

# The Causes of Default Loans Risk in Microfinance Institutions in Ghana: Case Study of Some Selected Microfinance Institutions in Kumasi and Accra

Farouq Sessah Mensah<sup>1</sup>, Mohammed Aidoo<sup>2</sup> and Farouq Sessah Mensah<sup>3</sup>

<sup>1</sup> University of Cape Coast

*Received: 8 December 2017 Accepted: 31 December 2017 Published: 15 January 2018*

## Abstract

The purpose of the study was to investigate how non-performing loans affect the operating profits, and interest income of microfinance institutions. Design/Methodology/Approach: The research concentrated in some selected microfinance institutions within the Kumasi and Accra metropolis where majority is located. The study focused on 6 microfinance institutions in Kumasi and Accra. A total of 140 respondents were administered questionnaires and interviewed out of the total population. These include 20 loan officers, 10 recovery and risk management officers, 10 managers and 100 clients were chosen for the study. The study used purposive sampling and simple random techniques. Primary and secondary data were used for the study. Findings: The study identified the manufacturing sectors have the highest incidence of NPLs. The study discovered a connection between delinquent of recovery and unpaid loans and profitability of the microfinance institutions. A unit change in problem of recovery and outstanding of loans will lead to changes in profitability by 0.685.

**Index terms**— microfinance, loan, default, risk

## 1 I. Introduction

or the past decade, majority of developing countries have witnessed some financial system experiences (changes) and innovation as result of the emergence of Microfinance Institutions (MFIs). International organizations have come in terms that Microfinance Institutions are genuine and efficient ways to ensure efficient implementation of programme mainly poverty alleviation schemes (projects) as well as seeking direct information on the needs and the interest of the poor across developing countries (Okumadewa, 1998). Microfinance is explained by Robinson (2001) as the small scale financial services that are given to people who are engaged in petty business in the urban and rural communities.

According to Mohammed and Hassan (2008), Microfinance program was established to give loans, saving and forms of financial services to the poor people and low income earners for use in their small and medium businesses. The purpose of micro finance is not only to provide capital but to fight poverty on individual or group of people at all levels and also create institutions that provide financial services, training to the poor in terms of how the capital is used, which are incessantly ignored by the commercial banks (Otero 1999). These microfinance institutions consist of community banks, cooperative banks, rural banks, thrift banks, credit cooperative unions and NGOs.

According to Consultative Group to Assist the Poor (CGAP, 2001) report that nearly three billion (3 bn) poor people are deficient in accessing basic financial services necessary for them to run their businesses and it is projected that 35% of poor people found in developing countries are below the poverty line leading to most of them not able to contribute much to the GDP. In the case of Ghana, it is estimated in GPRS 2003 report that the poverty line of women in the country is 51% and men are 49%. This situation makes it difficult for them

to set up and develop their businesses due to inability to access credit. In Ghana, the purpose of Microfinance institutions is to close the gap of the people through economic development method, thus empowering the people more especially the rural poor in form of providing micro financial services to them.

The key objective of Ghana Growth and Poverty Reduction Strategy two (GPRS II) to make sure the country achieved sustainable fair growth, speed up poverty decline and the protection of the weak and eliminate within a decentralized and democratic environment. The purpose of this strategy is to reduce general poverty and increasing income disparity mainly among productive poor people which represent the greater part of the working populace. According to the 2010 population and Housing Census, 80% of the working populace was found in the informal sector. This group of the working populace has challenges in accessing the credit which retard the development and growth of the informal sector of the economy. According to International Monetary Fund (May 2003) report on Ghana, difficulty in the financial sector cripple the prospect of finances of productive private investment. Thus, affecting business growth in Ghana. Since 2000s, the influx of Microfinance in the country has made majority of the people restore to accessing credit as way of running or startup business due to the easy way of accessing loans or services.

Bank of Ghana (BoG) Financial Stability, report covering operations of bank's revealed that Non-Performing Loans (NPLs) has hit 70% (GHC6.1 billion) leading some experts in the industry worried that it might have collapse some banks. In the case of microfinance, GHAMFIN 2008 report the total non-performing loan of the microfinance institution was 6% in 2004, it increase to 9% in 2006 and further to 21% in 2007. loans and Advances constituting over 50 to 70 percent of the total operating assets of the Microfinance institutions, this means that anytime there is a problem in nonperforming Loans will lead to enormous negative consequences on the operations of the Micro finance institutions in Ghana causing some of the microfinance institution to collapse. That is some of loans issued by these MFIs regrettably turn out to be non performing leading to bad debt which affects the overall performance of the institutions. This problem has created huge attention from the general public in recent years since it threatens the sustainability of the banking and non-banking financial institutions and the country at large (Arko, 2012). Typical examples are Noble Dream Microfinance, Eden Microfinance, DKM Microfinance, God is Love Microfinance, Lord Winners Microfinance among others. Based on this problem that, there is need to find out how loans default risk affect the microfinance institutions in the country.

According to Boateng and Ampratwum (2011), demand for micro credit is very high due to structure of the economy of Ghana where majority (80%) of the workforce is working in the informal sector. This situation causes a greater risk in the industry as result of the sector it serves. In most microfinance institution, the techniques of granting loans to an individual are using based on favoritism, speculative and experience of the earlier decision which is not data driven to objective analysis it (Arku, June 2013).

Over the years, the banking industry has seen periodic bank distress and sometimes collapse, with the microfinance institutions worst affected. This difficulty of bank distress has been outlined to number of factors, well known among them are improper risk management, favoritism, lack of unqualified personnel, economic factors such as the high interest rate, unstable inflation rate, and non-compliance to monetary and regulatory authorities (Nnanna 2003). Idama et al (2014) argue that credit risk continues to be a danger to microfinance sustainability.

Loan portfolio represents the highest operating cost and source of revenue to many of the microfinance institutions. However, most of loans given out to customers turn out to be non performing which have affected on the profitability and the general performing of financial lending institutions in developing countries. Most of the microfinance institutions that lend money in Ghana are faced with problem of increasing nonperforming loans portfolios in spite of attempts to decrease the problem.

The sustainability of microfinance institutions depends mainly on the willingness to collect the loans well and competently as possible. That is financial viability depend on microfinance institution ensuring that their customers pay back their loans (low default of loan) and ensuring due diligent are done when loans are issued.

