by the MFIs. At any rate, it has been established in the risk reward tradeoff theory that transactions in microfinance institutions in particular and financial markets in general are largely prone to risk. In other words the risk reward tradeoff theory postulates that risk with high level of uncertainties is commensurate with high returns. Consequently, businesses should endeavor to avoid risk aversion in order to rake in maximum returns [11]. By implication, avoidance of risk in certain circumstances is to avoid returns. In spite of this, safety nets need to be instituted in certain circumstances to mitigate, control or prevent some unexpected, avoidable or unreasonable risks. It is not every risk that are avoidable and in this case unavoidable risks must be mitigated or controlled in order to ensure some sustainable level of inflows into the organization [12]. Therefore risk mitigation measures remain a formidable strategy for keeping at bay the occurrence of risks and their adverse consequences.

2.4 RISK PROFILE OF MFIs

The growth in MFIs has gradually compounded the risk portfolios of the industry. The industry risks profile pervades a firm's financial, operational and strategic spectrum. Over the years the traditional focus of MFIs has been on the financial risk. This is understandable because of the high rate of loan default by borrowers or clients. Consequently, MFIs pay more attention to liquidity risk or their ability to meet their short term financial obligations due to the expansion in the size of borrowings or loans demands of customers [11].

2.5 THE NATURE OF CLIENTS RISK

Most borrowers from MFIs in the business to customer sector are dabbling in poverty, a situation made worse by their peripheral insights in financial management. MFIs therefore need to embark on the lofty scheme of training their clients in microfinance business related managerial and technical skills such as financial management [13]. If clients who run small and medium scale enterprises are given additional technical training, they will be in good stead to judiciously utilize resources and also boost their ability to access credits and subsequently enlarge their businesses [11]. The provision of enhanced capacity to microfinance beneficiaries who are engulfed in poverty will open the channels to savings [14]. To this end, [14] suggests that MFIs should not place poor borrowers to the back burner in view of the fact that they constitute the majority bloc of their client base adding that capacity building can be used to transform convert poor customers from perennial consumers into habitual and regular savers.

[14] Emphasizes that the poor indeed can save and have capacity to save and therefore they should not be left in the margins of credit provision adding that, on account of their numerical strength in the micro finance market, they are worth doing business with. In doing business with vulnerable individuals and groups, MFIs can institute adequate and efficacious risk management strategies to manage their clients' risks since this are the bedrock of micro finance industry success.

2.6 REASONS FOR RISK MANAGEMENT

Risk management is important because "risk pervades finance as gravity pervades physics" and to "survive and prosper in financial markets, participants must manage risk in ways that increase their wealth" [15].

An MFI may adopt certain elements of risk management although it may not have installed a comprehensive risk management system. According to the Federal Reserve Bank [16] comprehensive risk management includes systematically and quantitatively identifying, monitoring and controlling aggregate risks the activities and products of a financial institution. It also includes the institution of mechanisms to limit risk associated with individual product lines. For risk management to be comprehensive, it needs to have the attributes that will address both the risks associated with the Microfinance businesses in general and those specific to the clients in particular including their capacity development needs. If the risk management approach takes these two dimensions of MFIs into consideration, it will reduce the risk of loss, build credibility in the marketplace, facilitate the expansion of the MFI, enrich beneficiaries and create new opportunities for growth [16]. A comprehensive risk management approach is therefore effective in the sense that it ensures institutional sustainability and facilitates wealth creation for MFI beneficiaries. Despite this realization, MFIs have regrettably not always incorporated a comprehensive risk management system in their operations.

2.7 MICROFINANCE IN GHANA TO RE-ENGINEER RISK MANAGEMENT STRATEGIES

John Gibling, the Managing Director of Financial Institutions Ratings of Standard and Poor presenting a paper at the 2nd annual conference for African Banking & Non Banking Financial Institutions, urges the financial sector, particularly the Microfinance organizations in Ghana to re-appraise their risk management strategies. He opines that some microfinance and banking institutions are suffering from dwindling financial fortunes because they have the penchant for levying high levels of interest rates on their customers and requesting for collateral security before loans are approved. Research has shown that the demand for collateral as security for loans inhibit growth of business enterprises and development [17]. Further, [18] admonishes financial service sectors to downsize the rate of interest to facilitate loan repayment

According to the 2010 reports on Savings and Loans Association of Ghana the rate of loan default accounts in part for the high interest rate in Ghana. This position puts the blame at the doorstep of clients but [18] disagrees with this standpoint. He argues that MFIs are pre occupied with self-preservation and profit maximization instead of assisting the poor. This in his view is a disturbing deviation from the reasons that anchor the formation of MFIs. In essence the MFIs pursue excessive profit and fail to offer prudent financial advice and training to clients.

