

Credit Risk Portfolio Management in Microfinance Banks: Conceptual and Practical Insights

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Abstract Microfinance Banks have a critical role of providing different financial products and services to the people most especially the low income earners who lack collateral to borrow from formal financial institutions like the commercial banks. This category of financial institutions serves some of the world's most needy. A significant challenge facing these banks is the battle to control its portfolio at risk to remain within the international benchmark. In this paper, we reviewed practical approaches to controlling loan default and other related risks common to Microfinance Banks. The paper also reviewed related literatures on Microfinance credit risk portfolio assessment and suggested the place of Operations Research experts in tackling Microfinance Banks challenges. The major finding was that credit risk continues to be a threat to Microfinance Banks sustainability. Our conclusion is that Microfinance Banks' credit risk will reduce to the barest minimum if the recommended practical approaches to controlling loan defaults are adhered to.

Keywords Microfinance Banks, Credit Risk Portfolio, Default, Lending, Credit Risk Management, Delinquency, Collateral

1. Introduction

Microfinance Banks offer small amounts of loans mostly to business people who cannot afford collaterals to get loans from the main commercial banks. Despite recent growth in the Microfinance sector, the sector is faced with challenges of loan repayment defaults by clients. Individual groups have tried using groups' equity for collaterals which is expected to ensure the revolving of money for the benefits of other individual members of the group. However, loan delinquency has continued to pose serious challenges to most Microfinance Banks. This is a very serious threat to the banks sustainability as credit risk affects the profitability and the general performance of any financial institution. This paper therefore discusses practical steps which when adopted

by microfinance banks could reduce the default rate to the acceptable level.

It is undisputable fact that these Banks are generally subject to wide array of risks in the course of their operations due to the nature of their businesses and clients' profile. These risks have increased, especially in recent times as most Microfinance Banks diversify their assets in the changing markets.

According to Agene (2011), credit risk portfolio is the deterioration in loan portfolio quality that results in loan losses and high delinquency management costs. Williams J.(2004) defined credit risk as the risk of losing contractually obligated cash flows promised by a corporation, financial institution, government, etc. (the counterparty) due to default on the debt obligation. Defaults are usually associated with a credit event such a bankruptcy or reorganization, although delinquency in payment may also be considered a credit event even if there is not a formal bankruptcy.

Also known as default risk, credit risk relates to client failure to meet the terms of a loan contract. An effective and sound credit risk management is critical to the stability of Microfinance Banks. Effective credit risk management is the process of managing the Bank's activities which create credit risk exposures, in a manner that significantly reduces the likelihood that such activities will impact negatively on Microfinance Bank's earnings and capital. Credit risk is not confined to a Microfinance Banks' loan portfolio alone, but can also exist in its other assets and activities.

Eferakeya (2014) said a number of reasons have been identified as contributing to the spate of banking distress which one notable cause is the issue of bad loans. NDIC (1994) observed that one single, biggest contributor to the bad loans of many of the failed banks in Nigeria was insider trading. According to Brown bridge (1998), many of the bad debts were attributable to moral hazard, the adverse incentives on bank owners to adopt imprudent lending strategies, in particular insider lending and lending at high segments of the credit markets contrary to the interests of the bank's creditors (mainly depositors or government if it explicitly insures deposits) which if unsuccessful, would jeopardize the solvency of the bank. This malpractice has

crept into microfinance banks as well and is one of the contributing factors for closure of many microfinance Banks by regulatory authorities, Munene and Guyo (2013).

2. Definition of Microfinance

Oluyomno (2007) defines Microfinance Banks as a globally accepted means of reaching businesses and persons that are either not served at all or that are inadequately served by the normal commercial banks.

Karlan and Goldberg (2007) put it that microfinance is the provision of small-scale financial services to people who lack access to traditional banking services. "Microfinance is often defined as financial services for poor and low-income clients offered by different types of service providers. In practice, the term is often used more narrowly to refer to loans and other services from providers that identify themselves as microfinance institutions. More broadly, microfinance refers to a movement that envisions a world in which low-income households have permanent access to a range of high quality and affordable financial services offered by a range of retail providers to finance income-producing activities, build assets, stabilize consumption, and protect against risks. These services include savings, credit, insurance, remittances, and payments, and others." (www.microfinancegateway.org)

Crabb and Keller (2011) see microfinance as providing financial services to individuals traditionally excluded from the banking system, especially women.