In recent times, there have been complaints from customers that most the MFIs do not pay back their interest accrued from the money and actual money. These MFIs attributed to the high default rate of clients which means that majority of microfinance institutions are not attaining the internationally accepted standard risk of 3% of the bank's portfolio which raise concern on impact of businesses, individuals and the economy at large. Currently, these defaults of loans have started approaching deep into the operations of microfinance institutions in Ghana. Against this background that the researchers seek to find out the causes of loan default risks in the operations of microfinance institutions in Ghana. (001) define microfinance as an effort to improve ways by which small loans and small deposit from the poor are ignored by the commercial banks. In other words, Otero (1999) explained microfinance as provision of financial services to very poor and low income who are self-employed people living within a country. Therefore, microfinance can be defined as providing financial services such as loans, saving and insurance to the low-income earners living in both rural and urban setting who are unable to get such services formal the commercial banks.

For the past years, Microcredit and microfinance have being used interchangeably by among people within the country, it is therefore essential to draw attention to the differences between the two which sometime confuse people. Sinha (1998) explained microcredit as small loans whiles microfinance is suitable where NGOs and MFIs complement the loans with other financial services such as saving, insurance, among others. Okiocredit, (2005) further clarified microcredit as element of microfinance which involves giving credit facilities to the poor people

---

but microfinance means providing extra noncredit financial services such as insurance, savings and payment services.

According to Asian Development Bank (2000), microfinance rendered financial services to the poor and low income families found in both the rural and urban to develop their business and repay the loan within the due time. The study further revealed that institution of microfinance started before independence but was common throughout the country so as to attain the millennium goal project.

Microfinance has been seen by the policymakers and government as one of the important intervention of providing financial services to its people in the developing countries. It is not amazing that successive governments recognized microfinance as one the key to achieving the larger goal of reducing poverty since this aimed to providing services to the poor both urban and rural of which commercial banks do not provide service to.

In Ghana, the microfinance sector over the years has seen some increase in growth due to some financial sectors policies and programmes done by successive government since independence. Some of them include: In term of regulatory framework set out by the Bank of Ghana, the Saving and Loans companies are controlled under the Non-Bank Financial Institutions (NBFI) Law 1993 (PNDC Law 328) as well as Rural and Community banks are controlled under the banking Act 2004 (Act 673). As a result of the rapid growth in the microfinance institutions throughout the country the Bank of Ghana since 2011 has come out with operational rules, guidelines and licensing procedures to ensure efficient functions of Microfinance institutions.

Bank of Ghana has grouped these microfinance institutions into various categories. These include the saving and Loans companies, Rural and community Banks, Credit Unions and Financial non-Governmental Organizations.

## **2 a) Introduction b) Development of microfinance institution in Ghana c) Classification of microfinance institution in Ghana**

minimum capital requirement lower than the commercial banks but higher than the rural and community banks under the Non-Bank Financial institution law 1993. The motive behind this law is to help the speedy expansion and transformation of the financial services belonging to the private individuals and organizations into saving and loans companies working in the rural and urban areas in the country. These banks normally serve the informal sector whose members are mostly unbanked population and designed products and services that meet the needs of the group within the country. These banks are controlled in terms of range of financial services such as providing credit to SMEs and low income clients, money transfer, mobilization of deposit by the Bank of Ghana. They used normally used methodologies of microfinance to provide an average loan size to their clients which is higher than the various microfinance institutions the spreading within the country.

ii. Rural Banks Rural banks are entity banks which belong and are directed by people living in the community. These banks are recorded under the company code and are accredited by the Bank of Ghana to participate in banking business. Per the company code, these are not allowed to open branches throughout the country but are allowed to open agencies within their areas of operations. The key functions of these banks are saving mobilization and provision of credit facilities to reliable clients within their catchment areas. The aim reason why the Bank of Ghana licensed these rural banks is to serve as a way of developing the rural areas within the country.

### **3 iii. Credit Unions**

Credit unions are licensed under Co-operatives branch as a cooperative parsimony society in Ghana and are allowed to receive deposit and offer loans to only their members. These unions have set up an organization known as CUA which serve as regulatory apex body for its members and its affiliates.

Financial Non-Governmental Organizations are semi-formal system which is included as companies certified under the companies' code. These FNGOs are recorded Registrar General but not accredited by the Bank of Ghana. FNGOs are usually vigorous within the rural communities and are normally done by the missions. They tailor their products and services to alleviate the poor customers living in the country. These FNGOs do not collect money in form of deposit from the customers but use external funds for the microcredit. This money is generally from the government programmes, donors and social investors.

Microfinance institutions in Ghana deal with provision of financial services which aim at targeting the low income earners through designing products. These microfinance institutions manage their customers' funds and also offer products such as savings, loans, and transfer services, insurance and among others. Studies have shown that Microfinance provide various financial services that deal with the development of the poor so as to alleviate them from poverty. This development that microfinance plays to the poor can be as look critically in three broad roles:

? It helps low income earners to meet their basic needs ? It links to improvement in the household welfare ? It also helps to give power to low income earners more especially women by supporting them with programme that seeks to promote equity among the people.

## 4 i. Loan Default

Loan default is explained as the incapability of the borrower to abide by his or her loans responsibility as at when time for payment is due (Adedapo, 2007). In other words, [www.investopedia.com](http://www.investopedia.com) defined as loan default as inability to repay a loan given to client according to the agreement between the two parties within a particular period. That is, loan default arises when the debtor is inability to meet the legal requirement for debt repayment within the schedule plan (Murray 2011). In short, when client is not able to pay back a loan issued by the financial services or entity. Pearson and Greeff (2006) also describe default as a risk threshold that explained the time or the point in the borrower's reimbursement history where clients fail to pay at least three installments within 24-month period. This definition is coherent with international standards and was important because the study adapted this definition. This does not mean that the borrower does not pay the loan but the amount of payment done by the borrowers is always lower than the total loan given (Balogun and Alimi, 1990).

Delinquent loans are loans that have a sum of the funds due for payment by the customers but not received the financial institutions or entity. A delinquent loan is said to become default when the chances of retrieval of the money that was given to clients are minimal (Ledgerwood, 2000). That is loans are in arrears, past schedule time, and overdue time and have not being paid by customers of the financial institutions. Delinquency is calculated because it shows a rise loss of credit risk, cautions of operational challenges. This measurement helps to project how much of the portfolio will not be retrieve from the clients. Thus it will never be repaid by the customers (CGAP 1999).

According to CGAP (1999), the delinquency can be analyzed by looking at two broad indicators. These include collection rates measures the amount of money over schedule for payment by the customers (clients) as against the amount of loan issued out. Risk rate of the portfolio measures the unpaid loans balance that were not settled on time by the clients against total loans balances. Agene (2011) explained credit risk portfolio as the worsening of the quality of loan portfolio leading to losses of loan from clients and rising delinquency cost of management.

