

it was presumed that credit risk affects the financial performance of microfinance banks in Nakuru town, Kenya. The relationship between the two variables was expected to be influenced by the macroeconomic factors such as inflation which are beyond the control of microfinance banks.

6. Literature Review

This part presents a review of theories, and empirical studies that touch on strategic management practice (in particular, strategy implementation) and completion of projects.

6.1 Theoretical Literature

6.1.1 The Moral Hazard Theory

Moral hazard refers the risk in which a party to a transaction provides misleading information about its assets, liabilities or credit capacity, or has an incentive to take unusual risks in a desperate attempt to earn a profit before the contract settles. Usually a party to a transaction may not enter into the contract in good faith, thus providing misleading information about its assets, liabilities or credit capacity. It is postulated that, moral hazard problems may be occasioned by asymmetric information which makes it difficult to distinguish between good and bad borrowers [21]. It is also noted that moral hazard has led to substantial accumulation of NPLs [8].

Problems of moral hazard in financial institutions are evident at many stages of the recent financial crises. This theory is considered relevant in this study since borrowers and lenders tend to conceal crucial information pertaining to the lending and borrowing agreement. Yet in modern macroeconomic theory economic growth rate depends, crucially, on the efficiency of financial institutions. The financial systems themselves depend on accurate information about borrowers and the project the funds are used for. Though it is asserted that NPLs may be caused by less predictable incidents [7], they indicated that moral hazards resulting from generous government guarantees could lead to loan default.

Consistent with earlier assertions regarding moral hazard [12], it is arguable that microfinance banks with relatively low capital, just like other mainstream financial institutions, may respond to moral hazard incentives by increasing the riskiness of their loan portfolio. The foregoing is bound to result in higher non-performing loans on average in the future. As further reinforced by another study's argument [10], microfinance banks that tend to take more risks, including in the form of excess lending ultimately incur losses. Still in tandem with moral hazard, higher equity-to-assets ratio results in lower NPLs. Given that, moral hazard incentives such as low equity tend to aggravate NPLs [12], then microfinance banks and other financial institutions ought to avoid such moral hazard incentives in order for them to mitigate losses through NPLs.

6.1.2 Adverse Selection Theory

The theory rests on two main assumptions: that lenders cannot distinguish between borrowers of different degrees of risk, and that loan contracts are limited. This analysis is

restricted to involuntary default, that is, it assumes that borrowers repay loans when they have the means to do so. In a world with simple debt contracts between risk-neutral borrowers and lenders, the presence of limited liability of borrowers imparts a preference for risk among borrowers, and a corresponding aversion to risk among lenders. This is because limited liability of borrowers implies that lenders bear all the downside risk. On the other hand, all returns above the loan repayment obligation accrue to borrowers. It is further asserted that, just like moral hazard, adverse selection can lead to significant accumulation of NPLs [8].

Raising interest rates would affect the profitability of low risk borrowers disproportionately, causing them to drop out of the application pool. However, excess demand in the credit market may persist even in the face of competition and flexible interest rates. In the adverse selection theory, the interest rate may not rise enough to guarantee that all loan applicants secure credit, in times when loanable funds are limited. Therefore, in line with this theory, microfinance banks may find themselves in dilemma; whether to increase interest rates and lower the number of applicants, or reduce the rates and have many applicants some of which may default in servicing their loans.

It is argued that in line with stipulations of the adverse selection theory, information sharing is said to reduce adverse selection by enhancing banks' information on credit applicants. It is argued that, ordinarily, each banking institution has private information about local credit applicants, but has no information about foreign applicants. In this light, it is reasoned that if banks were to share information about their clients' credit worth, they can assess the quality of foreign credit applicants as carefully as they would assess their local customers. As such, minimizing information asymmetry between lenders and borrowers, loans are extended to borrowers with lower credit risk [5]. As such non-performing loans are likely to be reduced. In the context of Kenya's microfinance banking sector, the issue of adverse selection is being handled by CRBs that minimizes information asymmetry.

6.2 Empirical Literature Review

This part reviews empirical studies that have hitherto been conducted by different scholars on areas touching on components of non-performing loans and in particular credit risk, and financial performance. The study reviews global, regional, and local studies respectively.

6.2.1 Credit Risk and Financial Performance

When studying determinants of NPLs in different countries, it was observed that assessment of credit risk in the financial sector is a vital component of macro-prudential surveillance [6]. It was further opined that, most of the studies relating credit risk to the real economy have dwelt on the development of expected default frequencies (EDF), loan loss provisions (LLP), loss given default (LGD), and NPLs as a measure of asset quality [18], [19]. The aforementioned studies observed that credit risk plays a crucial role in stress test exercises through its impact on bank balance sheets. It is further exemplified in another analysis of the Spanish commercial and savings banks [23]. The analysis revealed

that, credit risk is determined by microeconomic individual bank level variables, like bank size, net interest margin, capital ratio, market power, and real GDP growth.