2.8 FINANCIAL MANAGEMENT RISKS AND CONTROLS

The risks associated with financial management represent a strong area of vulnerability for microfinance institutions. Distinct from institutional and operational risks, financial management risks are inherent in the range of strategies and procedures used by microfinance managers to optimize financial performance (Churchill, C., & Coster, D. 2001). Key risk areas that emerge from these strategies include:

- 1) Asset and Liability Management Risks
- 2) Inefficiency Risks
- 3) System Vulnerability Risks

2.9 ASSET AND LIABILITY MANAGEMENT

In banking parlance, asset/liability management (ALM) refers to the management of the spread, or the positive difference between the interest rate on earning assets and the cost of funds (Churchill, C., & Coster, D. 2001). Successful management of this spread requires control over: a) interest rate risk, b) foreign exchange gap, c) liquidity, and d) credit risk.

A microfinance institution is vulnerable and susceptible to these three risks if it exudes the following characteristics:

- It borrows money from commercial sources to fund its portfolio;
- It funds its portfolio from client savings;
- It operates in a high inflation environment; or

- It has liabilities denominated in a foreign currency.

These elements of asset and liability management need to be subjected to careful consideration. In formal financial institutions, a management committee is tasked with carrying ALM, as it involves both operations and treasury activities (CGAP, 2009). Because most MFIs are bereft of this kind of management depth, however, the Executive Director and Financial Manager will most likely carry out ALM within an MFI, with perhaps some support from a board member who has expertise in this area (CGAP, 2009).

2.10 INTEREST RATE RISK

Interest rate risk arises when assets and liabilities are mismatched, in terms of interest rates. Interest rate risk is particularly problematic for MFIs operating in high inflationary environments (Churchill, C., & Coster, D. 2001). If inflation rises, the interest rate on loans may not be sufficient to compensate for the effects of inflation (Lopez, 2009). An MFI's ability to adjust interest rates on its loans is determined by the degree to which short-term liabilities are used to fund longer-term assets within the portfolio. If the rates on short-term liabilities rise before an MFI can adjust its lending rates, the spread between interest earnings and interest payments will narrow, seriously affecting the MFI's profit margin (Churchill, C., & Coster, D. 2001).

MFIs should monitor interest rate risk by (1) assessing the amount of funds at risk for a given shift in interest rates, and (2) evaluating the timing of the cash flow changes given a particular interest rate shift (Churchill, C., & Coster, D. 2001).

All types of assets and liabilities do not respond to a change in interest rates in the same manner. Some are more sensitive to interest rate changes than others, a characteristic known as **interest rate sensitivity** (Chua, R. T., & Mosley, P., 2000). For instance, small scale savings accounts tend not to be very interest rate sensitive, as low income clients typically maintain savings accounts more for reasons of liquidity and safety, than for rate of return. In this connection, if the interest rate falls, such clients will not necessarily withdraw their savings (Churchill, C., & Coster, D. 2001).

For MFIs that serve primarily low-income clients, interest rate sensitivity may be less important than responding to the timing of any cash flow shifts. Determining the gap between rate-sensitive assets and rate-sensitive liabilities, or **gap analysis**, provides a mechanism for identifying the timing of cash flow shifts (Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ), 2000). Rate-sensitive assets or liabilities are those that are amenable to an upward mobility in price or can be reviewed downwards within the next couple of months. A useful indicator for monitoring interest rate risk is the **net interest margin**, commonly called the spread. This ratio calculates the income remaining to the institution after interest is paid on all liabilities, and compares the result with either the total assets or the performing assets of the institution. A variation of this ratio is $((\text{interest revenue} - \text{financial expenses}) / \text{average assets})$, where financial expenses include interest expense, inflation adjustment, exchange rate depreciation expense, and a subsidized cost of funds adjustment (Churchill & Coster, 2001).

