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ABSTRACT

Financial institutions all over the world encounter extensive exposure to defaulted loans. In this regard, it is prudent for MFIs to design viable mechanisms of credit or default management. Scholars in various areas of economics, finance and business continue to accord a significant attention to financial performance due to its role to firm's competitiveness. The purpose of this research was to investigate non-performing loans and financial performance of microfinance institutions (MFIs) in Kenya. The specific aims of the study were: to assess the effect of non-performing loan ratio (NPLR), examine the effect of loan loss provision (LLP), evaluate the effect of cost per loan asset ratio (CLAR), and establish the effect of credit to deposit ratio (CDR) on financial performance of microfinance institutions in Kenya. The study used secondary data specifically, the annual published financial statements and other financial records from Central Bank of Kenya (CBK). The study was guided by moral hazard theory, modern portfolio theory, stakeholder's theory and financial accelerator theory. Descriptive research design was used in the study and utilized cross-sectional data for period between years 2013 to 2017. Selected four MFIs operating in Kenya licensed to accept deposits and perform lending business formed the target population of the study and census method was used to select study sample. To establish non-performing statistics, Microsoft Excel and SPSS software's were used. Also, regression analysis of the SPSS was used to establish the effect of non-performing loans (NPLs) on financial performance of MFIs in Kenya. Overall, the study established that financial performance of MFIs is significantly and positively affected by non-performing loans in various proportions despite loans being the main asset that generates income. The study recommended need for better credit or loan management systems. For instance, MFIs should rely heavily on the report of credit worthiness of borrowers provided by reference credit bureaus and proper business assessment before decisions to lend. Additionally, it is prudent to hire competent staff to manage the credit process. A further study should be undertaken on this area using both primary and secondary data and focus on one MFIs and increase sample size.

Keywords: Microfinance, Loan, Loss, Credit, Performance

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INTRODUCTION

The emergence of microfinance as a support to mainstream financial services provision has become indeed a sigh of great relief for most people and institutions that are often unable to partake in the formal financial sector even though its (microfinance) advent has also instigated some challenges (Chortareas, Logothesis, Magkronis, Zekente, 2016). MFIs' main business is to furnish credits and advances and to act as depositories of public savings. They generate income by collecting interest on loans and interest or dividends payments from the securities they own (Laryea, Ntow-Gyamfi & Alu, 2016).

Loans, therefore, are the major output provided by the MFIs, but it is a risk output. The quality of credit determines the performance of the MFIs. For this reason, managing the credit risk should be given special emphasis, as the quality of credit risk management influences the success or failure of financial institutions. Thus, the likelihood that MFIs will underperform, lose depositors or even collapse if the monies they loan out are not paid back by borrowers is high. Therefore, non-payment of loans which leads to non-performing loans constantly affects their performance in terms of finance to run their lending operations.

Essentially, non-performing consists of four aspects, namely, non-performing loan ratio, loan loss provision ratio, cost to asset ratio and credit to deposit ratio. As such, this study attempted to determine these non-performing loan (NPL) situations on the financial performance of Micro-Finance Institutions (MFIs) focusing on four firms within Kenya. Some of the loans disbursed by the MFIs become overdue and at long last becoming a bad debt, which eventually affect the overall financial performance of the institution.

There are various theories which have been put forward to explain the effect of NPLs on financial performance, namely the moral hazard theory,

modern portfolio theory, stakeholder theory and financial accelerator theory. According to moral hazard theory Klein (2014), a party to a transaction has hidden intention to undertake unexpected risk in an endeavor to gain from the other party before the agreement is accomplished by providing misleading information to the lender.

On the other hand, Penrose originally pioneered the stakeholders' theory and was later refined by Freeman (2014). Stakeholders' theory argues that there are other agents who are affected by decisions and actions taken by MFIs. This theory further notes that MFIs have a social responsibility hence they should make decisions and take actions which are in the best interest of the affected parties. This study is also underpinned by modern portfolio theory (MPT) which was developed by Markowitz (1952). MPT deals with finance and investments and explains the benefit of diversification, where investors should maximize their returns through diversification in different assets.

