EFFECT OF CREDIT MANAGEMENT ON ASSET QUALITY OF MICROFINANCE INSTITUTIONS IN NAIROBI METROPOLITAN

BY

ANNE WAMBUI MWANGI

A RESEARCH PROJECT SUBMITTED TO THE COLLEGE OF BUSINESS IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE AWARD OF THE DEGREE OF MASTER SCIENCE, COMMERCE (FINANCE & INVESTMENT) OF KCA UNIVERSITY

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OCTOBER, 2021

DECLARATION

I declare that this dissertation is my original work and has not been previously published or submitted elsewhere for award of a degree. I also declare that this contain no material written or published by other people except where due reference is made and author duly acknowledged.

Student Name: Anne Wambui Mwangi Reg. No: 18/00623

Sign:…… Date: ……

I do hereby confirm that I have examined the master's dissertation of

Anne Wambui Mwangi

And have approved it for examination

Sign…… Date……

Dr. Fredrick Wafula

Dissertation Supervisor

ABSTRACT

Effective credit management ensures that clients are able to pay for the product/services rendered on credit. Management of credit is very critical for asset quality as it constitute an important part of the overall loan process. In Kenya, the aspect of non-performing loans has continued to be a significant issue among Kenyan MFIs. Therefore, the current survey sought to examine the effects of credit management on asset quality of microfinance1institutions in Nairobi Metropolitan. The specific variables that the study sought to explore were credit policy, credit standards, credit terms and credit collection techniques of MFIs. The study was anchored on four key theories i.e., information asymmetry theory, transaction cost theory, credit risk theory and modern portfolio theory. The study adopted descriptive research design and also used cross-sectional data. The cross-sectional data was obtained by combining both secondary and primary data involving all the 74 microfinance institutions within Nairobi Metropolitan area. Secondary data was obtained from published financial reports of all MFIs in Nairobi Metropolitan area. On the other hand, primary data was obtained using structured questionnaire. The target population for whom the questionnaires was administered composed of all 74 credit executives from all targeted microfinance institutions within Nairobi Metropolitan area. Collected data was analyzed with the aid of STATA Version Software and presented using tables and figures. The generated results were then be presented using frequency table, and figures. The researcher adhered to all ethical values in research particularly the confidentiality of the information obtained. On the effect of credit policies on asset quality of MFI, the study found out that there was a negative yet insignificant effect of credit policies on asset quality of MFIs in Nairobi Metropolitan. On the effect of credit collection techniques on asset quality, the study established that credit collection techniques are positively and significantly associated with asset quality of micro-finance institutions. On the effect of credit terms on asset quality, the study established that credit terms had a negative yet non-significant relationship with asset quality. Lastly, on the effect of credit standards on asset quality, it was revealed that credit standards had non-significant negative relationship with asset quality. It was concluded that a strong positive relationship between credit collection techniques and asset quality. Further, it can be concluded that investment in credit collection techniques can leads to better asset quality of MFIs in Nairobi Metropolitan. The study therefore recommended that MFIs in Nairobi metropolitan should not adopt a more stringent credit policy but a much more lenient policy for improvement in their asset quality. In addition, it was recommended that MFIs in Nairobi metropolitan should continue improving on their credit collection techniques/systems as a way of improving asset quality.

Keywords: Assets Quality, credit management, credit monitoring, credit standards, credit policy, credit terms and credit collection technique.

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TABLE OF CONTENTS

DEDICATION

The research project is dedicated to my beloved family members for their unwavering support and inspiration to accomplish my master's degree.

LIST OF TABLES

LIST OF FIGURES

ACRONYMS AND ABBREVIATIONS

AMFI	Association of Microfinance Institutions
BOD	Board of Directors
CAPM	Capital Asset Pricing Model
CBK	Central Bank of Kenya
EMH	Efficient Markets Hypothesis
MFI	Microfinance Institution
LLP	Loan Loss Provisioning
MPT	Modern Portfolio Theory
SACCO	Savings and Credit Co-operative

OPERATIONAL DEFINATION OF TERMS

Asset Quality: Asset quality is an aspect of bank management that involves examination of the assets of a bank so as to so establish the level and size of credit risk associate with its operation (Ramakrishnan and Thakor, 2014)

Credit Management: Credit management is a detailed procedure that is adopted by firms in order to ensure that their clients pay for the products/services that have been provided on credit terms (CBK Supervision Report, 2010)

Credit Policy: Credit policy is a set of guidelines that have been set by a lending institution in order to determine which customers are extended credit facilities (Bhatnagar, 2015)

Credit Standards: Credit standards are guidelines that are issued by a financial institution in order to evaluate whether a particular client is creditworthy (Bhatnagar, 2015)

Credit Terms: Credit terms refers to are contractual terms in which a company extends credit to customers; these terms also specify the credit duration and credit cap (Bhatnagar, 2015).