Consequently Lafourcade et al. (2005, p.2) put it that Microfinance is "the supply of loans, savings, money transfers, insurance, and other financial services to low-income people" Similarly, Udejaja and Ibe (2006) defined a micro finance institution as one that focuses on providing financial services to the low income/poor persons in the community.

Technically, micro finance is a business in which the person conducting the business holds himself out as accepting deposits on a day to day basis and any other activity of the business which is financed, wholly or to a material extent, by lending or extending credit for the account and at the risk of the person accepting the deposit, including the provision of short term loans to small or micro enterprises or low income households and characterized by the use of collateral substitutes (GoK, 2006).

According to Munene and Guyo (2013), it is the way of supplying loans and small credits to finance small projects to help the poor have an income through forming their own small scale business to earn their daily bread and better their living. Micro finance is the provision of credit to the poor and low-income earners to enable them engage in productive activities

"Microfinance is a source of financial services for entrepreneurs and small businesses lacking access to banking and related services. The two main mechanisms for the delivery of financial services to such clients are: (1)

relationship-based banking for individual entrepreneurs and small businesses; and (2) group-based models, where several entrepreneurs come together to apply for loans and other services as a group"

(<http://en.wikipedia.org/wiki/Microfinance>).

3. Structure and Characteristics of the Microfinance Sector

Lafourcade et al. (2005) identified three categories of microfinance institutions: regulated (banks, regulated non-bank financial intermediaries, and regulated NGOs); cooperatives (financial cooperatives and credit unions); and unregulated (NGOs, non-bank financial intermediaries, Microfinance Institutions projects, and others). In contrast, Udejaja and Ibe (2006) used the consideration of formality to classify MFIs. They identified the following three forms: (i) Formal MFIs are institutions such as development banks, savings and loans, and non-bank institutions that are governed by general company laws, regulations, and guidelines. (ii) Semi-formal MFIs are those MFIs that are subject to commercial and general company laws, but which are not subject to banking regulations, such as NGOs and cooperatives (thrift and credit societies). (iii) Informal MFIs are 'non-registered groups', such as traditional esusu, that organize thrift and credit services for members. Similarly, Ayayi(2008), in his study of MFIs in Vietnam, classified MFIs into three main categories: formal, semi-formal and informal, based on type of institution, and the regulations and core strategies involved.

3.1. Formal Sector

Formal institutions are banks and other banking institutions regulated by the apex bank that issue credit guidelines. In Nigeria for example the category constitutes the dominant sector, accounting for over 81% of the total market share of MFIs in the country. Examples of institutions in this category include the defunct People's Bank of Nigeria (PBN), community banks, the Bank for Commerce and Industry, the Bank for Agriculture, and Microfinance Banks. As of today, only the Microfinance Banks focus solely on providing financial services to rural and poor micro-enterprises and households nationwide.

3.2. Semi-Formal Sector

The semi-formal sector is composed of mass organizations, such as cooperative societies, NGOs and government programmes, including the National Poverty Eradication Programme (NAPEP). The sector, which is not strictly regulated, provides about 10% of micro credits in the country, especially to women and the rural poor. In addition, some government agencies support the institutions concerned with operating guidelines and wholesale funding to help ensure their success.

3.3. Informal Sector

According to Oguntoyinbo (2011), the informal sector, consisting of friends and relatives, unregistered societies, esusu and other traditional associations, is particularly active in rural areas. The sector accounts for about 8% of the country's share of the microfinance market.

Given the above classification, the rest of the literature review will focus on the microfinance bank subsector of the formal category.

4. Microfinance Lending Methodologies

According to Nyor et al (2013), there is huge demand for microfinance lending by low income earners and micro businesses and as such microfinance Banks have a prominent role to play. All Microfinance Banks works towards the same goal of poverty reduction and the promotion of economic growth, though different types of microfinance lending are employed throughout the world (Crabb & Keller, 2006). These include:

4.1. Individual Lending

As the name suggests, this is “the provision of credit to individuals who are not members of a group that is jointly responsible for loan repayment” (Ledgerwood 1999, P.83). Each loan is specifically tailored to the individual and business involved. This approach tends to work best when used with larger urban business or small rural farmers. According to Agene (2011), Microfinance lend directly to individuals, without any sort of group self selection or guarantee and are more likely to take collateral such as fixed assets, land and building or household appliances taken in pawn when it is available.