The financial accelerator theory developed by Freeman, Harrison, Wicks, Parmar and De Core (2014) explains how small economic shocks have large effect on the borrowing and lending activities. It is based on the interplay between the external finance premium and the economic agent's net worth that arises due to asymmetric information between borrowers and lenders. These theories are relevant to the study hence the researcher adopted them.

In the recent past, Manyuanda (2014) argues that Kenyan MFIs have experienced rapid increase in the level of NPLs hence leading to liquidity problems. The liquidity problem has led to performance issues of MFIs in Kenya such as declined deposits. Defaulted loans are those risk assets not making revenue and have not been repaid for at least ninety days. Some studies have found out NPLs causes liquidation of

financial organizations and thus eventually affect the entire wealth (Mombo, 2013).

Essentially, financial crisis occurs due to letting NPLs go unresolved. To control NPLs, it is important for financial institutions to identify and understand its roots cause and also institute mechanism of monitoring the behavior of borrowers. Gautam (2018) describes financial performance as the subjective measure of an organization to engage its resources to make income. It is the general measure of firms' financial health for a given period of time. In management, financial performance is a very important aspect and cannot be ignored since it is central to the survival of any business enterprise.

Statement of the Problem

MFIs play a key role in poverty reduction by increasing access to financial services and products among the low-income households in the developing countries. In fact, MFIs are formed with a purpose of strengthening and encouraging direct involvement of groups and individuals in well-grounded businesses and upgrading their social and economic status by providing sustainable financial and social support. However, poor performance has continued to hit the banking sector despite the intermediation (Mung'aho, Ondiek, & Odhiambo, 2016).

According to central bank of Kenya (CBK) 2017 report, Kenya's microfinance sector loss hit to \$7.31 million as at December 2017, compared to 2016, which recorded \$ 3.77million thus contributing to huge reduction of financial income. The sector which posted profits in 2015/2016 period also had non-performing loans increase by 25.6% from \$73.71 million to \$99.1 million. Deposits by customers dropped to \$394.16 million from \$401.98 million for previous period 2015/2016. The increased NPLs affected the capital base which had risen to \$104 million as at December 2016, dropped to \$98.1 million this pushed CBK to put a requirement of \$600,000 as the core capital. MFIs are faced with

challenges which include cap on interest rates and changing market dynamics thus leading to credit risk which has contributed to increased NPLs, reduced reliance on deposits and increased reliance more on expensive borrowed funds (CBK, 2017).

NPLs affect earnings of MFIs in Kenya by decreasing ROA which is a measurement of financial performance. MFIs are constrained in decreasing NPLs that affect financial performance of MFIs in Kenya. Despite actions taken to minimize NPLs, they have persisted to rise and MFIs have recorded a rise in NPLs. Financial institutions obtain income from interest charged on loans hence if non-performing loans are reduced; the institution will benefit and get high profits leading to growth and development of the organization. MFIs success is rooted on its performance and quality of the assets it possesses.

Despite poor performance among MFIs in Kenya, little empirical evidence exists on non-performing loans and financial performance in the country. In spite of such studies on NPLs and financial performance in different context with a varied regulatory, economic and cultural set up, where to the knowledge of the researcher little study has been conducted on the effects of non-performing loans on financial performance of MFIs in Kenya. The research therefore, intended to fill this knowledge gap by investigating the effect of non-performing loans and financial performance of MFIs in Kenya.

Study Objectives

The objective of the study was to determine the effect of non-performing loans on financial performance of MFIs in Kenya. The specific objectives were:-

- To assess the effect of non-performing loan ratio on financial performance of micro finance institution in Kenya.
- To examine the effect of loan loss provision on financial performance of microfinance institutions in Kenya.

- To determine the effect of cost per loan asset ratio on financial performance of microfinance institutions in Kenya.
- To establish the effect of credit to deposit ratio on financial performances of microfinance institutions in Kenya.

LITERATURE REVIEW

Non-performing loan ratio (NPLR) denotes the total default loans over total outstanding loans and advances. NPLR mainly reflects financial institutions credit risk (Herelimana, 2017). Various studies have examined the relationship between non-performing loan ratio and performance of various business entities across the world. Definitely, these studies might not have conceptual similarity with the current study but at least, they shed light on the relationship between non-performing loans and different dependent variables therein.