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Business entities are usually faced with a number of vulnerabilities as they go about their day-to-day activities. Though some of risks that business entities encounter in their daily operations are not that intense as to cause any significant effect on the business, there are some which are disastrous (Jasintha, 2019). As such, these kinds of risks tend to affect business operations particularly those operating in the financial sector especially MFIs. One of the most common risk that standout among MFIs is the issue of credit risk. In this regard, credit risk is considered as a default on a debt that may arise from a borrower failing to make required payments. In the first resort, the risk is that of the lender and includes lost principal and interest, disruption to cash flows, and increased collection costs (Qureshi, Aziz, & Mian, 2017).

Since the end of the financial crisis of 2008-2009, financial institutions particularly MFIs have continuously been instituting effective measures aimed at mitigating against financial losses which are likely to be as a result of poor credit management (Qureshi, Aziz, & Mian, 2017). Credit management is, therefore, considered as the overall approach to managing any risk that may arise from loans extended by financial institutions to their clients (Muriki, 2017). Therefore, in order to minimise issues of credit risks, financial institutions must ensure that they have proper understanding of its clients in terms of credit history as well as their capacity to repay. This is because, credit management does not stop until the full and last instalment has been recovered.

Across the world, one of the most critical risks in financial institutions is credit risk. A study on poor asset quality of Microfinance institutions (MFIs) in England showed that out of the sixty-two Microfinance institutions that existed before 1984, there were cases of premature loan and advances settlement. Several regions among them the developed countries such as the US, Japan and UK and other developing nations especially those from South America and South East Asia have over the years faced some notable challenges as a result of nonperforming loans (Kioko, 2018).

As a result of this, efficient credit management provides that all lending institutions should institute effective measures in order to ensure that they are able to capable of managing their clients credit lines more logically (Kioko, 2018). As a result of this, institutions that lends money to their client have taken a notch higher by partnering with credit reference bureaus (CRB's) which are able to share the credit worthiness of the borrowing clients a fact that has allowed lending institutions to be able to assess whether the credit worthiness of their clients before giving out loans. With this, lending firms are able to minimize their overall exposure to issues of defaults by their customers for their borrowed amounts (Al-Tamimi, 2012).

It should be noted that credit management begins after the sale of a product to the point when the payment for the sold product is received and documented. From the theoretical perspective, a sale cannot be regarded to be valid unless a consideration (payment) for the product being sold is received (Al-Tamimi, 2012). For this reason, it becomes somehow difficult for lending institutions to formulate and implement a comprehensive credit policy as part of its credit control variables given that institutions are required to utilize one or more of its control variables at any given time without any of them influencing each other. From the previous studies, it has been extensively examined those dominant economic conditions tends to affect credit policies that have been put in place by lending institutions with a slight change in these economic conditions been observed to result in their modifications in order to satisfy the ever-changing demands. Ahmad, (2013) therefore argue that microfinance institutions should make sure that they have implemented effective credit policies that are able to oversee their lending processes.

Revenues generated by microfinance institutions come from credit facilities extended to clients and payment of the interest and principal amount may be confronted with doubts as stated by Central Bank Annual Report (2018). Before extension of credit to customers, methodologies used in evaluation and appraisal plays a very essential role in determining the overall success of the loan facilities given out to the clients. For this reason, decisions regarding credit extension should only be made after an extensive evaluation and assessment has been done and completed through examination of the credit worthiness of the clients. Therefore, credit management is vital as far as asset quality of Microfinance institutions is concerned and it is an integral process when reviewing loan process for Microfinance institutions (Ahlin et al, 2018).