4.2. Group Lending

A strategy initially developed by the Grameen Bank of Bangladesh. It was designed to serve rural and landless men and women who wish to finance –generating activities. This method of lending is designed to serve rural and landless clients who wish to borrow from the bank. Crabb and Keller (2011) explained the process thus: The group usually has a membership of four to seven individuals who are not members of a nuclear family. Before receiving any loan each member is required to contribute savings throughout the duration of the group training which last for between four to six weeks. Additional requirements for loans include prompt repayment, mandatory weekly meetings, and pre-credit orientation and assistance. After successfully meeting up these conditions the loan officer disburse the loan first to two individuals. No further lending occurs until loans are repaid. The same process occurs for the remaining members of the group.

4.3. Village Banking Approach

Village banks are “community –managed credit and savings associations established to provide access to financial services in rural areas, build community self-help group and help members accumulate savings” (Legerwood 1999, p.85). According to Crabb and Keller (2011), village banks are made up of 25-40 women who cross guarantee each other's loans and self-manage the distribution and collection of funds. Village banks are primarily financed by loans from microfinance institutions, but forced and voluntarily savings are collected by the group and may also be loaned to finance members and non-member activities.

4.4. Wholesale Lending

According to Agene (2011), It is a methodology whereby microfinance that have corresponding relationship with the deposit money banks have easy access to working capital loans at concessional cost of funds for on-lending to their customers, especially micro-entrepreneurs and high net worth individual borrowers in their catchment areas.

5. Common Risks Found in Microfinance Banks

Financial intermediation involves some risks, with one major challenge facing financial institutions being to identify such risks and to hedge against them. The risks vary in type and intensity for different financial institutions, whether or not they operate in the same business environment. Each microfinance bank, therefore, has to identify its own unique set of risks and to manage it in its own way if it wishes to continue to sustain its operations.

According to Fernando (2008), risk management, in relation to an MFI is the process of controlling the likelihood and potential severity of an adverse event; it is about systematically identifying, measuring, limiting, and monitoring risks faced by an institution. Services are relatively small and simple when a new microfinance bank commences operations. During the setting up of a new microfinance bank, it tends to be very aware of the financial risks that it faces, causing it to make a conscious effort to mitigate them. However, as microfinance bank grows in size and diversifies its loan portfolios, different types of risks, other than the obvious financial ones, tend to begin to manifest themselves. Generally, the following three categories of risks that might face microfinance business have been identified.

5.1. Liquidity Risks

According to Craig and Dan (2011), liquidity risk arises when a microfinance bank is unable to meet its cash requirements or payment obligations timely and in a cost-efficient manner. Microfinance Banks have to plan the volume of loans to be approved and disbursed, the withdrawal pattern of their saving clients (where MFI is

allowed to mobilize deposits), and other fund requirements for operational purposes, and should be able to match available funds against such requirements.

In order to reduce liquidity risk, each microfinance bank branch needs to prepare a daily fund plan that guides the matching of cash inflows from loan repayment and saving deposits (that usually take place in the afternoon) with cash outflows (from draw-downs, customer withdrawals and operational expenses) for the branch on a daily basis. Any positive balance or surplus fund should be deposited with a correspondent bank daily, while any anticipated shortfall should be covered by withdrawing cash from the bank early in the day. No overnight cash should be held by the branch, in order to eliminate the risk of fraud or theft.

As in the case of the daily fund plan, each branch should also prepare a monthly fund plan that should outline the amount of loans to be granted, the volume of saving withdrawals from customers, and the anticipated operational expenses. The preparation of the plan assists the finance department to anticipate the funding requirements of the various branches, thereby allowing the determination in advance of any potential cash shortfall or surplus facing the branches concerned. The funds should then be moved to a position where they can address the situation, while any arising idle funds are invested appropriately.