In a paper on the Italian banking sector, banks' behaviour over the business cycle was analyzed [20]. The study investigated whether loan loss provisions, NPLs and the return on assets have a cyclical pattern and deduced that banks' riskiness and profitability are affected by the evolution of the business cycle. An investigation was carried out on the NPLs in Central, Eastern, and South-Eastern Europe (CESEE) in the period between years 1998 and 2011 [12]. It was noted that high cost efficiency may reflect little resources allocated to monitor lending risks and, thus, may lead to higher NPLs in the future. In tandem with "moral hazard" hypothesis, the scholar observed that banks with relatively low capital respond to moral hazard incentives by increasing the riskiness of their loan portfolio, which in turn, results to higher NPLs on average in the future.

In a study of causes and effects of NPLs on MFIs' operations in Ghana, it is asserted that the lender should ensure that good decisions are made relative to granting of loans with the object of minimizing credit risk [4]. In other words, the lender ought to always aim to assess the extent of the risk associated with the lending and try to minimize factors that could otherwise compromise repayment. The scholar further asserts that, needless to say, the lender should gather information regarding the prospective borrower that will assist in reaching a sound credit decision. It was noted that in order to mitigate NPLs which are occasioned by non-repayment of loans, MFIs in Ghana have adopted a standard loan request procedure and requirements that are usually contained in credit policy manual with the object of guiding loan officers and customers.

A study sought to analyze the effectiveness of credit management system on loan performance in Kenya's MFIs [14]. It was observed that credit risk results from investor's risk of loss emanating from default in loan repayment. When citing a previous study [22] it was argued that credit risk could be mitigated by employing a number of strategies such as risk-based pricing, covenants, credit insurance, and tightening and diversification. It is deduced that credit risk controls adopted by MFIs affect the loan performance. In a study on NPLs in Kenya Commercial Bank (KCB), it was noted that quality credit risk assessment and risk management and sufficient provisions for bad and doubtful debts can reduce the bank's credit risk [11]. It was continued to assert that when the level of NPAs is high, the assets provisions made are not adequate protection against default risk.

It is asserted in a study of factors affecting NPLs in Kenyan banks [16] that, granting loans to borrowers who are already overloaded with debt or possess unfavourable credit history could possibly expose banks to unnecessary default and credit risk. Information asymmetry is attributed to inappropriate determination of credit risk due to lack of requisite credit history of prospective borrowers. Financial institutions operating in isolation are argued to suffer from worse credit risk than those which share their credit information. Serial defaulters, associated with credit risk,

have negatively altered the lending business in the credit market, and as such negated the performance of banks [11].

7. Research Methodology

The study employed descriptive survey. As elsewhere asserted [13], descriptive survey enables to respond to the "what" question which is the case in this study. The aspect of survey was based on the fact that, the study was conducted at a specific point in time, that is, September/October, 2014 and the respondents cut across different departments and firms.

The target population is the population to which the study findings will be generalized. The current study was limited to the credit and management personnel of microfinance banks (MFBs) within Nakuru town, Kenya. There are four MFBs in Nakuru town (Kenya Women Finance Trust – KWFT, Faulu, Rafiki, and SMEP). The management and credit personnel from the aforementioned firms total to 66. Therefore, the target population was made up of 66 staff members.

Given that the target population (66) was relatively small, the researcher included all members of the population in the study. As such, there was no rationale of sampling. Instead, a census survey was employed. The aforementioned method was highly recommended not necessarily due to the small target population; but more importantly, census survey enhances the accuracy and reliability of the study findings by eliminating the sampling bias.

Questionnaires are very suitable in survey research [15]. In tandem with this assertion, a structured questionnaire was used to collect data from the respondents. The research instrument was pilot tested in order to determine both its reliability and validity prior to administering it in the main study. Validity was determined through expert opinion of the supervisor's at Jomo Kenyatta University of Agriculture and Technology while the reliability was tested using the Cronbach alpha coefficient. Only those factors in every construct that returned alpha values equal to or greater than 0.7 ($\alpha \geq 0.7$) were deemed reliable and as such include in the final instrument.

7.1 Data Processing and Analysis

The collected data underwent both descriptive and inferential analysis with the aid of the Statistical Package for Social Sciences (SPSS) version 21. Descriptive analysis involved frequencies and percentages for demographic data of respondents. As part of descriptive analysis, means and standard deviations were employed across all variables (independent and dependent). On the other hand, inferential analysis was in form of Pearson's correlation. The aforementioned analysis is founded on the fact that data pertaining all variables was on a Likert scale. The study findings were presented in form of tables that reflected both descriptive and inferential statistical results.

7.2 Research Findings

Out of the 66 members of the target population (credit, accounting, and management staff of microfinance banks in Nakuru town, Kenya), 7 participated in the pilot study. As such, they were excluded from the main study which implies that only 59 were included in the ultimate study. 59 questionnaires were issued and 51 were filled and collected by the researcher. Therefore, the response rate was 86.4 per cent.