2.11 INEFFICIENCY RISK

One of the enormous challenges confronting microfinance firms is how to minimize the credit risk associated with providing unsecured loans. Many MFIs have emerged tops in overcoming this obstacle and have now set their sights on the next major challenge; improving efficiency (Churchill & Coster, 2001). Efficiency improvements involve an organization's dexterity at managing costs per unit of output, and thus are directly influenced by both cost control and level of outreach. Inefficient microfinance institutions waste resources which culminate into provision of subpar services and products, as the costs of these inefficiencies are passed on to clients in the form higher interest rates and transaction costs (Churchill, C., & Coster, D. 2001).

MFIs can improve efficiency in three ways: (1) upscale the number of clients to achieve greater economies of scale, (2) streamline systems to improve productivity, and (3) cut costs across their value chain (Churchill, C., & Coster, D. 2001).

The first two goals are closely related; both seek to increase the number of clients, or units of output. MFIs post better performances when their staff work harder or, preferably, smarter. In microfinance organizations that are not managed in a business-oriented manner, employees often have excess capacity. And yet, as is common with human nature, the employees find ways of engaging in activities that are at best peripheral to creating shareholder value and the provision of exceptional value to clients. A critical appraisal of time allocation and **time management** will often reveal an astonishing and disturbing level of waste.

There is another side to the cost equation. There exists evidence to the effect that administrative costs, including salaries and other operating expenses, represent the greatest component of the cost structure of an MFI. Reducing the delivery costs associated with providing financial services improves operating efficiency. If these costs are cranked downwards, cost savings can be passed to customers in the form of added value through price cuts which can lead to repeat purchases and boost customer loyalty.

3. RESEARCH DESIGN AND METHODOLOGY

This section describes the procedures and research instruments used in this study in order to achieve the research objective. The study uses a sample of microfinance companies in seven regions in Ghana namely: Ashanti, Central, Greater Accra, Western, Northern, Brong Ahafo and Eastern Region. In spite of the researchers inability to cover the entire ten (10) regions of Ghana; the seven (7) regions selected can be described as representative and portrays the true complexion of the Microfinance industry in Ghana. The researchers picked one or sometimes two microfinance institutions from the capital cities of these regions. The reason underpinning the selection of these regions is the fact that Microfinance activities are quite buoyant in these territories.

Questions were modeled around some basic risk management strategies MFIs in Ghana. In the quest for answers to the research questions, this work employed quantitative research approach where a descriptive analysis or survey was employed for the study. The main informants of this research were drawn from clients and employees of MFIs that have been in operational existence for over two years. Data was solicited from these two set of respondents. Questionnaires were used to capture responses from the targeted respondents across the selected regions of Ghana. The study used both primary and secondary data. The primary data was gathered mainly through questionnaire. The choice of questionnaire allowed for efficiency and speed in collection of original data.

The secondary data which anchored the literature review of this study is derived mainly from magazines, brochures, articles, catalogues and other publications from microfinance institutions.

3.1 THE SAMPLING TECHNIQUES

Purposive sampling technique was used to select the samples for the study. The clients that deal directly with the organizations were sampled based on purposive sampling. By purposive sampling, the selections of the respondents were based on: 'clients who have transacted with the organization for two years or more' and 'clients who have secured the organization's loan before'.

3.2 SAMPLE SIZE

The total sample size for the study was two hundred (200). One hundred represented the sample from the formal sector (Management staff of MFIs). The other hundred represented the sample from the informal sector (clients or customers of these institutions). The large sample size is necessary to ensure representation and replication of research findings and conclusions. The following table is a graphic illustration of the sample size and population for the study.

TABLE 1.0: MFIs AND CLIENTS POPULATION/SAMPLE SIZE

Name of MFI	Total Population		Sample Size	
	Staff	Client	Staff	Clients
1. Opportunity International. S & L Ltd (Accra)	20	22	10	15
2. Procredit S & L Ltd (Accra)	10	19	5	12
3. Express Savings & Loans (Koforidua)	14	21	7	12
4. EZI Savings & Loans Ltd (Kumasi)	10	16	5	10
5. First National S & L Ltd (Takoradi)	40	29	20	18
6. First Ghana Building Society (Tamale)	12	17	6	10
7. Opportunity Inter. S & L Ltd (Techiman)	24	13	12	6
8. First National S & L Ltd (Cape Coast)	16	9	8	7
9. Procredit S & L Ltd (Kumasi)	30	12	15	5
10. Women's World Bank (Takoradi)	24	15	12	5
Total	200	173	100	100

Sample Interval is 2; Sample fraction is $\frac{1}{2}$

NB: The client's population was based on the number of clients available at the time of data collection at the premises of the MFIs. Clients' selection was based on purposive sampling.

