The impact of loan default on profitability of microfinance institutions in Zambia: A case study of Liquidity Solutions Limited

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ABSTRACT

The purpose of this study was to determine the impact of loan defaults on the profitability of Microfinance Institutions (MFIs) in Zambia. The study sought to identify the determinants of loan default in microfinance institutions, and the impact of loan default on microfinance profitability. The study used a descriptive evaluation design. A total of 392 people were polled. Purposive and random sampling approaches were used in the investigation. For data collection, questionnaires and interview guides were used. According to the study, non-performing loans at MFIs are the result of poor credit assessment by loan officers, a lack of loan monitoring, and inadequate recovery measures. The study found that a fall in demand for products and services sold by loan clients because of the COVID-19 outbreak and load shedding that happened during the study period is another reason for default. The study suggests reducing loan default by suspending loan disbursement during natural disasters such as COVID-19, suspending interest accumulation on principal if the borrower is experiencing financial difficulties, consistent monitoring, a good corporate governance system, credit evaluation, loan security, reliable loan software, good loan recovery strategies, and ensuring prudent loan policies. The study also discovered that SME clients defaulted at a higher rate than salary loan borrowers. It was also discovered that loan default has a detrimental impact on the financial success of microfinance institutions.

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Introduction

Microfinance is the provision of financial services to the poor and low-income people who do not have access to conventional banks. (Conroy, 2003). Microfinance institutions (MFIs) are now a source of funds for Zambians with low incomes and small, and medium enterprises (SMEs). MFI sustainability and growth are important for economic growth. This is because the financial sector contributes to economic growth in a variety of ways. MFIs help to drive economic growth by paying taxes and creating jobs. They also facilitate economic growth for other sectors of the economy by supplying them with credit in the form of loans (Asante and Tengey, 2014). MFIs have contributed to the reduction of poverty in developing countries such as Zambia by providing loans to individuals and groups of people with the goal of boosting small scale enterprises. MFIs provide an alternative for individuals and groups that may not be able to obtain loans from traditional banks. It entails lending loans ranging from K500 to K100, 000. Microfinance has garnered global attention, consequently, the United Nations proclaimed 2005 the "Year of Microcredit."

The microfinance theory lists six major risk categories that are related to bank credit. These are credit risk (repayment risk), interest risk, portfolio risk, operating risk, credit deficiency risk, and trade union risk (Muhammad, 2014). Credit risk is the major risk that leads to the failure of MFIs and banks (Sinkey, 1992, p.279). Research on the failure of MFIs around the world has found that poor loan quality is a major source of their failure (Boahene, el at 2012). The incapacity of MFIs to successfully control their credit risk negatively impacts on profitability performance in both the short and long term.

Loan default continues to be the primary cause of microfinance institutions failure (Tetteh, 2012). Nourse (2001) contends that the poor require savings and insurance services in addition to credit. He explained that MFIs should offer customized lending products to the poor rather than restrictive loan packages that result in default. MFIs must offer a variety of products to cater to different types of borrowers. For

example, vegetable marketeers, women, and the youth, to name a few, should be given loans with flexible repayment options at affordable rates. Every MFI should have a monitoring system that clearly and quickly indicates repayment concerns. This will facilitate effective management of delinquency.

Research Objectives

This study sought to determine the impact of loan default on financial performance of MFIs and specifically, to identify the causes of loan default and to establish the relationship between loan default and profitability.

Literature Review

There are many factors that cause loan defaults or non-performing loans. The following subsections discuss these.

Asymmetric Information

As a result of asymmetric information in the financial markets, it is difficult to identify prospective good borrowers. This leads to poor decision-making and moral hazard issues (Auronen, 2004). According to the asymmetric information theory, the borrower has more information about their creditworthy and the purpose for the funds being requested than the lender. Borrowers frequently conceal information that the lender needs to decide. Even if they provide information, not all of it is accurate. (Nyoni, 2018). Adverse selection and moral hazards have led to considerable buildup of non-performing loans in financial institutions (Angelini, 2018). Borrowers generally have accurate information about their track record and intentions which lenders lack. As a result, a lender may be unaware of the credit risk of the applicant.