Most of the customers often want to find out if these microfinance institutions are serious in term of collecting the loan payment since most of the MFIs employed staff who do not have much knowledge in financial industry (in term of strategies of collecting the loans). In addition to this, most of the clients believe that MFIs are non-profit organizations which are mostly funded by foreign donors and for that matter these clients do not put their maximum best to ensure that they make profit since there are no shareholders to report to (Dan Norell, 2003).

Customers' survivals are unpredictable in the sense that sickness or death of a family member may force some of the client to borrow from the MFIs with the aim help them since refusal may cause the extended family members to hate the person. This situation lead to most of them not being able to pay the loans since the loans were not entered into profitable business that help repay the loan (Dan Norell, 2003).

Balogun and Alimi (1998) argued that the key causes of loan default are high interest rate, delay in loan delivery, poor supervision on the part of the staff, non profitable venture of the clients of the MFIs and inadequate government interventions such as credit programme and regulations of the microfinance industry. High interest rate, Loan payment gap can influencing rise in borrowing coming from transaction cost which inturn influence negatively performance repayment of clients according to Olomola (1999).

If Loans given to clients for their business are big, additional funds may be put into their personal use. When such loans are due to be repaid, customers find it difficult to pay back the loans since the amount used for the business is not enough to repay the total loans. For instance, NGO based in USA, world vision's Georgia credit fund argues that the loans for personal uses are one of factor that determines whether a client will pay back a loan or not (Dan Norell, 2003). Moreover Akinwani and Ajayi (1990) discovered that age of famers, size of the family, expense of the family, farm size and experience to management methods are some of the causes that affect the farmer capacity of repayment.

Favoritism is one of cause of loan default. If loan given to clients are based on favoritism, customers may decide to holdup payment or default. They believe that their friend working in these microfinance institutions will persuade the organization to cancel the loan rather than encouraging the organization to take them to court or seize their property. This can be setback with small or large business loans leading to default loans. Ahmad (1997), also further explained that the cause of loan default include: lack of readiness of the clients to the loan together with movement of funds by the borrowers, willful abandon and inappropriate appraisal by credit officers. Kwakwa (2009) further argue that rises in corporate loan default causes in real gross domestic product to fall which in turn cause exchange rate to depreciate and also affect repayment capability of borrowers.

According to Okorie (1986)found out that disbursement time and nature of the loan, profit earned from business and supervision of the staffs are the main cause of loan default in Ondo state in Nigeria leading to clients finding it difficult in repayment of the loans. Other reasons that cause loan delinquencies are the type of the loan, interest on the loan, loan term, the clients (borrowers) income and transaction cost incurred on the loans.

Another cause of loan delinquencies is type of the business. Most of clients do not extensive study on the type of business they want to enter before they enter into. If instance if their friend is doing a business which earns him or her profit for her to pay off her loan collected from the bank, they also enter into that same the business with hope of making profit. They enter into the business and the income generate out of business is not enough to pay back the loan leading to default of loan. In addition to training of clients on recording keeping, how to use

your resources and among others are also factor the can lead to default of loan. The clients may spend their loan any how making it difficult for them to pay back the loan when time is due. Updegrave (1987) establish in his study that there are eight variables which affect credit risk of the consumer. These include age of the borrower, bankruptcy, income, occupation, historical repayment records of the borrowers, number of years a borrower will stay or work in particular place, the position of the saving account and bankruptcy history. This was confirmed by a research of Steenackers and Goovaerts did in 1983. They study used personal loans data in Belgian Credit Company and the findings revealed that number of years a borrower will stay or work in particular place, age of borrower, housing ownership, occupation, monthly income, the number and period of loans, public sector workers or not have a significant connection with repayment.

According Bloem and Gorter (2001) factor that cause loans default are as follows foreign exchange rate, price of main export of the country, volatility in interest rate and cost of petroleum products. They also revealed that poor supervision, poor management and overconfident assessments of creditworthiness during the time the country is experiencing economic booms from government assurances could result in default of loans.

Speculation in form of investing in high risk assets is also factor that can lead to default loans. This happen when these microfinance institutions invest their capital into high risk asset areas and the yields are not coming and also deceitful practices giving loans to unqualified clients or without location or security are some of causes of non-performing loans which turn lead to loan default. In addition to this, internal causes such as shortage or agitation of labour as well as market failures, high interest rate, undue dependence on high priced price inter-bank borrowings are causes of nonperforming loans resulting in default of loans. External factors such as natural disasters and economic recessions, term of trade worsening, macroeconomic instability, moral hazard are other variables that can influence loans default ??Goldstein and Turner, 1996).

According to World Bank study on nonperforming Loans in sub Saharan Africa indicated that non-performing loans attributed to economic shocks together with high cost of capital and low interest margins (Fofack, 2005). Other factors such as Overdrawn account where there is no limited given to clients, overdraft taken in surplus of the practical operational boundary and overdraft account which has not active operated for some time among others have affect performance of loans resulting in default of loans Nicholas Rouse (1989).

The interest income produces from loans plays important role to the profitability performance of microfinance institutions. However whenever a microfinance institution experience a loan default, then it means that the health and operations is going to negatively affected. Based on this, Bank of Ghana set up regulations for the microfinance institutions to make provisions and charges of credit losses in term bad debt which eventually decrease level of profit (Bank of Ghana, (2012).

Toxic asset is another consequence of loan default risk. This occur when these depositors and investors loss confidence in the microfinance institution resulting in liquidity problems. Again another consequence is the colossal amount of bad debt that some of these MFIs experience which have negative impact on the profit and wealth of shareholders as well as the growth of the business (Arko 2012). In instance, in Ghana, most of the depositor clients and investors loss interest in the microfinance institutions leading to some of them collapsing. Noticeably among them is the DKM microfinance, Eden microfinance, Noble Dream microfinance, God is Love microfinance Soul winners microfinance and among others.

According to Berger and De Young (1997), most of banks that have fail in doing business have colossal amount of non-performing loans which affect the Asset quality which is significant in predicting insolvency.

According to Golden and walker (1993), there are 5Cc approaches to decreasing default of loans. These includes i. Complacency-this refers to the tendency that things are good in the past and for that matter this will be good in the future. Again, loan repayment should be constantly monitored and whenever there is a default in repayment, a quick action should be taken. The Microfinance should also avoid granting loans to the risky customers or for speculative ventures, monitor loan repayments, and renegotiate loans whenever borrowers get into difficulties. (Kay Associates Ltd, 2005).