5.2. Market Risks

As stated by Fernando (2008), market risks are, by nature, environmental and include risks from financial losses as a result of changes in interest rates, fluctuations in foreign exchange, or mismatch in the management of long-term assets and liabilities (investment risk). Microfinance Banks in Nigeria have been managing their global operations with local borrowing to meet expansion in their loan portfolios as a way of avoiding, or hedging against, foreign currency exposures.

Generally, managing credit risk is an integral part of microfinance bank operating techniques, with reducing the risks requiring a major operational effort. As a provider of loan service, the MFI faces the hazard of imperfect selection of credit clients with little or no collateral security.

Armendariz de Aghion & Morduch, (2005) observed that wrong selection may occur when the bank has insufficient information to determine between good and bad customers. Mersland and Strom (2007) conclude that such knowledge is particularly important for Microfinance Banks, whose customers frequently lack a long, or any, credit history while a loan tends to be given without any collateral and the borrower is unlikely to make repayments without strenuous monitoring efforts.

5.3. Operational Risks

Mersland and Strom (2007) said operational risks arise because of possible system or human errors in service or product delivery. Potentially, unexpected financial losses

might occur as a result of a variety of issues, such as inadequate or deficient information systems, operational challenges, incompetent personnel, inadequate skill, deliberate breaches, or fraudulent tendencies. The management of such risks requires that the internal control framework is effective, the information technology (IT) used is adequate, the integrity of the employees is guaranteed, and the operating processes are streamlined.

Given the various sources of operational risk, the most obvious is the interaction of loans and clients involving financial transactions. In the case of normal traditional banks, the staff undertaking credit assessment is usually well trained, with multiple levels of crosschecking put in place. Unfortunately, in the case of MFIs, there are usually numerous short-term loans of small amounts, making elaborate crosschecking not cost-effective. As a result, the possibility of both error of assessment and deliberate fraud is relatively high.

6. Practical Approach to Avert Loan Default Risk

According to Oguntoyinbo (2011), a pragmatic microfinance approach to dealing with such a serious challenge involves engaging in group lending, character referencing, and continuous building up of customers' credit history, in order to establish realistic and workable loan arrangements. In this regard, the following measures, among others, have been found to be most effective.

6.1. Building Relationships

A microfinance bank should emphasize the need to build and to maintain a strong and cordial relationship with its customers. Loan officers should visit their clients regularly, not only to collect installments, but also to relate closely to them in order to understand the challenges of their businesses and to assist them with their most pressing concerns. The experience of MFIs over the years has indicated that, in a lending situation.

Without collateral, a critical success factor for timely loan repayment is to build strong ties with the clients involved.

6.2. Engaging in Group Lending

While Microfinance Banks normally grant credit to individual businesses and persons, clients are frequently required to form themselves into groups of about 5 to 10 members (e.g. cooperatives) that nominate specific members for loan awards. Ultimately, the group members are expected to act as enforcers of the repayments of the loans by the individual members, by means of group sanction, if a member defaults in making repayments. In terms of such an arrangement, the failure of a single member is likely to affect the credit rating of the whole group, so that social pressure forces the non-performing member to make amends in terms

of timely repayment. Furthermore, the measure serves

As a group reference, as only those members who are trusted to make timely repayment tend to be recommended by a group.

6.3. Total Borrower Verification

The information provided by credit customers must be comprehensively verified. Loan officers are dispatched to verify each client's information, including business location, place of residence, the accuracy of information supplied, and the capacity of the prospective borrower to pay back the loan. Investigations include verifying the standing of the credit customer in the society with his or her neighbours and peers.

6.4. Product Standardization

Loan products and services have to be standardized companywide in order to ensure that the company's loan portfolio consists of homogeneous products to facilitate easy appraisal, management and monitoring.

6.5. Regular Reporting

Portfolio performance has to be regularly monitored and appraised, and reports sent to the head office. Such reports are summaries that are intended for management as a means of providing overview information required to track vital progress indicators. From such reports, variations or exceptions can easily be identified, allowing for the institution of necessary corrective measures.