Patronizing and the Die Another Day Theory

According to this theory, there is a potential that lenders are unwilling to recover loans. Poor policies, procedures, structure, rewards, physical setting, and working conditions for employees can all contribute to this altitude. These internal reasons discourage effective loan management and encourage borrowers not to repay loans since they are certain that the management is likely to tolerate loan delinquency and default. Borrowers develop a negative image of management, namely that it is ineffective, and as a result, borrowers will misappropriate loan funds. Secondly, there is temptation to divert capital to unproductive uses if not rigorously monitored by the MFI. This is a phenomenon known as the die another day effect (Islam et al, 2005).

(Blome et al., 2007). The goal of risk management in DB schemes therefore should be twofold, firstly to reduce the contributor's cost of pensions and secondly to minimise allocation and risk trade-off to meet the stakeholders' varied objectives. Plan net funding cost minimisation through it is optimisation of risk adjusted return on assets is the focus of plan sponsors while members have goals that change over time.

Members would like to reduce their pension cost, maximise their plan benefit during active years without losing their vested benefits and retired members emphasise benefit security as they have no time to make up the shortfalls. The task remains therefore to create a combination of contribution and benefit policies and strategies of funding and investments that satisfy both the plan sponsors and active and retired plan members (Blome et al., 2007).

beneficiary's benefit cut risks. This creates a contribution, asset

Borrower Monitoring Delegated Theory

The monitoring of a borrower refers to the collection of information before and after a loan is issued, which includes screening loan applications, analyzing the borrower's creditworthiness, and ensuring that the borrower follows the terms of the contract. If an MFI operates the client's current account and can witness the flows of income and expenditure, it typically possesses privileged knowledge in this process. This is especially important for small and medium-sized businesses and is related to banks' roles in the payment system. (Matthews and Thompson, 2008). Customer recruitment and selection are the first steps in financing engagement. Before going into detail, the problem of Know Your Customer (KYC) is critical. MFI gathers information on its customers from a variety of sources before granting credit. These could include a credit report from the Credit Reference Bureau, financial documents for SMEs, three most recent bank statements, and confirmation of residency and place of business. But this is only applicable to small and medium enterprises. It is not applicable to typical MFI clients.

Empirical perspectives on loan default

Loan default is described as a borrower's inability to meet his or her loan obligations. A loan default occurs in the microfinance when a borrower fails to repay a loan in line with the specified loan repayment schedule (Waru, 2014). Lenders and borrowers may agree to an instalment repayment plan that includes weekly or monthly installments depending on the type of business and the loan amount. (Conza P, 2013). Zambia's financial services business has long been known for its high loan default rate. Weak credit rules and unfavorable economic conditions have been mentioned as causes of this

poor performance. Consequently, banks are unwillingness to lend, particularly to small and microenterprise borrowers (Financial Services Magazine, 2004). Loan default is a major issue that threatens the viability of microfinance institutions in every country. Loan default is defined by both ((Balogun, 1988)) and ((Greef, 2006)) as "a risk threshold that describes the point in the borrower's repayment history where he or she missed at least three payments within a period of six months". Non-performing loans are defined by the Basel Committee1 (2001) as loans that have gone unpaid for 90 days. An experiment on proper loan repayment implementation procedures in microfinance lending in India revealed three categories of loan default (Czura, 2015). Borrowers who wished to repay the debt but were unable to do so because their businesses were not profitable enough to allow them to do so were one type. Borrowers in the second category were those whose businesses generated enough revenue to cover loan repayment but voluntarily chose to default. Borrowers in the third category were individuals who had profitable enterprises and could afford to repay their loans but lacked the motivation to do so.

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The effects of loan default

Some of the consequences of default, according to (Pischke,1980), include the shortage of funds to lend to other borrowers, the reluctance of other financial intermediaries to meet the demands of small borrowers, and generally mistrust. Unpaid loans are a persistent source of frustration for lenders since they have a detrimental impact on their operations in terms of liquidity, profitability, debt serviceability, lending ability, and ability to obtain more capital. Both lenders and borrowers bear the costs of loan default (Baku E & Smith, 1998). The lender loses interest income, the opportunity cost of the principal, legal fees, and other related expenses of default. The borrower's decision to default may be a trade-off between the implications of lost reputation and the opportunity cost of skipping investments due to servicing the present debt. Loan default has serious consequences that must be avoided at all costs. If the borrower is experiencing financial difficulties, they should contact the lender to negotiate a payment schedule that would be acceptable to both the lender and the borrower. In the case of secured loans, the lender will seize the collateral asset upon default; in the case of unsecured loans, the lender may go to court to demand payment.