Kay Associates Limited (2005) cited by Aballey (2009) states that bad loans can be restricted by ensuring that loans are made to only borrowers who are likely to be able to repay, and who are unlikely to become insolvent. Credit analysis of potential borrowers should be carried out in order to judge the credit risk with the borrower and to reach a lending decision.

There are many strategies that most these microfinance institution used to check the rate of loan default. Some of these strategies are discussed as follows;

i. Portfolio at Risk (Over One Day Late) This is explained as the ratio of risk amount to the same value of remaining balance of loans over a late period of one day divided by the value of the remaining loans. The portfolio at risk over one day late ratio is one of the initial warning signal showing that the microfinance is deficient when it come financial g) Repercussion of loan defaults Risk h) An Approach of Decreasing Default of Loans i) Strategies of Reducing Default Loans discipline in the system. For microfinance institutions to ensure efficient and effective its operations, it is appropriate to installed computer tracking device system to check partial payment that were recorded late which acquired late payment charges. This is put in portfolio at risk over one day late statistics tracking device. This will show management that whether clients are paying back or not paying back the loans and may lead to the loans arrears problems since some customers often know one another. The industry standard portfolio at risk over one date late is below 10% (Dan Norell, 2003).

## 5 ii. Portfolio at Risk Over Thirty Days Late

This is defined as the remaining balances of loans that are more than thirty late divided the amount of loans remaining. It is one of the ways of measuring arrears of the banking institutions. The higher portfolio at risk means that the likelihood that there is going to high rate of default of loan. When this happen, credit officer or manager should take actions to stop it or stand losing the total amount of loan (Dan Norell, 2003).

## 6 iii. Principle Payment in Arrears Over One Day Late

This ratio is estimated by dividing the amount of principal payment in arrears by the total amount of loans remaining which is similar to portfolio at Risk. The only variation is that the numerator has the amount of principal payment in arrears rather than the amount of remaining balance of loans that are not paid (arrears) which make it lower than the portfolio at risk over one day late measurement. Many professional in the banking industry choose the portfolio at risk to value the remaining balances of loans that are not paid (arrears). This calculates the whole value that Microfinance institutions stands to lose including the principal payment.

## 7 iv. Principal Payment in Arrears Over Thirty Days Late

This ratio is estimated by the value of customers' payments that are in arrears divided by the total amount of loans remaining. There is no clear industry standard for calculating principle payment in arrears; it however varies from one country to country. For instance, in USA, World Vision uses a standard which below 4 percent.

## 8 v. Repayment Rate

This ratio is estimated as the amount of money paid by the clients (minus prepayment) divided by the total sum amount of money that is due payment in addition to the amount that is past payment. Although good, this strategy of reducing loans default has create challenges among the microfinance professionals because it hold back arrears of payment which threatening the industry. When calculating repayments rate it is important not to deduct the prepayment, which means that it must cover up delayed payment of clients in arrears. The industry has 95% standard rate.

## 9 vi. Financial Ratios

It is very important for management in the Microfinance industry to critically to study the financial ratios very well as it helps them to know health of the loans portfolio status. This also helps management to know the arrears rate of the company and what measures to take to reduce the arrears rate.

Berger and De young (1995) studied the causes of loan default in some of the banks in India by looking at industrial sector. The result of the study showed that wrong selection of clients (Enterprenuer), inadequate information in term of viability of client project, insufficient of collateral security, unachievable term and plan of repayment of the loan, strategies of collection of the loans by the staff and natural disaster are the major causes of loan default in India.

NishimuruKazuhito and Yukiko, (2001) investigated the fundamental causes of Japan's extended economic stagnation leading to most loans issued by the banks not doing well or loan default. The result of the study indicated that loans given to companies and industries by the financial institutions for the period of the simmer did not do well leading to default of loans. This situation led to the country experiencing structural reforms and also disallowed financial intermediary system from working well. Kohansal and Mansoori (2009) did further studies which the outcomes indicated that diversion of loans, poor management actions and reluctance to pay back the loans, interest rate ceiling are the causes in loan default in Japan. Vasanthi and Raja (2006) examined connection between income and other variables on the probability of default risk using data from Australian Bureau of Statistics. The study used the variables such as socioeconomic, homeowners and housing characteristics in Australia to determine the cause on default risk. The study used a sample of 3431 households; the findings revealed that repayment is significantly high comparing to consumer credit which is accounting for 93.03%. The findings further indicated that the head of the household has major impact on the default risk. Younger household tend to increase their chance of mortgage payments other than the older household. findings also revealed that the individual that used their loans on expensive automobiles have a higher likelihood of prepayment whereas loans of economy automobile have a lower likelihood of default. Autio et al (2009) studied how young adult use small instant loans in Finland. The study used 1951 young adult between 18-29years and the variable used for the research include employment, occupation status, income and structure of the family. The outcomes of the findings revealed that 18-23 years use small immediate loan more than the 24 to 29 year old. The age group 24-29 years used more credit loan as result of their status and higher income. From the result, there is a negative relationship between Gender and loans taken but rather income, structure of the household and occupational status have influence in number of loans taken. Merritt (2009) examined the cause of mortgage loan defaults. The outcome of the study showed that 36% of restriction of income, unemployment rate (8%) marital challenges (3%) and sickness on the part of client (family member) are cause of loan default and delinquencies. Amilie and Allen (2006) also investigated three key financial ratios to be the main cause of loan default. These ratios include liquidity, profitability and leverage. The result of the study showed that these three financial ratios have

---

a positive impact on the default loans calculation. An increase in any of the three financial ratios variables will lead to default of loan increasing.

Okpugie (2009) investigated the main cause of loan delinquencies and default in Nigeria. The result study showed that high interest rate by these microfinance institutions are the main cause of alarming loan default by clients. This situation led to most of the SMEs working for the MFIs institutions. This was confirmed by a study andel (1993) which also revealed that the high interest rate charge by these MFIs create loan default by the clients.

Mario and Claudio (2010) examined whether both behavioral and socio-demographical variables have impact on default loans in United States. The variables used in the study under socio-demographical include age, education level, income, time, ownership of credit card and nationality and result of the finding indicated that there is variation which exclude some of the variables in predicting whether it the cause of these default of loans in US.