7. Credit Risk Portfolio Assessment

According to Meysan et al (2012), a variety of analytical techniques have been used for credit risk assessment. They include statistical methods, models based on contingent claims and assets value coverage of debts obligations, operations research (OR) such as linear or quadratic programming, data envelopment analysis (DEA) and neural networks models." There is a split between static models which can only model the credit over a fixed time interval and dynamic models which allow one to model over anytime interval. (Kinnan, 2005).

More recent works include Kolari et al (2002) who developed an early warning system for bank failure based on logit analysis and trait recognition. Jones et al (2004) used a mixed logit model to predict financial distress, and Canbas et al (2005) who combined discriminant analysis, probit, logit and principal component models to create an integral early warning system for bank failure.

As Guo et al (2005) indicate, structural models are based on the information on asset values and liabilities available only to the firm's management while reduced form models are based on information available in the market.

Threshold- based model portfolio credit risk are widely

used in practice; see for example Moody's Quantitative Credit Analysis system (Kealhofer and Bohn, 2001), this use the normal copula as a model for the portfolio dependence structure. Another work by Glasserman and Li (2003) developed large deviation asymptotic for the probability of large losses, and important-sampling simulation procedures for homogenous portfolio within the normal copula framework. Threshold model with non-normal dependence structure have been proposed and studied by Frey et al. (2001) and Frey Mcneil (2003). The latter also formulated non-normal threshold models for credit portfolio that is based on mixing distributions. In all these research works practical tips to help microfinance tackle credit risk portfolio have never been addressed. This paper discussed the practical things that Microfinance Bank must do to overcome the challenge of loan default, in this sense, this paper is quite distinct from the available works done by other researchers.

8. Credit Risk Portfolio Management

Kono and Takahashi (2010) describe the existing literature and theoretical models on innovative factors underlying the high repayment rates in microcredit programs. They present simple models to argue that different elements of microcredit, such as group lending solve the problems of asymmetric information in the credit market. However, a large part of Microfinance Institutions do not offer group but just individual loans. Many practitioners of group lending are now turning steadily toward individual lending. This give rise to a very important question: when Microfinance Banks are not associated with joint liability lending mechanism and offer just individual loans, how do Microfinance Banks then manage their credit risk?

Armendariz and Morduch (2000) highlighted several important mechanisms that allow Microfinance institutions to generate high repayment rates from poor borrowers without requiring collateral and without using group lending contracts. These mechanisms include the use of non-refinancing threats, regular repayment schedules, collateral substitutes, and the provision of nonfinancial services. Typical group lending scheme include: (a) each member is jointly liable for each other's loan, (b) if any member does not repay, all the members are punished (often in the form of denial of future credit access), and (c) prospective borrowers are required to form groups by themselves. Group lending model has attracted an enormous amount of public and academic attention mainly after the success of group lending program in Grameen Bank.

Many economic works on microfinance focus on the incentives induced by joint liability in group lending contracts and nearly all authors have proven that group lending enforces joint liability mechanisms, involves borrowers in sharing information and then reduces asymmetric information (Besley and Coate, 1995; Ghatak, 1999; Kono and Takahashi, 2010; Stiglitz, 1990; Van Tassel, 1999). Zeller (1998) uses information on 168 credit groups in

Madagascar and showed that the group effectively generates insurance, transfer screening and monitoring costs from the bank to borrowers, providing an effective way for MFIs to overcome adverse selection, moral hazard, and enforcement problems, which leads to a better repayment performance.

According to Baklouti and Adelfettah (2013), group lending is an innovative credit contract that essentially allows the poor borrowers to act as guarantors for each other. In a group lending contract, borrowers are required to form groups and the entire group is responsible for repaying the loan of any member who is unable to pay. Each borrower obtains a loan for her individual project but the liability is joint. This joint-liability induces group members to self-select each other and provides incentive for peer monitoring, such that each borrower in the group will have information about the other's actions. Hence, it is believed that this interdependence between borrowers helps mitigate problems caused by adverse selection and moral hazard and therefore contributes significantly in obtaining high repayment rates.