1.1.1 Credit Management

Credit management refers to detailed procedures that are adopted by firms in order to ensure that their clients pay for the products/services that have been provided on credit terms (Clarke, 2018). In addition, credit management is regarded as the techniques/ strategies that firms adopt in order to ensure that they are able to maintain an ideal credit level as well as its effective management. As a result of this, the concept of credit management is considered to be among the most critical activities for any business entity and there is no way it can be ignored by any monetary endeavor involved in credit undertakings regardless of its outlook (Clarke, 2018). Therefore, effective credit management ensures that clients are able to pay for the product/services rendered on credit. It is therefore a part of financial management strategies that involves the analysis of credit, rating of credit, classification and reporting of credit (Muturi and Rotich, 2016).

For business entities dealing with credit transactions, credit management becomes a very significant undertaking since in such case it becomes virtually impossible to have zero credit or zero default risk by clients. Credit management is based on the financial notion that the higher amount of accounts receivables and their age there are, then the higher the overall financial costs that the firm will incur in maintaining them. This is because, in the event where accounts receivables are not paid on timely manner and there is an urgent need of cash, then the firm will be obliged to borrow, thus, incurring interest expense which might be expensive.

According to Muturi and Rotich, (2016), the nature of credit management strategies that a financial institution adopts can greatly influence its overall success or failure. This is so because failure of most microfinance institutions is in most cases influenced by the nature and quality of credit decisions made and, thus, the quality of the risky assets. With this in mind, Olabamiji and Michael, (2018) goes further to note that credit management provides a leading indicator of the quality of microfinance institutions credit portfolio. As such, one of the most notable requirements in order to ensure effective credit management is the ability of a lending institution to intelligently and effectively manage its clients credit lines.

This should be done in order to minimise the chances of the microfinance institutions from being exposed to bad debts, bankruptcies and over-reserving by expertly analysing client's financial strengths, history of client's credit

score as well as their past credit payment patterns (Olabamiji and Michael, (2018). For example, utilizing credit score is very essential to microfinance institutions because by analysing a client credit scores helps in reducing discrimination when extending out loans since it is able to provide an objective analysis of the client's creditworthiness.

In the past, commercial banks across the globe witnessed rising non-performing credit portfolios which significantly contributed to their financial distress (Maina, Kinyariro & Muturi, 2016). Therefore, the biggest and most significant risk facing microfinance institutions currently especially in developing countries is extending loans and being unable to recover it. This becomes a series financial distress for microfinance institutions particularly due to the fact that most micro-lending is unsecured (Maina, Kinyariro & Muturi, 2016). Therefore, it is usually crucial for MFIs to design effective credit management strategies that is capable of identifying the already existing and probable risks inherent in their lending services in order to enhance their overall asset quality.

1.1.2 Asset Quality in Microfinance Institutions

The asset quality of microfinance institutions tends to affect their operational, financial as well as their national financial soundness. The reason for minimizing the value of asset quality of microfinance Institutions in China was because the microfinance Institutions were not aware that loan quality is a serious cause of crisis. However, this notion is disputed by Olweny (2011), who notes that the key issue that determines asset quality in India is the underlying value of the loan portfolio as well as their credit control management of the microfinance institutions. Therefore, both securities and loans are key techniques that determines the asset quality of microfinance institutions despite them carrying the greatest number of risks. Moreover, other assets such as real estate, off balance sheet items and cash also affect asset quality of microfinance Institutions.

It is noted by Oludhe (2011) that asset quality powerfully determines the performance of any microfinance institutions in South Africa because it intensifies interest income and reduce the cost load of bad debt management simultaneously. By law, microfinance institutions are expected to keep aside cash deductible as an expense to cushion the microfinance institutions against bad debts and other loan defaults. The higher the non-performing asset ratio to the gross-net asset, the lower the asset quality.

Quality of current and potential credit risks reflects the asset quality ratings, and this is highly intertwined with the loan investment portfolios, real estates and off-balance sheet transactions. This also reflects the ability of microfinance Institutions in Kenya to recognize and manage credit risks. According to Nocco and Stulz, (2016), asset quality evaluation of MFIs in Kenya ought to be emphasized depending on how adequate the Grant for Loan and Lease Losses (LLL) are the intensity of exposure to counter-party, the issuer or borrower default under actual or implied contractual agreements.