7.2.1 Descriptive Findings

In this section, the study sought to establish the opinions of the credit, accounting/finance, and management staff of the MFBs in Nakuru town.

a) Descriptive Findings for Credit Risk

The researcher wanted to find out the views of the respondents pertaining credit risk in light of both non-performing loans and financial performance. Table 1 illustrates findings regarding credit risk

Table 1: Descriptive Results for Credit Risk

	N	Min	Max	μ	σ
i. Credit risk is caused by individual MFB variables e.g. size, net interest margin, capital ratio, etc	51	1	5	3.51	1.255
ii. Credit risk controls adopted by our MFB affects its financial performance	51	1	5	4.08	1.017
iii. Our MFB has initiated strategies for mitigating credit risk	51	3	5	4.47	.578
iv. Our MFB monitors credit risk of potential borrowers	51	2	5	4.51	.809
v. There is credit management system in our MFB	51	3	5	4.53	.578
vi. Credit risk assessment is very important before lending money	51	4	5	4.73	.451

The means of all propositions regarding credit risk were inclined towards either 4.00 (agree) or 5.00 (strongly agree). Therefore, it was noted that, credit risk is caused by individual MFB variables such as size, net interest margin, capital ratio, etcetera; credit risk controls adopted by MFBs affect their financial performance, and that MFBs have initiated strategies for mitigating credit risk. It was further noted that, MFB monitors credit risk of potential borrowers

b) Descriptive Findings for Financial Performance

Table 2 illustrates how respondents commented on propositions regarding financial performance of microfinance banks.

Table 2: Descriptive Results for Financial Performance

	N	Min	Max	μ	σ
Credit risk plays a major role in determining financial performance of MFBs	51	4	5	4.57	.500

Respondents were found to strongly agree ($\mu = 4.57$) with the assertion that credit risk plays a major role in determining financial performance of MFBs. Given that the standard deviations for all the three assertions were

noticeably small ($\sigma = 0.500$), it meant that the respondents' opinions were closely related, that is, the degree of variation of responses regarding financial performance was relatively small.

7.2.2 Effect of Credit Risk on Financial Performance

In this section, the study sought to establish the strength and significance of relationship between credit risk and financial performance of MFBs in Nakuru town. This was determined by use of Pearson's correlation due to the fact that the responses sought were on a Likert scale. The analysis of the pertinent data led to the results as indicated in Table 3.

Table 3: Effect of Strategy Implementation on Successful Project Completion

Credit Risk		Financial Performance
	Pearson Correlation	-.444**
	Sig. (2-tailed)	.001
	N	51

** Correlation is significant at the 0.01 level (2-tailed).

The findings indicate that there exists a moderately strong and positive relationship between credit risk and financial performance of MFBs in Nakuru town ($r = 0.444$; $p < 0.01$). More so, the relationship is statistically significant as exemplified by the value of "p". Therefore, the second null hypothesis (credit risk does not significantly affect financial performance of MFBs in Nakuru town) was rejected. The findings were interpreted to mean that, when credit risk of borrowers rises, financial performance of the MFBs is likely to be negatively affected. This may be due to the argument that, the rise of credit risk occasions increased default rates hence increased non-performing loans. The aforementioned loans ideally are not serviced which leads to decrease in profitability of the MFBs concerned.

8. Summary, Conclusions and Recommendations

This section presents a summary of research findings. Conclusions are then deduced from the summary, and eventually recommendations are suggested in line with the study objectives.

8.1 Summary

It was noted that, credit risk is caused by individual MFB variables such as size, net interest margin, capital ratio, among others; credit risk controls adopted by MFBs affect their financial performance, and that MFBs have initiated strategies for mitigating credit risk. It was further established that, MFB monitors credit risk of potential borrowers. The findings were in tandem with an earlier study's [23] observations that, credit risk is determined by microeconomic individual bank level variables, like bank size, net interest margin, capital ratio, market power, and real GDP growth. It was indeed found out that, credit risk is significantly and negatively related with financial performance of MFBs. In other words, credit risk was argued to negate the profitability of MFBs due to increment in NPLs.

8.2 Conclusions

The study deduced that credit risk is caused by size, net interest margin, and capital ratio of MFBs among other variables. Credit risk controls adopted by MFBs were also concluded to affect MFBs' financial performance. It was concluded that credit risk negates the profitability of MFBs due to increment in NPLs and as such reduces the MFBs' financial performance.

8.3 Recommendations

It is that, MFBs ought to critically analyze potential borrowers regarding their credit worthiness before advancing loans to them, or even offer cascading loans depending on borrower's ability to service these loans. Moreover, it is suggested that, MFBs should fully abide with the credit regulations stipulated by the CBK. The MFBs need to work closely with CBK's established credit reference bureaus by sharing credit information in order to identify serial defaulters and desist from awarding such borrowers loans.

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