Determinants of loan defaults

According to Huang (2014), high interest rates and penalties are among the reasons for defaults. Customers fail to meet their contractual obligations because certain MFIs charge borrowers higher interest rates. Some MFIs may charge as much as 60% interest per year on the loan principal. For example, if a client borrows money, he or she will be charged 60% interest on the principal and will be forced to repay interest and principal weekly or monthly. If a client's business fails, the loan will continue to grow due to monthly penalties, resulting in the client defaulting.

Other causes of loan default are institutional or client-based negligence (Hossein, 2016). A loan default can be caused by the institution's credit analysis team's negligence, while others are caused by clients' refusal to pay, misapplication of funds, or death in the borrower's family. Ineffective loan management approaches, as identified by Siaw (2014) and Van den Berg (2015), lead to institutional-based loan default. This is correct because loan recovery is difficult without credit evaluation, prompting the requirement for every MFI to establish a credit risk management system. According to studies, most microfinance institutions that have encountered loan defaults do not manage credit risk, and as a result, large sums of money are recorded as delinquent loans on their books that could be irrecoverable.

According to (Siaw 2014), the other institutional cause of loan default includes loan type, disbursement time, customer's business, loan terms, interest rates, and other factors. Randoy (2015) stated that when a client pledges security for a loan, recovery is simple. Loan default occurs when there is insufficient collateral for a loan. Additional causes of loan failure include financial insecurity, mortality, family tragedy, or other factors beyond the lenders' control (van den Berg 2015).

Profitability

The level of profitability is particularly important for microfinance shareholders because it is a measure of management performance (Devinaga, 2010). According to Codjia (2010), the level of profitability is the major indicator of the financial strength of microfinance institutions. Profitability performance focuses on income statement, which displays how much revenue is generated, how much is spent as expenses, and the net income. MFIs can prepare this on a weekly, quarterly, or annual basis. (Codjia, 2010). According to Rushdi and Tennant (2003), profitability can be measured in a variety of ways, including return on assets (ROA) and return on equity (ROE). Godlewski (2004) used ROA in measuring profitability. It was revealed that the degree of non - performing ratio has a negative impact on the performance of a microfinance institution. In theory, ROA demonstrates a microfinance management's ability to generate profits based on the amount of assets available. Furthermore, the

profitability position of a company is commonly used to measure its performance. Return on assets is used as a measure of profitability by many scholars (Flamini et al, 2009). Researchers choose ROA over ROE since it is free of financial leverage and its hazards (Flamini et al, 2009). When ROA is used as a proxy for profitability, it is also possible to compare companies in the same or other industries. As a result, ROA is a great indicator of profitability (Devinaga, 2010).

Internal factors affecting microfinance profitability

According to Devinaga (2010), researchers who focus on determining the variables of microfinance success and profitability group them into two categories. These are the internal and external variables. Husni (2011) defines internal determinants of profitability as those that can be controlled by microfinance management. Thus, it is within the authority of microfinance institutions to define the extent at which these elements should be considered. These factors influence both the earnings and costs incurred by microfinance institutions. Loan quality, income, liquidity ratio, and capital ratio are classified as internal factors.

External factors affecting microfinance profitability

The environment in which microfinance operate have a considerable influence on the financial performance. These external drivers are the outside elements that determine the performance of the MFI. These factors are beyond the control of MFI management; however, proactive MFI management can position themselves to take advantage of the anticipated changes. These external factors, according to Karkra and Ameyaw (2010), are macroeconomic variables that might affect the profitability of an MFI. For example, Covid-19, load shedding, high levels of unemployment, and Gross Domestic Product (GDP).