1.1.3 Credit Management and Asset Quality

Credit management is regarded as the process that involves collection, compilation, storage as well as the subsequent analysis of essential information regarding credit transactions (Kadioglu, Telceken & Ocal, 2017). As such, effective credit management requires that the lending institutions to establish clear procedures and guidelines pertaining to extending credit services to its clients as well as the laid down strategies that will be used in order to ensure that the firm is able to maintain optimal credit level. For this reason, credit management procedures need to be regularly updated particularly on annual basis due to ever changing economic environments in which these Organisations operate in (Kadioglu, Telceken & Ocal, 2017).

Management of credit is a very critical aspect of enhancing the asset quality of a firm, hence, constituting an important part of the overall loan process. For this reason, a credit management strategy that is well-developed and managed is very crucial in ensuring that any financial institution is able to attain financial (Mwirigi, 2016). Therefore, having a weak credit management system in place is among the key issues that causes many financial institutions to have weak asset quality. In order to safe-guard their asset quality, financial institutions are required to make sure that they have developed strong and effective credit management strategies (Korir, 2014). As far as the asset quality of MFIs is concerned, effective credit management strategy is essential as thus will ensure they are able to achieve success and long-term survival in the market. However, it is worth to note that, an effective credit management strategy should as well ensure an enabling credit environment that serves to benefit the institution. This means that a good credit management system should function effectively from the time the loan is dispatched,

monitoring the overall payment plan and also ensure that any foreseeable risk arising from the dispatched loan is well put under control (Mutua,2014).

Globally, it has been established that a significant trade-off normally exists between the number of loan borrowers per loan officer and the asset quality of microfinance institutions in the United States (Gonzalez, 2017). This close trade-off between number of loan borrowers per loan officers in the United States has been very beneficial to the MFIs across the country due to existence of economies of scale without compromising their overall asset quality. According to Lawal, Oluoch & Willy (2018), the operational efficiency of financial institutions is usually impacted by the level of their asset quality. As a result of this, the asset portfolio of MFIs needs to be monitored constantly and also ensure that they strictly adhere with standard policies of credit management (Gonzalez, 2017).

In Africa, Sile, Olweny & Sakwa (2018) notes that the overall financial performance of financial institutions in Nigeria is usually impacted by their level of asset quality. Therefore, financial institutions must embrace policies and procedures that minimizes their overall credit risk in order to enhance their asset quality level (Sile, Olweny & Sakwa (2018). In Ghana, Abaidoo, & Oppong, (2017) observes that lending has become a very risky business for commercial banks given that repayment of the loans is not always a guarantee and, in most cases, it depends on other factors that are not in borrower control. As a result of this, managing loans has become a very essential undertaking among financial institutions in Ghana as failure to manage loans, which make up the largest share of banks assets, would likely lead to high levels of non -performing loans, hence, affecting the asset quality of Ghanaian commercial banks (Abaidoo, & Oppong, (2017).

Locally, Barus, et al., (2017) observes that loan and advances are the most common MFIs assets that are strictly used to determine their overall asset quality. However, following the financial reform process in Kenya, there has been an increasing growth in the non-performing assets and this has significantly interfered with development in the MFIs sector which has in turn impacted negatively on their overall asset quality. As a result of this, Barus, et al., (2017) suggests that the management of MFIs in Kenya have the responsibility of ensuring that asset quality is well monitored so as maintain the soundness of these vital financial business.

1.1.4 Microfinance Institutions in Nairobi Metropolitan

According to the Microfinance Act (2006), MFIs are financial institutions entities in which the individual responsible for operating the business holds themselves out as accepting deposits on a day-to-day basis. In Kenya, the microfinance industry constitutes of various types of competing institutions, which are different in terms of their establishment formalities, professionalism, visibility, commercial orientation, geographical coverage, and size. As a result of this, MFIs in Kenya are registered under Association of Microfinance Institutions (AMFI). This, therefore, means that MFIs are not fully registered commercial banks though they are subject to many of the same conditions under the prudential control of the Central Bank, given that they use customer deposits to raise capital for independent loans (Alshatti, 2015). MFIs accepts, demand deposits and use the deposits as a means to generatee capital for the extension of credit to customers.