Gan et al (2012) studied the causes of mortgage default loans in china. The outcome of the study revealed that the demographic characteristics of borrower affected the lending decision process of the banks. The outcome of study also revealed that amount of loan and interest rate are positively connected to loan default in China. This means that a unit change in amount of loan given to the borrower and interest rate have a change in loan default. The other variable such as bank rate, occupation and whether the clients live in the same catchment of the banks showed a negative relationship with the default of loans.

Bichanya and Aseyo (2013), explored the causes of loan default within microfinance institution in Kenya. The study used a sample of 150 respondents using the simple random sampling. The result of the findings indicated that non supervision on the part of the MFIs staff on borrowers and insufficient training for borrowers in term of how the loans will be used were the cause of loan repayment default. The study also showed that majority of the borrowers did not use the amount of the loan given them to planned and approved project.

Arku (2013) investigated the delinquency and default risk modelling of the microfinance in Ghana within the period of January 2011 to December 2012. The study used criterion model for the study and the outcome of the findings showed that, trading and manufacturing experiences higher rate of default loans than the food vendors as well as the service sectors. The customers of these banks are comparably less dangerous.

Arko, (2012) examined the determinant of causes and the effect of performing loans on the operations of microfinance institutions. The study used focus on Sinapi Aba Trust where five -year data such as interest incomes, operating profit and loanable funds was used the research. The study revealed that Sinapi Aba Trust bank witnessed significant amount of nonperforming loans within the five year period and affect the profitability of the bank, loanable funds and the Liquidity position of the bank. The study further revealed that lack of proper monitoring of loans by the staff, business failure on the part of the borrowers, poor marketing opportunities were identified to be the major causes of non-performing loans in the bank. The research also showed that trade and service sector has the highest frequency of non-performing loans.

Addae-Korankye, (2014), explored the causes and control of loan default in microfinance institutions in Ghana. The study adopted random sampling procedures for the work and the result of the findings reveals that inadequate size of loan, poor appraisal on the part of the staff, lack of effective monitoring systems, high interest rate and inappropriate customer selection. The study further stated that the MFIs should have a clear and efficient credit policies and guidelines and must be reviewed. The government and Bank of Ghana should monitor the activities of these MFIs.

Ntiamoah et al (2014) investigated loan default rate and its effect on profitability and measures to control loans defaults in microfinance institutions. The study used qualitative and quantitative methods. The outcome of findings showed that there is a positive relationship creates of loan default rate and profitability of the different microfinance institutions.

Asongo and Adamu (2014), examined the determinant of the causes of loan default in

## 10 III. Methodology

The study used case study design because it gives clear details and account for many parts of any given social situation. A case study involves empirical analysis of a particular modern day problems within area situation using various sources of facts (Saunders et al ( 2007)). The study used case study method because it helped in answering the questions asked in the study. This was confirmed by Saunders et al (2007) that case study answers the questions such as what, how, which, why, which help in responding the research questions.

The study also used explanatory design of which face to face interviews were performed by the researchers to get an in-depth understanding of the problem.

According to Cooper and Schindler (2001), population is defined as the total collection of element about which we wish to make some inferences. According to Bank of Ghana, There are 385 microfinance institutions recognized in Ghana which have more than 3000 staff. These institutions provide services that meet the needs of the SMEs located in both rural and urban area in the Ghana. The study focused on 6 microfinance institutions in Kumasi and Accra. These microfinances were made up of staff and clients of Pathway Microfinance, Nativity Microfinance,

## 11 Heritage

Microfinance, Christian Community Microfinance Limited, Alliance Trust Microfinance limited, Legacy Capital Microfinance Company Limited which are located in Kumasi and Accra. The population of the study was seven hundred and fifty (750) which was made up of fifty staff and seven hundred clients within Kumasi and Accra.

A total of 140 respondents were administered questionnaires and interviewed out of the total population. These include 20 loan officers, 10 recovery and risk management officers, 10 managers and 100 clients. The study used purposive sampling technique for the staff because these are the people that will provide the necessary information needed for the study. These staff have diverged knowledge in administration of the microfinance and clients selected were based on the number of times they have gotten loans from their microfinance institutions through convenience sampling. Convenience sampling refers to those respondents that are ready and prepare to give the information.

Unfairness was eliminated in the selection of the respondents by drawing six staff and twenty clients from each of the chosen MFIs at different branch locations. At each branch, loan officers and managers were administered questionnaires and interviewed. This was done to ensure that important information relating to the research understudied was achieved.

## 12 IV. Results

From the Table 4.1, it was revealed the study that 42.0% of the respondents were males and 58.0% were females. This means that there is a dominance of females in doing business with the microfinance institutions since there is not much difficulty in assessing their financial products compare with the commercial banks. From table 4.1, it was shown that 18% of the respondents were between the ages of 21-30. 39%, 25%, 14% and 4% were in the ages ranges of 31-40, 41-50, 51-60 and 61 and above respectively. Majority of the respondents were in the active working population comprising of 82% of the total respondents. This means that according to the study majority of the working population access these microfinance institutions products such as loans to grow their businesses which in turn affect the SME sector in the country.

From table 4.1, it was shown that majority of respondents forming 45% had Senior High education, 25% had tertiary education, 20% had Junior High and 10% had primary education. The level of education had an effect on the operational activities of the customers since it helps one to know how to keep records of the business, managerial skills, which type of business to enter into, which will earn profit and among others.

From Table 4.2 it was revealed that most of the respondents were males representing 57.5% and 42.5% representing females. Most of the respondents were between the ages of 21-40 forming 67.5% and the rest forming 32.5%. Additionally, 70.0% of the people have completed their tertiary level whiles 30.0% of the people have completed Senior High level, with most of SHS graduate working as loans officers. It also revealed that, 37.5% of the staff has worked with the organization for 0-1 years, 25% of the staff has worked with Microfinance institutions for 2-3 years, 17.0% of the staff has work for 4-5years and 20.0% have worked for 6years and above. This means that majority of staff forming 63% have experienced in the microfinance industry. After issuing out of the questionnaires and carrying out the interview by the researchers, the answers given by the respondents are discuss below. The important factors recognized by these respondents were, high interest rate, high utility services, inadequate monitoring of clients, diversion of funds, poor credit appraisal techniques, business failure among others. The respondents were asked to rank the causes of default of loans in MFIs using the scale of 1-10, with 1 being the main cause and the 10 being the least cause. The result are showed in Table 4

## 13 Source: Field Survey 2017

The respondents were asked to rank the causes of loan default in the microfinance institutions in Kumasi using a scale of 1-10 with 1 being the important and the 10 the least factor. The result showed that high interest According to 29 of those who answered the questionnaires, inadequate monitoring was cited third significant factor that causes the default of loans in microfinance institutions representing 15.4%. The respondents explained that inadequate logistics such as vehicles, motorbikes lead to staffs not able to visit their clients effectively and encourage them to pay off their loans. Thus, there is no effective monitoring of clients. This situation leads to most of the clients not paying the loans that they have access resulting in default of loans.