4. ANALYSIS OF RELEVANT DATA

In an attempt to achieve the objectives of the study, relevant data collected was analysed using SPSS version 19.0. The following show cases the quantitative analysis of the data starting from the demographic analysis.

TABLE 2: GENDER OF MFI STAFF

		Male	Female	Total
Microfinance Institutions	Opportunity Inter. Savings & Loans Ltd (Accra)	60.0%	40.0%	100.0%
	Procredit Savings & Loans Ltd (Accra)	60.0%	40.0%	100.0%
	Express Savings & Loans Ltd (Koforidua)	57.1%	42.9%	100.0%
	Ezi Savings & Loans Ltd (Kumasi)	20.0%	80.0%	100.0%
	First National Savings & Loans Ltd (Takoradi)	55.0%	45.0%	100.0%
	First Ghana Building Society (Tamale)	66.7%	33.3%	100.0%
	Opportunity Inter. Savings & Loans Ltd (Techiman)	58.3%	41.7%	100.0%
	First National Savings & Loans Ltd (Cape Coast)	62.5%	37.5%	100.0%
	Procredit Savings & Loans Ltd (Kumasi)	53.3%	46.7%	100.0%
	Women's World Bank (Takoradi)	58.3%	41.7%	100.0%
Total		56.0%	44.0%	100.0%

Table 2 shows the demographic features of 10 MFIs in the country. The total count of male to female ratio is 56/44 as evident in the table above. The male population in each MFI is greater than the female population except that of EZI Savings and Loans Ltd.

TABLE 3: NEED FOR STANDARD PROCEDURE FOR DELINQUENCY FOLLOW-UP

		Yes	No	No Idea	Total
Microfinance Institutions	Opportunity Inter. Savings & Loans Ltd (Accra)	80.0%	20.0%		100.0%
	Procredit Savings & Loans Ltd (Accra)	80.0%		20.0%	100.0%
	Express Savings & Loans Ltd (Koforidua)	42.9%	42.9%	14.3%	100.0%
	Ezi Savings & Loans Ltd (Kumasi)	80.0%		20.0%	100.0%
	First National Savings & Loans Ltd (Takoradi)	30.0%	30.0%	40.0%	100.0%
	First Ghana Building Society (Tamale)	66.7%	16.7%	16.7%	100.0%
	Opportunity Inter. Savings & Loans Ltd (Techiman)	58.3%	25.0%	16.7%	100.0%
	First National Savings & Loans Ltd (Cape Coast)	25.0%	12.5%	62.5%	100.0%
	Procredit Savings & Loans Ltd (Kumasi)	53.3%	26.7%	20.0%	100.0%
	Women's World Bank (Takoradi)	50.0%	25.0%	25.0%	100.0%
Total		52.0%	23.0%	25.0%	100.0%

In response to the question of whether the MFI has standard procedure for delinquency follow-up, the response rate for "Yes" were more than "No"; 52% representing 52 staff from seven (7) MFIs responded "Yes". 23 staff representing 23% responded "No" and 25 representing 25% have no idea. At first sight, the 53% of those who appreciate the presence of mechanisms for delinquency follow ups appear impressive. However, those respondents who had no idea or who responded in the negative when put under one umbrella constitutes 47% which makes it worthy of attention.

TABLE 4: SANCTIONS AGAINST DEFAULTERS

		Yes	No	No Idea	Total
Microfinance Institutions	Opportunity Inter. Savings & Loans Ltd (Accra)	70.0%	20.0%	10.0%	100.0%
	Procredit Savings & Loans Ltd (Accra)	100.0%			100.0%
	Express Savings & Loans Ltd (Koforidua)	57.1%		42.9%	100.0%
	Ezi Savings & Loans Ltd (Kumasi)	100.0%			100.0%
	First National Savings & Loans Ltd (Takoradi)	60.0%	15.0%	25.0%	100.0%
	First Ghana Building Society (Tamale)	50.0%	33.3%	16.7%	100.0%
	Opportunity Inter. Savings & Loans Ltd (Techiman)	66.7%	16.7%	16.7%	100.0%
	First National Savings & Loans Ltd (Cape Coast)	37.5%	37.5%	25.0%	100.0%
	Procredit Savings & Loans Ltd (Kumasi)	60.0%	13.3%	26.7%	100.0%
	Women's World Bank (Takoradi)	66.7%	8.3%	25.0%	100.0%
Total		64.0%	15.0%	21.0%	100.0%

The outcome of this question painted a positive picture about adequate sanction regimes to deter loan default. Across all the ten (10) MFIs, almost all respondents, majority of respondents answered in the affirmative with the notable exception of National Savings and Loans Ltd (Techiman Branch) which recorded less than 50%. Procredit (Accra) recorded 100% responses for "Yes". Express Savings and Loans had 51.7% "Yes" and 42.9% for "No Idea".