In MFIs operations, Kenya is ranked among the top in Africa given the country's extensive investment in MFIs operations across the country are particularly in big cities and metropolitan areas especially in Nairobi metropolitan area. In total, the Kenyan MFI's sector consists of nearly 250 MFIs in total all which are registered under the Association of Microfinance Institutions (AMFI). There are 74 MFIs within Nairobi metropolitan area that are currently registered with Association of Microfinance Institutions (AMFI). These MFIs business entities are focuses on delivering financial services to low-income individuals as well as micro and small enterprises (MSEs) engaged in various business entities across Nairobi metropolitan area. As a result of this, MFIs in Nairobi metropolitan area and those across the country at large have been introducing significant innovations both in products and services especially those which are patronized by MSEs. However, despite their overwhelming popularity, the asset quality of MFIs across Nairobi metropolitan area has been affected a lot due to ineffective credit management policies that these institutions adopt. The deterioration of MFIs asset quality across Nairobi metropolitan area has largely been caused by ignorance of loan quality.

For example, there was reported an increase in the provisioning for loans under the doubtful and loss categories which increased from Ksh. 4.92 billion in 2017 to Kshs.5.27 billion in 2018, and from Kshs. 5.27 billion in 2018 to Kshs. 8.99 billion in 2019 respectively. The overall rise in the amount of credit default has been attributed

to lack of management sensitive measures of credit worthiness and weak incentives for MFIs to strengthen their systems for monitoring credit management.

1.2 Statement of the Problem

The asset quality an MFI is a clear indication as to the management ability to identify and also to manage any credit vulnerability (Ahamed, 2017). With the increasing globalization, firms across the globe in particular financial institutions such as MFIs are continuously increasing the products and services to their customers especially in terms of their loan products. As a result of this, it has become very critical for these institutions to constantly monitor their asset quality as it the key measure of the financial stability of these institutions. In order to achieve this, it very crucial for MFIs to develop effective and sound credit management strategies so as to remains stable and profitable. According to Ahamed, (2017), the probability of bad debts increases as the more available credit management standards are relaxed. For this reason, microfinance institutions must make sure that they effectively manage their credit extensions in order to protect themselves from getting into financial distress (Ahamed, 2017).

The issue of non-performing loans continues to be a menace amongst MFIs in Kenya (CBK, Monthly Economic review, January 2018). The ratio of non-performing loans to total loans among MFIs across Nairobi metropolitan area rose from 7.1% in December 2016 to 10% in June 2019 which beckoned an increase in credit risk exposure among MFIs (Mwirigi, 2016). Further, MFIs in Nairobi metropolitan area registered declined performance in 2017 with profit before tax decreasing by 6.0 per cent from Ksh. 50.0 billion in December 2016 to Ksh.44.0 billion in December 2017. In addition, the annual report released by the CBK (2018) also indicated that the amount of non-performing loans among MFIs in the country was on an increase. Such an increase in non-performing loans among MFIs is a clear indication that operational stability is in a jeopardy. The above statistics of microfinance institutions asset quality implies that they are headed in the wrong direction.

A number of studies have been done in Kenya relating to credit management and asset quality. Agwu, (2018) examined how implementing credit risk management strategies was implicating the asset quality of Kenyan commercial banks. However, the current study will explore the effects of credit management on asset quality of MFIs Nairobi Metropolitan. Chikamai & Mutua, (2018) evaluated how the financial performance of SACCOs operating

in Kakamega town was influenced by the credit policies they employed. However, the current study will look at the effects of credit management on asset quality of MFIs Nairobi Metropolitan. Further, Muturi, Kibati & Koima (2019) how the financial performance of SACCOs in the country was being influenced by their asset quality. However, the current study will specifically look at the effect of credit management on asset quality of MFIs within Nairobi Metropolitan. Based on the above analysis, it is clear that the concept of credit management and asset quality of MFIs has received less attention among scholars in Kenya. The current study, therefore, sought to expound don this research gap by exploring the effect of credit management1on the asset quality of microfinance institutions in Nairobi Metropolitan?

1.3 General Objectives

The main objective of this study was to examine the effects1of credit management on asset quality of microfinance institutions in Nairobi Metropolitan.