A study by Alshatti (2015) examined on effect of non-performing loan ratio on financial performance of 13 Jordanian commercial banks for the period 2005 to 2013. Using panel data the study revealed that credit risk has a positive effect on financial performance on Jordan banks and further capital adequacy ratio (CAR), credit interest to credit facilities and the leverage ratio do not affect the profit of the banks measured by ROE implying other variables effect on bank profitability, hence need to carry out the current study.

Another study by Hasan and Wall (2014) analyzed the determinants of bank loan loss allowance for samples in US banks and non-US banks in 21 nations for a period between 2003- 2010. The fundamental determinants (non-discretionary) included non-performing loans and discretionary determinants used income before the loan loss provision. Using data techniques to analyze, the study revealed that high amount of NPLs is linked with bulk levels of loan loss provision reserve. However, some variable like net charge offs reflected fundamental factor in US

analysis are not a significant factor for non-US banks. The current study seeks to find out if there is a contextual gap and has narrowed the study to one nation for a 5 years period.

A similar study by Boudriga, Boulila and Jellouli (2011) to analyze the cross-countries determinates of non-performing loans and the potential impact of regulatory factors on credit risk exposure employed aggregate, financial economic and legal environmental data for a panel of 59 countries for period 2002-2006. The study showed that higher loan loss provision tends to reduce the levels of impaired loans with eventual severe financial performance consequences.

Loan loss provision (LLP) is that cost allocated for unrecovered debts and loan installments. LLP covers significant loan losses like customer defaults and bad loans. Financial institutions with anticipation of high equity losses may give higher provisions to loan loss in order to minimize returns fluctuations and build up their solvency. A study by Fawad (2014) conducted a secondary data based on quantitative approach of 576 rural banks on the relationship between loan loss provision ratio proliferation and financial performance. The study observed loan loss provision ratio proliferation negatively affected financial performance of financial firms. The authors advised much importance be placed on the lender's role in ensuring good decisions relating to the granting of loans in order to minimize credit risk.

Cost per loan asset (CLA) is average cost per loan disbursed to borrowers and is denoted by dividing total operating costs by total loans amounts. There are mixed results from the empirical studies on the effect of cost per loan asset (CLA) on financial institution profitability. Using pooled data for 14 commercial banks in Nepal, Bhattarai (2016) examined the effect of NPLs on the profitability of commercial banks for the period 2010 to 2015. NPL was measured by NPLR and cost per loan asset ratio,

performance on the other hand was measured by ROA and ROE, while firm size, GDP growth rate and inflation rate formed the control variables.

Using panel data estimation techniques, the study indicated NPL has a negative effect measured by ROA whereas NPLs has a positive effect measured by shareholders returns- ROE. Moreover, cost per loan asset has a positive significant association with bank profitability as measured by ROA. However, this study was carried in Nepalese context with a varied regulatory, cultural and economics set up; the current study will use ROA to measure performance of MFIs in Kenya.

Credit to deposit ratio (CDR) is used frequently as statistical way to measure liquidity in a financial institution. A study by Patil (2018) interested with audit risk on public and private banks performance used panel data of 40 commercial banks (24 public and 16 private) for a period of 16 years (2000-2015). Gross non-performing asset ratio, loan loss allowance to total advances, credit to deposit ratio and loan loss advances to assets were the proxy for credit risk whereas deposits and bank size measured by natural logarithm of assets formed the control variables. ROA, ROE, and NIM were used for measure performance. Using data technique, the study revealed a positive and significant relationship between loan loss allowance and ROE, ROA and NIM. Similarly, credit to deposit ratio positively influenced the banks performance measured in all the parameters.

METHODOLOGY

Descriptive survey design of selected registered and regulated micro finance institutions operating in Kenya was applied. This design fitted the current study for it enabled the researcher to also use quantitative data in trying to examine the effect of NPLs and financial performance of MFIs in Kenya. For this study, the target population was selected MFIs operating in Kenya. Although they were 13 registered DTMs, only four (4) microfinance institutions which

included Faulu Microfinance Bank Ltd, Kenya Women Microfinance Bank Ltd, Rafiki Microfinance Bank Ltd and SMEP Microfinance Bank Ltd (CBK, 2017) were on the study population. This was because the study set threshold was of having it being in operation as at 31st December 2017, having been in operation for at least five years (2013-2017) for an MFI to be considered for the study.