High utility service was cited second important factor that causes of loan default in microfinance institutions with the results representing 17.6%. These respondents explained that tariff set up by the Public Utility Regulatory Commission are high which increase electricity prices in country leading to operational cost of business increases. When this happen, they pass on to the prices of their products or services couple with the slowdown of the economy made demand to fall which affect the revenue of the customers to pay their loans that are contracted from the microfinance institutions. This confirmed to the moody investors service report (2016) that energy issues (utility service) is the cause of Non-performing loans resulting in loans default.

The next factor cited by the respondents was the diversions of funds. 25 of the respondents representing 13.3% believe diversion of funds is one the causes of default of loans. Diversion of funds is where funds meant for specific project is not used for its intended purpose. They explained this to mean that some of the staff gave these loans to their family members without properly accounting for it and also loans not used for intended purpose by the clients. This lead to a fall in the MFIs projected cash flows resulting in loans default.



---

In the view of 19 respondents, business failure was rated the 5<sup>th</sup> significant factor that causes nonperforming loans leading to loans default microfinance institutions representing 10.1%. These respondents said that most of the clients do not think through the business before they start the business or project. They start the business or project and eventually collapse within certain period making payment of the loans that they have contracted difficult to pay. This situation leads to default of loans within the microfinance institutions.

Poor credit appraisal techniques on the part loan officers was also factor cited by the respondents to be the cause of loan default in microfinance institutions. These respondents rated poor credit appraisal techniques as the 6<sup>th</sup> key factor that causes default of loans. These respondents describe that as some loans officers do not have the skills to properly assess or examine whether the clients business is economically viable or not. They accept to give loans to them to undertake their project which eventually lead to them not able to pay the loan resulting in default of loans.

Other factors such as high import duties, difficulty in locating loans defaulters house as result of poor house and street numbering system, family size, lack of business management knowledge on the part of loan officers, familiarity of the loans takers, corruption and non-compliance of credit policy representing 8.0% were some of minor causes identified by respondents to be cause of loans default in the microfinance institutions in Kumasi and Accra.

From table 4.4 it was revealed that 20% of the respondents were in the manufacturing industry, 31% were into trading sector, 28% were in the food industry (food sellers) and 21% were in the service industry. This result suggests that trading industry were the people who access much loans facility from the microfinance institutions than the rest of the sector. This is followed by food industry, service industry and manufacturing sector in that order. Low access of loans in food industry could be attributed to the high demand of the food which translates into rises in revenue which makes them used in their business.

## **14 Source: Field Study, 2017**

To accomplish the research objective, the connection between delinquent of recovery and outstanding of loans and profitability of the microfinance institutions is presented in Table 4.5 using Pearson correlation. The result showed that there was a relationship between delinquent of recovery and unpaid

## **15 d) Sector that Access of Loans e) Connection between Problems of Recovery and**

Outstanding of Loans and Profitability loans. A unit change in problem of recovery and outstanding of loans will lead to changes in profitability by 0.685. This means that good management of credit or loans portfolio will lead to an increase in profitability of microfinance institutions. The analysis is done to determine the trends of non-performing loans within the selected microfinance institutions for the period 2009 to 2014. The Table ??elow shows the effect within the six year period.

## **16 f) Analysis of the Movement of the Non-Performing Loans**

From the Table 4.6, it can be seen that amount of credit losses stated as percentage of total loan portfolio were 1.36%, 1.38%, 1.44%, 1.72%, 2.82%, 3.60% for 2009, 2010, 2011, 2012, 2013 and 2014 respectively. These ratios are disturbing because according to the World Bank the global standard of percentage of loan portfolio that are non-payment for over one year is 1.5% compared with Ghana which has 4.5%. It can be seen from the table 4.7 that the ratio of Non-Performing loans raises from 1.36% in 2009 to 1.44% in 2011, it however increase further in the ratio to 1.71% in 2012 as result of renegotiated loans with the clients and also hold up MFIs cash for the fear of losing their investment during election. For the fear of these MFIs suffered from financial difficult in their operations, renegotiated loans were treated as current credit facilities. The ratio increases from 0.98% in 2012 to 2.82% and it further increase to 3.60% in 2014. The increase in ratio was not amazing, looking at the energy crises that the country experienced affected businesses couple with slowdown of the economy made some clients to default the loans. This loans default came as result that these companies increase their loans portfolio by 488.4% without increasing employment of additional credit officers and as well as vehicles, motor bikes among others to ensure efficient and effective monitoring of clients. The resultant impact was that an increased in loan portfolio by more than 100% lead to credit losses increasing.

## **17 g) Impact of Default of Loan on Interest Income**

Interest income is the main source of income to all financial institutions in Ghana more especially the Microfinance. The study seeks to analyze the effect of NPLs on interest income. the economy as well as high prime rate were some of the factors that made it difficult for most of the clients to pay of the loans resulting in loans default. From the discussion above, it is seen that there is relationship between interest income and credit losses. An increase in credit losses will lead to a fall in interest income which in turn affects the total income of the microfinance companies.

## 18 h) The Impact of NPLs on Operating Profit

The analysis is done to determine the effect of Non-performing Loans on the operating profit of selected Microfinance institutions for the period 2009 to 2014. This table below shows the effect within the six year period. From Table 4.8, it can be seen that operating profit was affected as the provision of loans impairment increase. In 2009, 5.09% of operating profit was eroded by provision of loan impairment of the MFIs. It however increase in 2010 by 5.43% which means that an increase in provision of credit loss affected the MFIs operating profit by 5.43% whilst 2889344 of the operating profit in 2011 representing 6.91% was lost as result of bad debt. In 2012 the ratio of operating profit to credit loss falls from 6.91% in 2011 to 4.33% in 2012. This come a result of measures put in place by management of the MFIs which include renegotiation, effective monitoring, loans financing and also not to invest much during the election year. After the election year in 2013, 6,785,432 representing 7.95% of the operating profit was eaten by loans impairment (bad debt). It however experiences the highest effect of Non-Performing Loans in 2014 where the ratio of operating profit to credit loss was 8.66%. In the six year period, the average ratio of operating profit to bad debt representing 27,197,531 was 7.08%. This situation deter potential investors who want enter or partner existing Microfinance company as well as customers who was to increase the saving investment (wealth) rather than losing it as result of increasing nonperforming loans or Loans default. In totality, the situation has an effect on the microfinance industry.