1.3.1 Specific Objectives

i. To ascertain the effect of credit standards on asset quality of1microfinance institutions in Nairobi Metropolitan.
ii. To investigate the effect of credit policy on asset quality of microfinance institutions in Nairobi Metropolitan.
iii. To examine the effect of credit terms on asset quality of microfinance institutions in Nairobi Metropolitan.
iv. To determine the effect of collection techniques on asset quality of microfinance institutions in Nairobi Metropolitan.

1.4 Research Questions

i. What is the effect of credit standards on asset quality of Microfinance institutions in Nairobi Metropolitan?
ii. How does credit policy affect asset quality of Microfinance institutions in Nairobi Metropolitan?
iii. What is the effect of credit terms on asset quality of Microfinance institutions1in Nairobi Metropolitan?
iv. What is the effect of collection policy on asset quality of microfinance institutions in Nairobi Metropolitan?

1.5 Justification of the Study

Effective credit management is of great importance to the future success of any financial institution. This is because, sound credit management ensures that MFI institutions are not faced with recurring issues of bad-debts and non-performing loans, thus, being able to uphold their shareholders wealth and at the same time preventing them from expressing financial crisis. Across Nairobi Metropolitan, some MFIs continue to experience some financial distress due to issues of non-payment of loans by members despite them being the most common financial intermediaries across the country. Based on this understanding, the current study, therefore, was determined to examine how the credit policy of MFIs in Nairobi Metropolitan was impacted by the credit management strategies that they employed.

1.6 Significance of the Study

1.6.1 Management of Microfinance Institutions

The study drew some conclusions and identifies the credit management strategies in relation to asset quality significantly. Thus, it gave indicator to the management1of the microfinance institutions and policy makers to take remedial action.

1.6.2 Researchers

It also helped other researchers as a source of reference and as a stepping stone for those who may need to undertake further studies on the same subject.

1.6.3 Financial Sector

Good Credit management leads to the achievement of the optimum goal of any Microfinance Institution which is to make profit. The research was of great significant to the financial sector in such a way that it shows the benefit of quality lending to a Microfinance Institution as well as the long-run benefit to the financial sector of any developing country.

1.6.4 All stakeholders

Credit risk management also helped in the going concern principle of any microfinance institution. By understanding its effect on the asset quality of Microfinance Institutions, the research gave all stake holders in the area the opportunity to gain deep knowledge about the relationship between the two variables.

1.7 Scope of the Study

The survey was restricted to the assessment of the effect of credit management1on the asset quality of Microfinance institutions in Nairobi Metropolitan. Therefore, the study was limited to all Microfinance Institutions within Nairobi Metropolitan. The study used cross-sectional data which involved a combination of both primary and secondary data sets.

1.8 Limitation of the study

There are a number of constraints that were encountered while undertaking this survey. First, the researcher faced time constraint given the limited time within which the research was required to be completed. In addition, it proved a bit difficult while trying to gather the primary data that was to be used in this study due to the ongoing Covid-19 pandemic as some institutions restricted outsiders from accessing their head offices where the required study data was to be obtained. In addition, researcher failed to locate relevant published information due to existence of incomplete published information in the websites, of the MFIs thus, limiting the survey.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

The section looked at the detailed review of literature that related to the topic of the study. This involved examining what has already been covered by other researchers previously that relates to the study topic. The section also examined the various theories that related to the topic of the study as well as the conceptual framework.

2.2 Theoretical literature Review

Theories are regarded as the statements or even principles that are normally developed in order to explain more about a given phenomenon. For this reason, theories have been established as been able to make predictions about natural phenomena. Theoretical analysis means investigation of problem's decision process methods and peculiarities of the problem description and initial data impact on obtained results. The following are theories that has been used.

2.2.1 Information Asymmetry Theory

The theory was developed first by Akerlof's (1970). The theory explains that information asymmetry exists in the event where there is an assessment of banking lending applications. As such, the theory expounds on when significant information is unknown to all those parties which are involved in a given transaction. According to Chod and Lyandres, (2019), such information might include reliable data that a bank might need to assess its clients. For this reason, financial institutions particularly banks must make sure that they have received all the sufficient information in order to enable them be in a position to comprehensively assess the true risk profile of their clients. According to the theory, in the event where the aspect of information asymmetry arises, then banking institutions are normally faced with two key challenges which includes those pertaining to moral hazard in regards to monitoring their client's behaviour and adverse selection in which case the banking institutions makes error due to lending to the wrong clients (Chod and Lyandres, 2019).