TABLE 5: NEED FOR BETTER LOAN COLLECTION & DISBURSEMENT STRATEGIES

		Yes	No	No Idea	Total
Microfinance Institutions	Opportunity Inter. Savings & Loans Ltd (Accra)	60.0%	20.0%	20.0%	100.0%
	Procredit Savings & Loans Ltd (Accra)	100.0%			100.0%
	Express Savings & Loans Ltd (Koforidua)	57.1%		42.9%	100.0%
	Ezi Savings & Loans Ltd (Kumasi)	80.0%	20.0%		100.0%
	First National Savings & Loans Ltd (Takoradi)	60.0%	20.0%	20.0%	100.0%
	First Ghana Building Society (Tamale)	83.3%		16.7%	100.0%
	Opportunity Inter. Savings & Loans Ltd (Techiman)	66.7%	25.0%	8.3%	100.0%
	First National Savings & Loans Ltd (Cape Coast)	87.5%		12.5%	100.0%
	Procredit Savings & Loans Ltd (Kumasi)	60.0%	20.0%	20.0%	100.0%
	Women's World Bank (Takoradi)	58.3%	8.3%	33.3%	100.0%
Total		67.0%	14.0%	19.0%	100.0%

On the question about the imperatives of better loan collection and disbursement strategies, sixty seven (67) respondents representing 67% responded "Yes". Fourteen (14) respondents representing 14% responded "No" and 19% representing 19 respondents from all the ten (10) MFIs had no idea.

4.1 PROVISION OF CREDIT ADVICE

In trying to ascertain whether the MFIs offer or provide credit advice to their customers, it became clear from the responses that most MFIs in Ghana do not provide credit advice to customers once loans are released. Data analysis shows that over 60% of the MFIs in Ghana have no active credit advice bureau. Indeed, almost all except Opportunity International (Accra), ProCredit (Accra) and Express Savings and Loans Ltd (Koforidua) do not provide credit advice in a bid to put a downward pressure on risks associated with their credit services.

4.2 DEMANDS FOR COLLATERAL

An overwhelming majority of MFIs dealt in this study have collateral enshrined and entrenched in their terms and conditions for issuing loans. Over 50% of MFIs answered "Yes" when the question of whether collateral is demanded was put. The striking exception is Opportunity International-Techiman branch, where other considerations override collateral.

4.3 MODELING MICROFINANCE RISK MANAGEMENT

The study used multiple Regression to examine the inter-relationship between **Microfinance Risk Management (Dependent variable)** and a number of **explanatory (Independent) variables** such as **Need for Standard Procedure for Delinquency Follow-up (X1), Sanctions against Defaulters (X2), Need for Better Loan Collection & Disbursement Strategies (X3), Provision of credit advice (X4), Demand for collateral (X5)** as factors contributing to microfinance risk management.

Mathematically:

Microfinance Risk Management → **Constant + Need for Standard Procedure for Delinquency Follow-up (X1) + Sanctions against Defaulters (X2) + Need for Better Loan Collection & Disbursement Strategies (X3) + Provision of credit advice (X4) + Demand for collateral (X5)**

OR

Y Microfinance Risk Management = $b_0 + b_1X1 + b_2X2 + b_3X3 + b_4X4 + b_5X5 + \epsilon$

Where Y is the **Microfinance Risk Management**, the dependent or predicted variable, is the **Microfinance Risk Management strategies in the operational area**

X1 is the **Need for Standard Procedure for Delinquency Follow-up**

X2 is the **Sanctions against Defaulters**

X3 is the **Need for Better Loan Collection & Disbursement Strategies**

X4 is the **Provision of credit advice**

X5 is the **Demand for collateral** respectively.

Where b_0, b_1, b_2, b_3, b_4 and b_5 are unknown constants whose values are estimated by the regression analysis from the SPSS output in Table 6.

ϵ is the random error term with expected value of zero and variance of 1.