First, peer selection in group lending model provides a screening mechanism for borrower's character, the choice of investment project and the proposed loan use, that can help to reduce adverse selection (Ghatak, 1999; Morduch, 1999; Van Tassel, 1999; Zeller, 1998). Ghatak (1999) and Van Tassel (1999) provide original theoretical models to explain how group lending with joint liability affects the problem of adverse selection. They mentioned that borrowers in group lending have perfect knowledge of their partners and every individual wants to form a group with safe borrowers. This peer selection and screening mechanism make the effective cost of borrowing lower to safer borrowers and hence improve repayment rates and efficiency. In his study, Wenner (1995) used information on 25 Costa Rican credit groups and showed that lending groups use private information to select their peers and that this selection mechanism increases the group repayment performance.

In addition, joint liability in group lending can reduce the problem of moral hazard by increasing borrower's incentives to monitor each other and then to repay the loan. The original theoretical models dealing with the effect of group lending with joint liability on moral hazard can be found in Stiglitz (1990) and Varian (1990). These studies concluded that joint liability may induce borrowers in a group to monitor each other, thereby alleviating moral hazard problems. However, Kono and Takahashi (2010) advanced that group lending alleviates the problem of moral hazard only if the group can coordinate its members' decisions and achieves higher repayment rates only if the returns are sufficiently high. According to Besley and Coate (1995), Karlan (2007) and Wydick (1999), moral hazard can be reduced also by social sanctions against defaulting borrowers in group members. For example, Besley and Coate (1995) construct a model to compare the repayment performance between group lending with and without the use of social sanctions and argued that social sanctions can improve repayment rates under group lending.

9. Oguntoyinbo Risk Ameliorating Models

According to Oguntoyinbo (2011), the following are further models adopted by Microfinance Banks to ameliorate risks inherent to their mode of operations.

9.1. Use of a 'Daily Collection Board'

The 'daily collection board' is a large board on which is written up the amount of money due for collection each day, including both loan installments and savings collection, with the names of the respective loan officers written against the collections to ensure transparency. The maintenance of such a board enables details regarding the daily collection targets for the various loan officers to be available at a glance and also helps to prevent the possibility of misappropriation of money by the officers concerned.

9.2. Collections in Group Meetings

The system requires that all savings and loan installments are collected during group meetings and in full view of the members concerned. In terms of such an arrangement, the clients are able to witness all financial transactions and, thereby, to increase their level of confidence in the organization. The possibility of fraud is also minimized.

9.3. Rotation of Loan Accounts

Rotating the clients' accounts within the same branch among loan officers every six months helps to ensure transparency, as no particular officer has a monopoly of knowledge of client accounts. In addition, such rotation helps to ensure accuracy in record-keeping, as well as compelling a six-monthly review of accounts, helping with the detection of error, and cutting down on the possibility of fraud.

9.4. Periodic Review of Passbooks

Such periodic review requires that each branch manager check all the clients' passbooks quarterly to ensure that the records of transaction in the passbooks agree with the records in the books that are held at the branch. The procedure is important for checking that no transactions are either erroneous or fraudulent.

9.5. Disbursements Made from Branch Offices

The disbursement of loans to clients is made in the branch office concerned, in the presence of loan officers employed at the branch, as the branch manager. The client, the loan officer and the branch manager sign the loan application form, indicating that disbursement of the sum approved has been verified by all those who are immediately concerned with making the loan. The procedure helps to ensure that the

whole loan amount is received by the client in question and that no portion of it is misappropriated by any officer.

9.6. Internal and External Audits

An internal audit is carried out on a continuous basis, while external audits, which serve as counterchecks, are carried out periodically, on a biannual or annual basis.

10. The Place of Operations Research in Tackling Microfinance Challenges

According to (Britannica 13, p.594), "Operations Research attempts to provide those who manage organized systems with objective and quantitative basis for decisions. It is normally carried out by teams of scientists and engineers drawn from a variety of disciplines. Thus OR is the application of science to the solution of managerial and administrative problems, and it focuses on the performance of organized systems taken as a whole rather than on their parts taken separately. It is concerned with how managerial decisions are and should be made. It provides the knowledge and understanding required to make effective use of men and machines to carry it out." The problem of incessant loan default that have plagued many microfinance banks worldwide and which have led to the closure of many such institutions could be best tackled by Operations Research approach. Olokoyo (2001) shared the same opinion that operations Research is the application of scientific methods to problem arising from operations involving integrated systems of people, machine and materials.