There are two key ways to characterise information asymmetry. First, information asymmetry can be characterized based on the extent to which bank managers are in possession of more information regarding their clients than the client's themselves as a group (Caputo et al., 2016). In addition, information asymmetry can be

characterized based on the extent to which the nature and amount of the available information varies between different groups of investors. Therefore, information asymmetry among banking institutions is predicted based on the availability of uninformed lender and informed borrower for whose private information is key to a lender to make effective decision about extending the loan facility.

However, a key critique of this theory is that the asymmetry creates an imbalance of power in transactions, which can sometimes cause the transactions to go awry, a kind of market failure in the worst case due to existence of monopolies of knowledge. The information asymmetry theory was of relevant to the current study since it provided a detailed explanation that is helpful in adding MFIs within Nairobi metropolitan area in reducing information asymmetry between them and their clients by sharing information with various Credit Reference Bureaus (CRB) as these institutions have developed credit management policy where lenders are able to assess credit worthiness of their clients. This significantly enhance loan repayment among their clients.

2.2.2 Transaction Cost Theory

Transaction cost theory was first developed by Schwartz (1974). In his theory, Schwartz argue that the ideal organizational structure is the one which is capable of achieving efficient economic efficiency by minimizing the overall costs o exchange. For this reason, Schwartz goes on to posit that each and every type of transaction incurred within an organization produces a coordination of three major costs in regards to their overall monitoring, controlling as well as the management of such costs (Akbar and Tracogna, 2018). In this regard, transaction costs are considered as the overall costs that are usually incurred by organizations in running their economic systems. Schwartz, thus, opinioned that such transaction costs ought to be differentiated/distinguished from other costs used for production purposes and also that organizational management who are tasked with making critical decisions can make a choice to either utilize firm structures or other finance sources in the market by first making a detailed comparison in regards to transaction costs with the overall internal production costs. Thus, transaction cost is a critical factor when making effective financing decisions (Akbar and Tracogna, 2018).

As such, transaction cost theory is considered to be a significant theoretical perspective particularly in the event where decisions are to be made based on vertical boundaries within an organization. According to Ketokivi

and Mahoney, (2016), transaction is considered to have taken place in the event where goods/services are transferred either physically or technologically from the supplier to the intended customer. This therefore means that whenever one transaction ends, the next set of transaction commences immediately. Therefore, the theory holds that suppliers normally have an upper hand compared to their clients since they are in a position to acquire sufficient information in regards to the credit worthiness of their clients (Ketokivi and Mahoney, 2016).

This theory was therefore of great significance in this study since microfinance institutions while extending loan facilities to their clients are able to monitor and ensure that their clients pay their loans in full. Such advantage that enables suppliers to acquire essential information about their clients is advantageous to them cost wise compared to traditional lenders. However, this theory has been critiqued by sociologist who argue that much of the theory has been conducted amongst scholars who are sympathetic to the approach, thus, ignoring the role of differential capabilities in overall structuring of economic organizations. However, this theory is relevant to the current study since it enables MFIs to be able to monitor their client's ability to pay their loans in full before extending loan facilities to their clients.

2.2.3 Credit Risk Theory

Even though individuals have been confronting credit risk as far back as early ages, there has been very scanty literature on the same. This theory was introduced by Melton (1974), it is the most important of all others in financial management. It asserts that the management should monitor all the information including screening of the continuing creditworthiness of the borrower and ensure that the borrower adheres to the terms of the contract. Further, the theory explains how a financial institution can react when faced with risks during credit servicing period. Money loaning continuously encompasses some features of risks arising from situations which result from the failure to honor loan obligation when they fall due (Olweny, 2011).

The theory asserts that, uncertainties which result from preceded default can be caused by events that are beyond the control of the management. Therefore, the microfinance institutions need to hedge themselves from such a risk by transferring the risk to third parties such as insurance companies. This entails recouping some amount as premiums from the loans dispatched to members at a given rate (Ahmad, 2020). This amount is recognized in the

income statement as other operating incomes as this amount is far more than the amount remitted to the insurance company. Therefore, in perspective of this fact it is understandable why research effort needs to be dedicated to this phenomenon of loan loss provision by microfinance institutions. Therefore, this theory when applied to the loan administration of microfinance institutions which helped the management to hedge their financial transactions against any unforeseen happenings and take an insurance policy (Oludhe, 2011).