TABLE 6: COEFFICIENTS^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	2.232	.025		89.061	.000	2.180	2.284					
	Demand for collateral	-.013	.000	-.993	-36.760	.000	-.014	-.013	-.993	-.993	-.993	1.000	1.000
2	(Constant)	2.126	.048		44.587	.000	2.026	2.226					
	Demand for collateral	-.013	.000	-.946	-31.145	.000	-.014	-.012	-.993	-.990	-.990	.624	1.602
	Provision of credit advice	.002	.001	.076	2.518	.021	.000	.003	.656	.500	.060	.624	1.602

a. Dependent Variable: Risk Management Strategies

The regression model is developed using the *STEPWISE* method for all the explanatory variables. This method is preferred because it adds the explanatory variables into the model one after the other at a time. It begins with the variable that has or exhibits the highest correlation with the predicted variable, in our case **Microfinance Risk Management**.

If an explanatory variable is found not to be contributing significantly to the dependent or predicted variable, it can be removed. The *STEPWISE* method is especially useful if the independent variables are very large and the motive is to include only those contributing significantly to the model.

After critically examining the SPSS output for the regression model the study has considered model 1 and 2 on the *STEPWISE* regression model table as the best models.

4.3.1 JUSTIFICATION FOR SELECTING MODEL 1 & 2 AS THE BEST MODELS

As stated earlier in our discussion under the Stepwise method, the SPSS package begins selecting explanatory variables that contribute highly to the dependent variable. Hence, the package identified **Demand for collateral** as being the independent variable that makes the highest contribution to **Microfinance Risk Management**. It then identified **Provision of credit advice** as having the highest partial correlation with **Microfinance Risk Management** so it was added in the second model, model 2.

Mathematically the final and best model is:

$$Y \text{ Microfinance Risk Management} = 2.232 - 0.13X_4 + 0.02X_5$$

Where X_4 is the Provision of credit advice and

X_5 is the Demand for collateral

A look at the model summary reveals that R, the multiple correlation coefficients is very high. $R = 0.993$ and 0.995 for model 1 and 2 respectively. This shows that there is a very strong correlation between the observed and predicted values of the dependent variable, **Microfinance Risk Management**. The value of R-squared is 0.985 indicating that 98.5% of the variation in the dependent variable is explained by the regression model, and the Adjusted R-squared which corrects the R-squared to more closely reflect the goodness of fit of the model in the population is also 98.5% . The model has a reasonable number of explanatory variables included. The t values, beside the constant are all high in excess of 10. This indicates that the two explanatory variables **Provision of credit advice (X_4)** and **Demand for collateral (X_5)** are very important to the model.

TABLE 7: MODEL SUMMARY^c

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.993 ^a	.985	.985	.06307
2	.995 ^b	.989	.988	.05603

a. Predictors: (Constant), Demand for collateral

b. Predictors: (Constant), Demand for collateral, Provision of credit advice

c. Dependent Variable: Risk Management Strategies

Also, a critical inspection of the Variance Inflation Factors (VIF) values in table 6 of these models is less than 10 which are signs of non-existence of collinearity or multicollinearity. This indicates that the best model does not have problems associated with models with too many variables which do suffer from the issue of over fitting, making it hard to interpret such models.

5. DISCUSSIONS

This section is dedicated to further commentary of the outcome per the analysis of relevant data based on which conclusions are drawn.

5.1 STANDARD PROCEDURES FOR DELINQUENT FOLLOW-UPS

On the need for standard procedures regarding delinquent follow-ups, it emerges that most MFIs in Ghana have instituted standard systems for following-up on delinquent customers. All the respondents agree that their respective institutions have delinquent follow-ups processes, except that the margin that exists between those who accept the need for standard procedure versus those who do not agree or have no idea is very narrow. For instance, analysis of data reveals that 52% of respondents agree that there is the need for standard procedures and 42% represents the combined percentage of those who have no idea and those who are against the idea of any standard procedure. The lack of knowledge as reflected in the responses of employees of Express Savings and Loans Ltd (Koforidua) and First National Savings and Loans Ltd (Takoradi and Cape branches) is disconcerting. This calls for capacity building for the staff on the policies and procedures of the organization.