Since the selected number of MFIs in the target population was small, the whole study population of four (4) DTMs in Kenya that are listed in appendix v was studied. In this case the researcher conducted a census. The study made use of secondary data exclusively. This was a quantitative study in nature and included data collected on the levels of non-performing loans, loan loss provision, cost of loan, credit to deposit ratio and ROA of the 4 microfinance institutions in Kenya. Secondary data for five years was collected from CBK MFIs annual published financial statements 2013 to 2017. The panel data collected was quantitative in nature and comprised data levels of NPLs, total loans disbursed, MFIs earnings, total assets, total deposits and loan loss provisions.

To analyze the data, descriptive statistics to determine non-performing loan ratio, loan loss provision ratio, cost to asset ratio and credit to deposit ratio were utilized. The study also made use of regression analysis and correlation to determine the effect of NPLs on the financial performance of MFIs in Kenya. Multiple linear regression model was successfully used in establishing the effect of non-performing loans on the financial performance of MFIs in Kenya.

FINDINGS

On the first objective, the study established that non-performing loan ratio kept increasing from one year to another. The study findings also indicated that 2017 had the lowest of 15% while the year 2016 and 2014 had 42% and 38% respectively. The findings

revealed high non-performing ratios among most MFIs in Kenya. The implication of the findings was that non-performing loan ratio existed and although it had been decreasing yearly, the ratio pattern of 55% to 15% was significant. As such, non-performing loans was a concern that needed attention despite the declining.

The study demonstrated that non-performing loan ratio was unstable with extreme swings of high and very low ratio. Additionally, regression and correlation showed a significant positive relationship between non-performing loans ratio and financial performance of MFIs in Kenya. On whether NPLR had any effect on the financial performance of MFIs in Kenya, the study demonstrated that NPLR had a significant relationship with financial performance of MFIs in Kenya.

Secondly, the study revealed an increasing trend of loan loss provision ratio as expressed in percentages increased as the years progressed among MFIs in Kenya. The study findings that the LLP ratio among the MFIs in Kenya was highest in the year 2016 and 2017 in which the MFIs reported LLP ratio of 12% in both years. The study findings indicated that 2015 had 9% while the years 2013 and 2014 had the same percentages of 5%. The findings revealed a strong positive relationship between the loan loss provision ratio and MFIs financial performance in Kenya. On whether LLPR had any effect on the financial performance of MFIs in Kenya, the research findings established that loan losses affected financial performance of MFIs in Kenya positively.

On the third objective, the findings on cost per loan asset ratios for the five-year period showed the MFIs in Machakos county was characterized with instability as the ratios with oscillated between the highs and to lows. The study findings indicated that the CLA ratio among the MFIs in Kenya was highest in 2013 at 15% and lowest in 2014 at 1% while it was reported to be 5% in 2015, 4% in 2016 and 11% in 2017. Accordingly,

the findings showed unstable cost per loan asset ratio among the MFIs with oscillations thereby causing instability in loan management. On whether cost per loan asset ratios had any effect on the financial performance of MFIs in Kenya, the research findings established that cost per loan asset ratios affected financial performance of MFIs in Kenya positively.

Results revealed that non-performing cost had a significant and effect on the performance of MFIs, as such costs eat into ROA and other capital bases if the situation persists. The implication was that MFIs spent massively on risks emanating from costs of NPLs. This was a confirmation that NPLs had a significant impact on financial performance of the DTMs in Kenya.