## 19 V. Conclusion and Recommendation a) Conclusion

The study revealed that high interest rate, inadequate monitoring and high utility prices were considered the most important factors the influence the loan default in the microfinance institutions within the country. The study indicated that manufacturing is riskier than the rest of the sector in term of loans default. It is therefore expected that management of these microfinance institutions adopt measures to reduce the non-performing loans leading to loans default.

From the finding of the study, it was revealed that that Non -Performing Loans increase throughout the six year period i.e. 2009-2014 which affect the business operations. In 2012 there was improvement in quality Non Performing Loans due to renegotiation of the loans, loans financing and reduction in provision of loans.

The study further indicated that the provision of Non-Performing Loans and loans default have impact on the interest income and operating profit which in turn affect the financial performance of the Microfinance institutions in relation to liquidity and profitability within the 2009-2014 period.

## 20 b) Recommendations

? Government and Bank of Ghana should come together to reduce the lending interest rate by designing policies to help shape the Microfinance industry in Ghana. ? Government should look to strategic investors through private sector participation to efficiently and effectively produce electricity at a low cost since reduction a tariff prices set up by the Public Utility Regulatory Commission reduces the operations of the Customers business. ? These microfinance institutions should provide adequate logistics such as vehicles, computers and among others to their staff so as to ensure effective monitoring of the clients who have accessed loans from the microfinance.

? Management of microfinance institutions should provide regular training programs to staffs more especially loans officers to abreast themselves in modern techniques in tracking their clients who are within the non performing loans or loans default categories and also sharpen their skills and knowledge. These training should be in the areas of risk management, proper accounting and records of their customers, financial analysis and management of Non Performing Loans. ? Management and loan officers should regularly visit these clients periodically to advise them on how to manage their business which in turn help them pay their loans in the long run. Management should effectively monitor this loan facility and periodically review the customers' accounts so as to give an early signal to the management and take measure to non performing loans or loan default. ? Bank of Ghana should restructure and sanitize the operations of the MFIs. This will help reduce the credit loans emanating from Non performing Loans and also reduce its effect on financial performance in the Microfinance industry.

## 21 Global Journal of Management and Business Research

Volume XVIII Issue II Version I Year ( ) C<sup>1 2</sup>

<sup>1</sup>© 2018 Global Journals

<sup>2</sup>© 2018 Global Journals 1

Successive governments since independence have come out with policies to groups establishment of microfinance institutions. These include

- ? Official suppliers such as rural and community banks, saving and loans companies and commercial and development banks
- ? Semi-official suppliers include financial non-governmental organizations (FNGOs), credit unions and cooperatives;
- ? Unofficial suppliers include moneylenders, Susu collectors and clubs, rotating and Accumulating savings and credit Associations.

Figure 1: ?

343

Causes	Frequency %		Rank
High interest rate	44	23.4	1 st
Inadequate monitoring	29	15.4	2 nd
High utility service	33	17.6	3 rd
Diversion of funds	25	13.3	4 th
Business failure	19	10.1	5 th
Improper credit appraisal techniques	23	12.2	6 th
Others	15	8.0	7 th

Figure 2: . 3 Table 4 . 3 :

2018  
 Year  
 32  
 Volume XVIII Issue II Version I  
 ( ) C  
 Global Journal of Management and Business Research  
 © 2018 Global Journals 1

Figure 3:

4

Sector	5: Sector that Access of Loans			
	Frequency Non -Default	Default Rate	Total	%
Manufacturing	5	15	20	75.0
Trade industry	12	19	31	61.2
Food industry(food vending)	22	6	28	21.4
Service industry	13	9	21	42.9

Figure 4: Table 4 .

45

Problem of Loans Recovery and Overdue of Loans

Profitability

Figure 5: Table 4 . 5 :

46

34 Year	2009	2010	2011	2012	2013	2014
Loans	4,875,058	7,802,367	13,825,252	13,245,362	19,096,718	21,809,395
Impairment (credit losses)	66,102	107,829	199,754	227,365	539,451	784,381
Percentage of impairment to total loans portfolio	1.36%	1.38%	1.44%	1.72%	2.82%	3.60%

Source: Annual and Financial 2009 -2014

Figure 6: Table 4 . 6 :

47

Year	2009	2010	2011	2012	2013	2014	Total
Interest income	2,698,856	3,555,739	8,476,274	9,065,954	12,896,543	42,745,887	77,438,205
Impairment (credit losses)	66,102	107,829	199,754	227,365	539,451	784,381	1,924,882
Percentage of impairment to total loans portfolio	2.45%	2.78%	3.47%	2.21%	5.95%	6.08%	4.94%

Table 4.7 reveals that there was a constant rise in the interest income produce from the loan portfolio from 2009 to 2014. The study further indicated that both loans issued out and interest income was increasing but indicated credit losses by comparing with loans issued out within the period understudy as stated as 2.45%, 2.78%, 3.47%, 2.21%, 5.95%, 6.08% for 2009, 2010,

2011, 2012, 2013, 2014 respectively. From the 4. be seen from 2009 to 2014 that there was a subs increase in bad debt amount with exception of 2 which experienced a fall to 2.21%. The study in that provision for credit losses decreased the gen interest income for the six year period by ????? representing 4.94%. From 2009 to 2011, an incre

Figure 7: Table 4 . 7 :

48

Item/ year	2009	2010	2011	2012	2013	2014	Total
Operating Profit	1,297,452	1,985,661	2,889,344	5,294,321	6,785,432	8,945,321	27,197,531
Provision for credit Losses	66,102	107,829	199,754	227,365	539,451	784,381	1,924,882
Ratio provision credit to Operating Profit	5.09%	5.43%	6.91%	4.33%	7.95%	8.66%	7.08%

Figure 8: Table 4 . 8 :

The research seeks to address the following research questions.

[Bank Of ()] *A Note on Microfinance in Ghana*, Ghana Bank Of . WP/BOG-2007/01. [www.bog.gov.gh](http://www.bog.gov.gh) (retrieved 23rd/11/2016 2007. (Working Paper)

[Adedapo ()] 'Analysis of Default Risk of Agricultural Loan by some Selected Commercial Banks in Osogbo'. K D Adedapo . *International Journal of Applied Agriculture and Apiculture Research* 2007. 1 (2) p. .