Methodology

The study was both quantitative and qualitative in nature and relied on primary and secondary data obtained from Liquidity Solutions Limited (LQS). Management staff, loan officers and clients were interviewed accordingly, and questionnaires were distributed to clients of the institution and feedback obtained. The qualitative data were basically focused on the financial institution officials' views about non-performing loans in the loans department of LQS right from policies to the value chain process of lending. Quantitative methods applied to secondary data from published and unpublished reports.

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Sample size

The study's sample size was made up of respondents who are directly involved in loan management operations and its customers who are the borrowers. The sample size was calculated using Slovin's formula method. The formula in the study used a 95 percent confidence level or (-+0.005) as tabulated below:

Formula: n=N/(1+Ne^2)

Where:

n=the sample size

N=population understudy

e=error

Using the formula above, the sample size was calculated as follows:

n = 20650/ (1+20650*0.05^2)

n = 392.39

n = 392

Therefore, the sample size for the study was 392 respondents.

This study used purposive and random sampling techniques. Purposive sampling was used to select the management staff and loan officers of the institution since they had the main role of financial performance of the institution. The selected Management staff and loans officers were interviewed since they are the main implementers of the loan practices and had direct contacts with the loan customers.

Random sampling technique was used to select borrowers who have defaulted since this method gives all participants equal opportunities to be selected for the study.

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Results and Conclusions

The study investigated credit appraisal and discovered that 44% of the respondents agreed that failure to abide by the 5 credit rules of finance (character, collateral, condition, capital and capacity) contribute to loan default. This was supported by the outcome of the in-depth interview with loan management staff. When MFIs perform an inadequate KYC at loan appraisal stage, it will result in a non – performing loan. This result supports Bologate (1998) view that easily admitted customers would lead to loan default. The study also indicated that 97% respondents agreed that poor credit assessment leads to occurrence of non-performing loans, all loan management staff interviewed concur with this view. Credit assessment helps the lender to analyze the borrower's potential to pay back the loan, the five factors mentioned above are a vital tool to loan quality.

As stated by Agrictel (2008) it is essential to monitor the loans to ensure compliance and thus avoid loan default. This study found that 78% of the respondents agreed with the foregoing statement. Lack of follow ups such as visitation and phone

calling contribute to occurrence of non-performing loans. If borrowers are not monitored, they tend to divert funds to other uses.

Collateral is required to ensure full commitment of the borrower. 85% of the respondents agreed that having security for the loans reduces defaulting. 90% of the respondent agreed that lack of proper loan management software system contributes to loan default.

The linear regression analysis indicated a positive correlation between loan appraisal and performance of financial institutions. This analysis shows that 1% increase of loan appraisal is likely to decrease non- performance of the financial institution at 0.16 percent (r-squared, coefficient of variation). This analysis was confirmed by respondents who revealed that it is vital for financial institutions to follow the 5Cs (Capital, condition, collateral, character and capacity) when assessing the clients to determine the credit worthiness and the probability of loan default.

Secondly, there was a positive correlation between credit monitoring and performance of financial institutions, the analysis shows that 1% of increase in credit policy will reduce non-performing loans of the financial institution at 0.14 percent (r-squared, coefficient of variation). This analysis was confirmed by key informants who revealed that credit monitoring ensures knowing the customer better (KYC), this helps the institution have information on potential, existing and new customers.

Thirdly, there was a moderate positive correlation between loan recovery strategy and performance of the financial institution. This analysis indicates 1% improvement in recovery procedures is likely to reduce non-performing loans at 4.95 percent (r squared, coefficient of variation). This analysis was confirmed by loan officers and the management who revealed that good loan recovery procedures ensure the recovery of both principal and interest as scheduled.

Fourthly, there was a moderate positive correlation between interest rate and the performance of financial institutions. It was observed that 1% increase in interest rate variable results in 0.044 percent (r squared, coefficient of variation) decrease the performance of microfinance. This analysis was confirmed by respondents who stated that high interest rate changes the value of loans and discourages clients to repay loans in good time.

Lastly, there was a positive correlation between macro-economic factors (COVID-19, load shedding) and performance of financial institution. The analysis shows that 1% increase in macro-economic factors will negatively affect the performance of the financial institution. This analysis was confirmed by respondents who stated that COVID-19 was the reason for the increase in non-performing loans during the period under study.