On the fourth objective, an increasing credit to deposit ratio was observed among MFIs in Kenya. The study findings indicated that the credit to deposit ratio among the MFIs in Kenya was highest in the year 2016 and 2017 at 12% and lowest in 2013 and 2014 in which it was reported to be both at 4%. The study findings indicated that 2015 had 9%. Overall, CDR kept increasing from one year to another. The implication was that the MFIs in Kenya liquidity level cannot sustain loaning due to the increasingly high credit to deposit ratio. The CDR kept increasing from year to the other instead of assuming a steady medium ratio suitable for both lending and ROA. Also, regression and correlation established a positive relationship between the CDR and financial performance of MFIs. On whether CDR had any effect on the financial performance of MFIs in Kenya, the research findings established that CDR affected financial performance of MFIs in Kenya positively.

CONCLUSION

On the first objective, the study concluded that non-performing loan ratio kept increasing from one year to another. Also, the study concluded that non-performing loan ratio had a significant relationship with financial performance of MFIs in Kenya. Basically, the study established that non-performing loan ratio

had positive effect on financial performance of MFIs in Kenya.

Secondly, the study concluded that there was an increasing trend of loan loss provision ratio as expressed in percentages increased as the years progressed among MFIs in Kenya. Also, the study concluded that loan loss provision ratio significantly affected financial performance of MFIs in Kenya positively as the MFIs provided a substantial loss in expectation of loan default.

Thirdly, the study concluded that the cost per loan asset ratio for the five-years under study on MFIs in Kenya, was characterized with instability as the ratios with oscillated between the highs and to lows. Additionally, it was concluded that the cost per loan asset ratios significantly and positively affected financial performance of MFIs in Kenya. Further, the study concluded that the credit to deposit ratio kept increasing from one year to another. Cost to loan asset is the variable which had the highest influence of 50.6% on financial performance as compared to the other variables.

Finally, on the fourth objective, the study concluded that credit to deposit ratio among the MFIs kept on increasing from one year to another. From the research findings it was concluded that credit to deposit ratio significantly affected financial performance of MFIs in Kenya and positively. The study therefore, concludes that there is strong positive relationship between, non-performing loan ratio, loss provision ratio, cost to loan asset ratio, credit to deposit ratio and financial performance of microfinance banks in Kenya. Therefore, it can be concluded that non-performing loans had a significant correlation with financial performance of MFIs in Kenya in the positive way.

RECOMMENDATIONS

The findings and eventual conclusions of the current study evolved commensurate recommendations to the relevant stakeholders for consideration in

enhancing non-performing loans towards improved financial performance of MFIs in Kenya. First, the study recommended credit management systems to reverse the non-performing loan ratio which kept increasing from one year to another.

Secondly, in view of loan loss provision that increased as the years progressed to be upturned by designing intervention and preventive loan management mechanisms. To control and avoid the unstable cost per loan asset ratios for the five-year period, the study recommended that the cost of lending the loan assets should be monitored with view of optimizing loan portfolios. Further, to mitigate credit to deposit ratios upward trend, MFIs should come up with adequate control measures which are vital to vet and avoid borrowers who have negative credit histories.

Similarly, the researcher recommended sharing of information amongst MFIs industry to lock out the multi funded borrowers and the defaulters from further access to loans. It is vital to consider hiring competent staff and perform frequent training to evaluate the best ways to apply in order to reduce the NPLs and work efficiently for the MFIs. Also, the study recommended that credit to deposit ratio be reduced and leveraged and encouraged the MFIs to utilize the retained earnings and customer savings for lending. This was because high percentage of credit to deposit ratio holds more loan assets with borrowers which can affect the liquidity of the MFIs.

Furthermore, highly profitable MFIs can utilize their earnings for growth in their asset base and manage their operations effectively. Besides, the study recommended that MFIs to rely heavily on the report of credit worthiness of borrowers provided by reference credit bureaus and proper business assessment before decisions to lend to their customers are made. In addition, MFIs should rely on the customer's cash flow for credit approval and monitoring procedures. This would help in improving the quality of loan asset hence reduce NPLs.

Likewise, for growth purpose MFIs should embrace equity financing through issue of shares and fund through retained earnings. Finally, the study further recommended that various government regulatory agencies be involved in helping MFIs in Kenya in implementing the various banking guidelines and

measures to ensure compliance with NPL management guidelines and loan asset reporting.

Recommendations for Future Study

The researcher proposed a further a study to be undertaken on this area using both primary and secondary data, focus on one MFIs and increase sample size.

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