[Caprio and Klinggebiel ()] 'Bank Insolvency-Bad Luck, Bad Policy or Bad Banking'. G Caprio Jr , D Klinggebiel . *Annual World Bank Conference on Development Economics*, 1996.

[Bichanga ()] 'Causes of Loan Default within Micro Finance Institutions in Kenya'. Aseyo Bichanga . *Interdisciplinary Journal of Contemporary Research in Business* 2013. (12) p. 4.

[Agarwal et al. ()] *Consumer Bankruptcy and Default: The Role of Individual Social Capital*, S Agarwal , S Chomsisengphet , C Liu . <http://ssrn.com/abstract=1408757> 2008. (Working Paper. Available at)

[Delinquency Management and Interest Rate Setting for Microfinance Institutions (2009)] *Delinquency Management and Interest Rate Setting for Microfinance Institutions*, <http://www.cgap.org> 2009. January, 2017. Consultative Group to Assist the Poor/World Bank

[Chandler and Ewert ()] *Discrimination on basis of sex and the equal credit opportunity Act*, G Chandler , D C Ewert . 1976. Indiana. Credit Research Centre: Purdue University

[Kohansal and Mansoori ()] 'Factors Affecting on Loan Repayment Performance of Farmers in Khorasan-Razavi Province of Iran'. M R Kohansal , H Mansoori . *Conference on International Research on Food Security*, 2009. Natural Resource Management and Rural Development, University of Hamburg

[Edgcomb and Cawley ()] *Financial ratio analysis of micro-finance institutions*, E Edgcomb , J Cawley . 1995. New York: The SEEP Network.

[Schreiner and Colombet ()] 'From Urban to Rural: Lessons for Microfinance from Argentina'. M Schreiner , H Colombet . *Las Microfinanzas en la Zona Rural de Argentina*, 2001. 19 p. .

[Okpugie ()] 'High Microfinance Interest Rates Cause Loan Defaults in Nigeria, the Guardian'. G Okpugie . *Journal of Business and Management* 2009. 10 (2) .

[Updegrave ()] *How Lender Size You Up*, W L Updegrave . 1987. p. .

[Allen et al. ()] 'Issues in the Credit Risk Modelling of Retail Markets'. L Allen , G Delong , A Saunders . *Journal of Banking and Finance* 2004. 27 (4) p. .

[Balogun and Alimi ()] 'Loan Delinquency among Small Farmers in developing countries: A case study of small-farmers credit programme in Lagos State of Nigeria'. E D Balogun , A Alimi . *CBN Economic and financial Review* 1988.

[Okorie ()] 'Major Determinants of Agricultural Loan Repayments'. A Okorie . *Savings and Development* 1986. (1) .

[Khandker ()] *Microfinance and Poverty: Evidence using panel data from Bangladesh*, S Khandker . 2003. (World Bank Policy Research Working Paper 2945)

[Ledgerwood ()] *Microfinance Handbook: An Institutional and Financial Perspective*, J Ledgerwood . 1999. Washington, D.C.: The World Bank.

[Mohammed and Hasan ()] *Microfinance in Nigeria and the prospects of introducing its Islamic version there in the light of selected Muslim countries experience*, A D Mohammed , Z Hasan . <http://mpra.ub.uni-muenchen.de/8127/> (retrieved on 11th Dec 2008. 2016. (MPRA Paper No. 8127)

[Merritt ()] *Mortgage Default: Causes and Cures, Mortgage Loan Compliance, the Forensic Loan Audit Company*, E Merritt . 2009.

[Fofack ()] *Non Performing loans in sub-Saharan Africa: Causal Analysis and Macroeconomic implications*, H Fofack . no. WP3769. 2005. (World Bank Policy Research Working Paper)

[Otoro ()] *Perceptions of the Impact of Microfinance on Livelihood Security, Kimmage Development Studies Centre, Holy Ghost College, Otoro* . 2007. Kimmage Manor, Whitehall Road, Dublin; Ireland. 12.

[Berger and De Young ()] *Problem Loans and Cost Efficiency in Commercial Banks*, Centre for Financial Institutions Working Papers, A N Berger , R De Young . 1995. Wharton School Centre for Financial Institutions, University of Pennsylvania

[Vasanthi and Raja ()] 'Risk Management Model: an empirical assessment of the risk of default'. P Vasanthi , P Raja . *International Research Journal of Finance and Economics* 2006. 1 (1) .

[Saunders et al. ()] M Saunders , P Lewis , A Thornhill . *Research Methods for Business students*, 2007. (4th Edition)

[Okiocredit ()] 'Small Loans Great Change: building a future with Microfinance'. Okiocredit . *International Microfinance Symposium*, (Bonn) 2005.

- 622 [Asongo ()] 'The cause of Loan Default in Microfinance Bank'. A I Asongo , Adamiuidama . *IOSR Journal of*  
623 *Business and Management* 2014. 16 (2) .
- 624 [Boateng and Ampratwum ()] 'The Informal Sector in Ghana'. C Boateng , E Ampratwum . *Friedrich Ebert*  
625 *Stiftung. Ghana Office* 2011.
- 626 [Gorter and Bloem ()] *The macroeconomic statistical treatment of Non-Performing Loans, Publication of the*  
627 *Organization for Economic Corporation & Development*, N Gorter , M Bloem . [http://www.dbj.go.jp/](http://www.dbj.go.jp/english/IC/active/hot/adfiap/pdf/nagarajan.pdf)  
628 [english/IC/active/hot/adfiap/pdf/nagarajan.pdf](http://www.dbj.go.jp/english/IC/active/hot/adfiap/pdf/nagarajan.pdf) 2002. 2017. (accessed 9th March)
- 629 [Akinwumi and Ajayi ()] 'The Role of Loan Repayment Capacity in Small Scale Farmers Credit Administration'.  
630 J A Akinwumi , A O Ajayi . *Quarterly Journal of Credit Administration* 1990. 15 (2) .
- 631 [Golden and Walker ()] 'the ten commandments of credit: the C's of good and bad loans'. S Golden , H Walker  
632 , M . *Journal of commercial lending* 1993. p. .
- 633 [Autio et al. ()] 'The Use of Small Instant Loans among Young Adults -a Gateway to Consumer Insolvency'. M  
634 Autio , T-A Wilska , R Kaartinen , J Lahteenmaa . *International Journal of Consumer Studies* 2009. 33 (4)  
635 p. .
- 636 [Bloem and Gorter ()] *Treatment of Non-performing Loans in Macroeconomic statistics*, M Bloem , N Gorter .  
637 WP/01/209. 2001. (IMF Working Paper)