5.2 BETTER LOANS DISBURSEMENT PROCESSES AND IMPROVED LOAN USAGE

The analysis of the data on the application of best practices on loans disbursements and better loan investments such as sampling some loans for checks and balances shows that MFIs controls in connection with judicious utilization of loans by clients leaves a lot to be desired. The results demonstrate that 41% of MFIs staff agrees that their organizations do not sample clients for checks. The remaining 49% were divided between those who claimed have no idea or agree that their organizations sample clients for checks. It is surprising to note that the percentage of those who had no idea about the question far outweighs those who claimed to have an idea that their organisations conduct credit (background) checks of their clients. The outcome reflects a palpable weakness in monitoring and evaluating loans usage.

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5.4 LOAN DEFAULT RATES

The Non-payment of loans and accrued interest is widespread based on the research findings. Opportunity International Savings and Loans Ltd (Accra) recorded the highest loan default rate of 70% followed by Women's World Bank with 66.7% , ProCredit (Accra) and Ezi Savings and loans Ltd (Kumasi) with 60% , Express Savings and Loans Ltd (Koforidua) with 57.1% and finally ProCredit (Kumasi) with 53.3% . These colossal default rates if not reversed can jeopardize the liquidity position of the MFIs in Ghana.

5.5 CREDIT CHECKS AND SCREENING

Concerning the processes for screening out credit worthy clients from those with weak credit ratings, data analysis finds that 57% out of the total of 100 respondents accept that their respective MFIs have screening processes for loans services. 34% opine that their organisations do not have any screening processes for identifying credit worthy clients. Though the outcomes are quite satisfactory, it is poignant to note that organisations such as Express Savings and Loans Ltd (Accra) could not establish clearly whether the organization has such processes or not.

5.6 SANCTION REGIMES AGAINST LOAN DEFAULTERS

Regarding the necessary sanctions for loans defaulters, the research findings show that almost all the MFIs in Ghana have sanctions regime, except First National Savings and Loans Ltd (Cape Coast). First National Savings and Loans Ltd recorded an incredible rate of 0% for loan default. First National Savings and Loans Ltd have a robust credit advice and follow up strategies in regulating and controlling their clients' loan utilization.

5.7 PROVISION OF CREDIT ADVICE

Credit advice is the effort of providing borrowers with technical and management skills in order to promote the judicious utilization of loans. From the data analysis, it is apparent that majority of financial services providers jettison this scheme much to their operational peril. Perhaps it is in recognition of the dangers of non-provision of credit advice that the government of Ghana has launched a programme seeking the services of consultants to engage microfinance companies in order to build their capacities in offering technical and management assistance to Small and Medium Scale Enterprises (SMES). This government of Ghana hopes will minimize risk in provision of credit (Daily Graphic, February 2013). In trying to ascertain whether the MFIs offer or provide credit advice to their customers, it became clear from the responses that most MFIs in Ghana do not provide credit advice to customers once loans are released. Data analysis shows that over 60% of the MFIs in Ghana have no active credit advice bureau. Indeed, almost all except Opportunity International (Accra), ProCredit (Accra) and Express Savings and Loans Ltd (Koforidua) do not provide credit advice in a bid to put a downward pressure on risks associated with their credit services.

5.8 DEMANDS FOR COLLATERAL

On the issue of collateral, the study finds an uncompromising demand for collateral by MFIs before loan applications are approved. Clients that serve as respondents have loud misgivings about the terms and conditions on collateral. Apart from Opportunity International, Techiman, all other MFIs covered under this work request for collateral as a strong condition for granting loans. This is not surprising because collateral is a dominant factor in minimizing Microfinance risk. A cursory glance at the value of MFIs reveals both a social mission and a commercial vision. The demand for collateral favours clients with moderate to strong financial status. The have nots by every stretch of financial logic cannot claim ownership of properties let alone provide same as collateral. With this situation, it follows those MFIs lofty dream towards alleviating poverty through micro loans appear to be a distant prospect.

6. RECOMMENDATIONS

It is clear from the study that MFIs in Ghana are performing creditably. However there is some room for improvements particularly in their strategies for loans recollection and interest payments by clients.

These recommendations are aimed at MFIs and practitioners in an attempt to contribute to best practices that can help minimize risk in the operations of MFI's.

6.1 CHECKS AND BALANCES

Concerning Savings and Loans Checks and Balances, the MFIs in the country, except Opportunity International Savings and Loans Ltd (Accra), are ineffective as far as this control system concerned. This urgently calls for the setting up of special units or departments in every MFI in Ghana to supervise and discharge this function.