The Implications of the Findings

The findings of this study have implications on how MFIs are managed. The result of this study suggests that poor management adversely affects loan portfolio quality and consequently financial performance. This implies that there is an urgent need for investment in human resources development in the microfinance sector in Zambia. Secondly, there is a need for MFIs to invest in the development of appropriate management information systems in the microfinance sector in Zambia. In addition, enforcement of procedures should be strengthened.

The importance of well-functioning microfinance sector cannot be overemphasized in view of the critical role of external funding in facilitating private sector investment. This study has revealed that there is a shortage of loanable funds. Therefore, there is a need for a public policy (a Big Push) to ensure that MFIs are in position to provide the necessary funding to the clients.

Finally, this study has revealed a need for research into the impact of MFIs' staff moral on loan quality.

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Bibliography

A, A. S. (1997). Harzard Management in the Greater Caribbean & Latin. *Natural Hazards*, Publication No. 3.

A, H. N. (2015). Social Collateral, Repayment rates and the Creation of Capital Among the Clients of Microfinance. *Procedia Economics & Finance*, 31, 823-828.

A.K, M. (2014). Microfinanc & Credit to the Ultra Poor. *International Journal of Social Economics*, 41, 975-993.

Aps, D. S. (2008). *Business Research Methods.* New York: Ventus Publishing.

Baklouti. (2013). Determinants of Microcredit Repayments. *African Development Review*, 25, 370-382.

Baku E & Smith, M. (1998). Loan Deliquency in community Leading Organisations. *Housing Policy Debate*, Vol 9 151-175.

Balogun. (1988). Loan Deliquence among small farmers in development countire. *CBN Economic & Financial Review*, 26,67-72.

Balogun, A. &. (1988). Loan Deliquence among small farmers in development countire. *CBN Economic & Financial Review*, 26,67-72.

Berger, D. Y. (1995). Problem Loans & Cost Efficiency in Commercial Banks. *Banking & Finance*, 849-870.

Bloem, N. G. (2002). The Treatment of NonPerforming Loans. *International Monetary Fund*, P4.

C, A. T. (2008). Bank Performance & Credit Risk Management.

Casselman, L. .. (2013). Profiting from Poverty: Ethics of Microfinance in BOP. *South Asian Journal of Business Research*, 2, 82-110.

Conroy, D. J. (2003). *The Challeges of Micro Financing in South east Asia.* Singapore: Institute of Southern Asian.

Conza P, &. L. (2013). Evaluating the Nonmonetary Effects of Microfinace. *Applied Economics*, 45, 1202-1220.

Cozarenco, B. &. (2014). The role of business Development. *Small Business Economic*, 48, 931-946.

Czura. (2015). Pay, Peek, Repayment information acquisition & Punishment in a Microcredit Lab in the field experiment. *Journal of Development Economics*, 117,119-138.

Dr Greener, S. (2008). *Business Research Methods.* Dr Sue Greener and Ventus Publishing APS.

Ezihe.J, O. U. (2014). Loan repayment among small holder maize farmers in kanke, Nigeria. *Cuurent Agriculture Journal*, 2,30.36.

Gine, K. D. (2014). Short & Longterm Evedence from Philippine Microcredit Lending Groups. *Journal of DevelopmentEconomics*, 65.83.

Greef, P. .. (2006). *Causes of Default among Housing Micro Loan Clients.* Johasburg, South Africa: Finmark Trust Rural Housing Fund.

H, K. M. (2009). Factors affecting on Loan Repayment & Performance of Farmers. *Conference on International Research on Food Security.* University of Hamburg.

Hossein, C. (2016). A Case Study of Microfinance in Kingstone Jamaica. *Review of Social Economy*, 74,148-175.

Huang, X. J. (2014). Microfinance throug nongovernmental Organisation & its effects on Formal & Informal Credit. *China Agriculture Economic Review*, 182-201.

Husni, A. (2011). Determinants of Commercial Banks Performance. *International Research Journal of Finance*, vol 81.

Kargi, H. (2011). Credit Risk and the performance of Nigerian Banks.

Kayombo, D. K. (2017). Research Methods. *course Guide*.