From the definition of Operations Research by Britannica 13 and Okoyo (2001), one can deduce that employment of operations research experts in financial institutions to leverage on their wealth of experience in both objective and quantitative problem solving skills will go a long way to giving microfinance banks the best desired results.

11. Suggested Practical Steps to Mitigate Credit Risk in Microfinance Banks

Just as observed by Nyor et al (2013), in order to avoid occurrences of non-performance of Microfinance Banks in Nigeria, Microfinance Banks should focus more on quality service and good governance than complain of inadequate finance. This may help avoid sharp practices and poor management that usually bring about banks' failure. Furthermore, we recommend the following practical steps for Microfinance banks which when wholly followed could reduce the default rate most especially using group lending methodology:

1. The Bank official should personally visit the group members, either in their shops or houses to ascertain that the group is genuinely formed and that all members are serious business people and not just

members by name. This will also avoid customers giving fake addresses with the intention to run away with the Bank money.

2. Loan officer should explain to the group that they are collectively responsible for each other's loan and reconfirm that they are agreeable to guarantee each other. This allows members to select only trustworthy colleagues to be members of the group.
3. Loan officer should ensure that each borrower actually gets the amount of the loan he/she is taking and other members of the group do not use his or her share of the loan. This is one of the common happenings in group lending; some smart group members use others to borrow on their behalf.
4. Clients should be made to save some amount in their account with the Bank each week during the pre-disbursement training period. This will help the Loan officer to know if the client is in business and to predict his ability to repay the loan.
5. Loan officer should visit the borrower's business after disbursement and verify that the amount has been used as specified. Loan diversion is a major cause of default. The Bank has to insist on this because sometimes the loan officer himself may be reluctant most especially if he has an interest in the loan.
6. Clients that borrowed under a group must continue to meet even after the loan is disbursed. In fact every member should pay his/her loan installment to the Loan officer at the meeting in the presence of all the members. This helps checkmate the loan officer and the group leaders so that they do not use the money.
7. Loan officer should insist on the need to make regular weekly / monthly repayment as agreed and not bulk repayment. Bulk repayment is a signal that default may soon happen.
8. If the installment remains unpaid at the close of daily business, the customer should immediately be reminded. If the installment remains unpaid till after a week the loan officer should raise the issue in the next group meeting and give a written reminder to the group. This will create consciousness among the group members that the Bank is monitoring them.
9. The Loan Officers should keep good relationship with the local chiefs in the areas where the Bank lends to clients because the local chiefs have a good influence on the community and it will help to easily recover the money.
10. A new loan should not be issued to any member of the group once a member or more members of the group have not fully paid the previous loans. This makes members to force one another to pay so that they will go for the next loan.
11. Loan officer should not ignore any early warning signs like borrower not available at his place of business/ residence, installments not coming etc. These are signs that something is wrong and these

should be reported to the immediate supervisor.

12. Wide disparity in the loan amounts within a group should be avoided. Normally, the maximum amount in the group should not exceed 50% of the minimum amount. Wide disparities may lead to defaults. Also, other members may not have the financial capacity to contribute to pay for a defaulting member with a big amount.
13. Loan officers should not be allowed to hold borrowers' pass books to avoid using the passbook or making alterations therein.
14. Loan officers should avoid collecting gift from clients either in cash or in kind. Banks that allow this always have repayment difficulties because it results to taking kickback from customers after loans are given to them.
15. Clients should choose group members themselves not the loan officer. This is to avoid Bank official imposing clients on the group to borrow on their behalf.

12. Conclusions

The success of microfinance banks is dependent on the effective and efficient management of its credit portfolio. These risk portfolios proved to be the source of recurring problems and the cause of failure for many microfinance banks. Credit policies, procedures, systems and controls do not always assure asset quality and earnings. Practical approach is therefore necessary for effective loan portfolio management. This paper discusses and recommends the practical approach needed by microfinance banks and the need to have operations research experts among the Bank's employees. Operation Research experts could use their wealth of experience in both objective and quantitative problem solving skills to continually carry out research on causes of loan defaults in Microfinance Banks and recommend optimum solutions. Finally, further research should be conducted using operations research approach on the challenges facing microfinance banks especially on why loans borrowed from the banks are not paid as at when due by clients.

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