6.2 LOAN DEFAULT RATES

The study shows that loan default rate is in the ascendency, particularly in Opportunity International Savings and Loans Ltd (Accra), Women's World Bank and ProCredit Savings and Loans Ltd (Accra and Kumasi). The exorbitant interest rates charged by the MFIs accounts for the spiraling default situation. The interest rate chargeable needs to be reviewed downwards but a pre cursor to this is the need to minimize the risk of loan nonpayment through training of clients in financial and business opportunity identification and investment.

6.3 MONITORING LOAN USAGE

In respect of monitoring activities, it emerges that ProCredit Savings and Loans Ltd (Accra) and First Ghana Building Society scarcely follow-up on how loans are being used by clients. Management of these Institutions should consider putting in place effective strategies that will serve as an apparatus for providing early warning signals about the potential for default and measures to claw back loans defaulted. Strategies such as task force regular visits on clients, promoting group loans more than individual loans, and offering discount to clients or groups who pay the loans and interest on time can help stem the tide of loan default.

6.4 SANCTIONS REGIME AGAINST LOAN DEFAULT

Concerning appropriate sanctions to serve as deterrent to potential defaulters and actual defaulters, recommended sanctions include verbal warning, followed by warning letter and finally legal action against the defaulting client in a court of competent jurisdiction. With the advent of the Credit Bureau in Ghana, the MFIs need to capitalize on it by educating their clients on the adverse consequences of feeding negative credit traits into the system of the Credit Bureau.

6.5 INTEREST RATE AND LOAN PAYMENT DURATION

The data analysis points to some difficulties on the part of clients to settle loans. The study has already established the link between high interest rates and loan default. An added dimension to the scenario of nonpayment of loans is the short period usually given to clients to make good the debt. To enhance the regularity of payments, MFIs should make credit periods more elastic by elongating loan payment duration. This will give clients some room to maneuver payments which will sap away the spectre of loan default.

Beside, MFIs such as Express Savings and Loans- Accra, ProCredit Savings and Loans Ltd-Accra, and First National Savings and Loans Ltd- determine interest charge of customers based on their ability to pay. This system of interest rates assessment raises ethical questions bordering on honesty. Clients should be made to pay standard interest rate as required of anyone irrespective of class.

Furthermore, charging higher interest rate to clients with wobbling credit foot is also not a best practice. The revelation is that almost all MFIs with the notable exception of Opportunity International Savings and Loans Ltd (Accra) engage in this practice. It appears ironical that, potential defaulters position is rather made worse by the high interest rates charged leaving them deep in the quagmire of loan default. It is reasonable to pose the question; if a customer may not be in a position to pay back loans interest, why should you worsen the condition by charging high interest rate?

6.6 CREDIT ADVICE AND GUIDANCE

Opportunity International Savings and Loans Ltd (Accra), ProCredit Savings and Loans Ltd (Accra), Ezi Savings and Loans Ltd (Kumasi) and Express Savings and Loans Ltd (Koforidua), do not offer credit advice to their customers when loans are given out.

Credit advice to customers help minimize investment losses (Fafchamps, 1997) and loans default. Credit advice helps the customers to make good choice of investment even when there are diverse investment portfolios to choose from (Khan, 2010).

6.7 DEMANDS FOR COLLATERAL

Clients of the MFIs except that of Opportunity International Savings and Loans Ltd (Techiman) agree that the demand for collateral to serve as security against loan default is a condition instituted by banks before loans are granted. Potential clients without collateral face a daunting task in their quest for a loan. Research has shown that the demand for collateral as security for loans inhibit growth of business enterprises and development (Khan, 2010). Individuals and firms who may not wish to lose their properties to MFIs will not attempt to secure loans for business expansion at all. MFIs in an attempt to relax the condition of collateral could resort to deduction of repayments at source, where the individual is a government worker or require of applicants credible persons as guarantors for the loan. By so doing, MFIs would have widened the frontiers of loan provision and soften the channels of loan repayments.

7. LIMITATIONS OF THIS STUDY

The study has been conducted in seven (7) regions of Ghana. Future research work could widen the scope of study to include the other three (3) regions where MFIs are doing brisk business. Beside, this work also focused on the risk associated with clients. Whilst this is important, the internal risks that MFIs possibly face such as weak corporate governance structures, inadequate internal control systems leading to fraud is a palpable risk faced by MFIs in Ghana. Future studies in risk management in MFIs could concentrate on this area.

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