Kendi, k. O. (2013). Individual Lending versus Group Lending, An evaluation with Kenya Microfinance. *Review ofDevelopment Finance*, 3,99-108.

Khavul, S. &. (2013). The Contested terrain of Enterpreneurial Microfinance for those in Poverty. *Journal of Business Venturing*, 28, 30-50.

Kiros, Y. (2014). Determinants of loan repayment: Evidence from group owned micro & Small enterprises,Tigray, Northen Ethiopia. *Journal of Economics & Sustainable Development*, 5,41-52.

Kjenstad, E. C. (2015). Credit Rationing by loan Size , A Synthesized Model . *The Quartely Review of Economics & Finance*, 55, 20-27.

Liu, G. L. (2013). Group Lending with Heterogeneous Types. *Economic Policy*.

Machiraju. (2004). *Modern Cmmercial Banking.* India: vikas Publishers.

Mark Sauders, P. L. (2009). *Research Methods for Business Students.* New York: Mark Sauders.

Marozva, G. (2015). LKiquidity & Bank Performance. *International Business & Economic Research* , 453.562.

Motta, M. &. (2016). A Theory of Interactions between Microfinance Inatitutions & Informal Lendres. *Journal of Development Economics*, 121, 191-200.

Murray, J. (2011). Default on Loans. *United States Business Loans & Taxes*, 1-85.

Nourse. (2001). The Missing Parts of Microfinance. *Services for Consumption & Insurance*, 61-90.

O, B. L. (2013). Credit Access and Life Satisfaction, Evaluating the nonomonetary effects of Microfinance. *Applied Economics*, 45, 1202-1217.

Okpugie, G. (2009). *High Microfinance interest rates Cause Loan Default.* lagos Nigeria: The Gaurdian Nigeria.

Otero, M. (1999). Bring Back Development in MicroFinances. *Journal of Microfinance*, 8-19.

Pischke, V. (1980). American Agriculture Economics . *American Journal of Agriculture Economics*.

Rabelloth, P. &. (2014). Geographical Distance & Moral Harzard in Microcredit. *Journal of International Development*, 26, 91-100.

Randoy. (2015). The Impact of Entreprrnewer CEOs in Microfinance Institutions. *Entreprenewship Theory & Practice*, 929-953.

Roberts, P. (2013). The Profit Orientation of Microfinance Institutions & Effective interest rates. *World Development*, 41,120-131.

SCIENCE, I. O. (JUNE 2012). IMPACT OF EXTERNAL DEBT ON ECONOMCGROWTH.

Sengupta, C. S. (2014). Sequential Lending with Dynamic Joint Liability in Microfinance. *Journal of Development Economics*, 167-185.

Siaw A, E. O. (2014). An Empirical Analsis of te Loan Default rate of Microfinance Institutions. *European Journal of Business & Management*, 6, 12-22.

Tennant, M. R. (2003). Policy Analysis. *Policy Analysis & Reforms*, 229-259.

UN. (2005). International Year of Microcredit. *Microfinance & Millenium Development Goals*, 5-71.

Van den Berg M, L. R. (2015). Loan Officers Gender & Microfinance. *The Journal of Development Studies*, 51,1241-1260.

Vandel, K. (1993). A Perspective on Mortgage Default Research. *American Real Estates & Urban Economics*, Vol 23 (4).

W, T. N. (2014). Effects o Gruop Lending on Management of loan Default rates among MicrofinanceInstituions in Kenya. *International Journal of Science & Research*, 3,606-610.

Walliman, N. (2011). *Research Method the Basics.* New York London: Nicholas.

Waru, S. (2013). The determinants of the Ugandan Banking Industry Profotabilty. *MUBS University Working Papers, Panel Evidence*.

Warue, B. (2012). Factors affecting Loan Deliquency in Microfinance in Kenya. *International Journal of Management Sciences & Business Research*, 1-12.

Waters, B. (2016). Dynamic Lending under Adverse Selection. *Journal of Development Economics*, 237-262.

Z, M. A. (2008). The Prosprct of introducing its islamic. *Microfinance in Nigeria*, 18-89.

Zambia, B. o. (2021). *Annual Report, Page 98.* Lusaka: Central Bank.