However, this theory has been critiqued by some scholars who argue that it focuses on management capabilities to control credit risk which is generally not the case since micro-economic factors such as interest rates, liquidity levels among others are ones that are mostly responsible for the occurrence of such risk. This theory is therefore of great significance in this study since it provided an elaborate framework for cautioning lenders to be extra careful when extending out loans since borrowers might default any time, thus, negatively affecting their overall asset quality.

2.2.4 Modern Portfolio Theory (MPT)

This theory was developed by Markowitz (1991). The theory explains how a loan portfolio can be used to maximize returns and minimize loan default risk by carefully combining different loan types. The idea behind this theory is that, the loans in each portfolio should be selected with consideration on the effect they have on each other's returns. where he argues that investors are risk averse. The theory explains how an individual or institution can achieve the highest returns by practicing diversification of loans in each loan portfolio. This takes care of borrowers' diverse loan needs and minimizes loan default risks during adverse economic times (Nocco & Stulz, 2016).

Njanike (2009) asserts that risk and return are correlated meaning that an investor must take on higher risk achieving greater returns. The underlying idea is that the performance of a firm is directly linked to its economic environment and its asset portfolio. The practical reality of this is evidenced in Microfinance institutions because the demand and default of different loans is influenced by incomes/earnings of the members and incase of default it will inject cost to the income statement (Ahmad, 2020).

Therefore, management of Microfinance institutions should design different loan types which take advantage of different circumstances and operating environments faced by the borrower. Increasing the loan ceiling as per the

result of this study has a negative impact to the money related performance. Different types of loan when backed with good loan policies will improve the cash flows of Microfinance institutions and oblige the borrowers to service their loans promptly to reduce the risk of loan default and auctioning of assets pledged as security or denial of loans to guarantors (Mutua, 2014). However, this theory has been greatly critiqued due to the fact that investors have to estimate from past market data because MPT tries to model risk in terms of the likelihood of losses, without a rationale for why those losses could occur. That makes the risk assessment probabilistic, but not structural.

This theory is relevant to this study because it is applied by MFIs in diversifying their loan portfolios so as to optimize unsystematic credit risk. The possibility of sudden decline in credit portfolio in a certain industry or geographical area cannot be ignored because shocks may arise at any time without giving the banks enough time to cushion themselves. Therefore, banks work out to ensure that the concentration of a portfolio is not too high across industries, geographically or within specific firms.

2.3 Empirical Literature

According to Gatzert and Martin (2015), empirical review means what previous studies found on the relationship between the variables under consideration. Empirical evidence can be analyzed quantitatively or qualitatively.

2.3.1 Credit Policy and Asset Quality

The set of credit policies that a financial institution has put in place to a great extent affect their overall effectiveness of credit management. However, there are other economic conditions that as well affect a firm's credit policy since the external economic conditions such as introduction of interest rate cap will automatically cause the credit policy of a firm to change as well (Lucas, 2016). Effective credit management has been established to depend significantly on the establishment of sound and well-defined credit policies (Alshatti, 2015). Such can be achieved through instituting measures such as fully documenting the credit policies, proper authentication by the board of directors (BOD's) as well as ensuring that the policies are strictly implemented and adhered to. This is because, effective credit policies will establish the framework for lending and guide the credit-granting activities of the institution. Therefore, credit policies relating to credit assessment and granting process must be sound, well defined and a

thorough understanding of the borrower or counterparty, as well as the purpose and structure of the credit, and its source of repayment (Alshatti, 2015).

Credit policy should establish the procedures for dealing with deteriorating and managing problem credits. Effective credit policy ought to define a detailed follow-up procedure for all the loans that a financial institution has extended and the various reports to be submitted both to management and board of directors. Therefore, it is essential to note that the effectiveness of extending out credit facilities is greatly depending on the methods that are basically used by the lender in evaluating the borrower. For this reason, thorough evaluation in respect to the risk associated with extension of the credit facility to the borrower need also to be factored in (Wang, Sun and Meng, 2016).

In Nigeria, Oladejo, (2015) investigated how credit accessibility implicated tomato market in Osun Stat. A total of 160 marketers of tomato were selected through the use of multi-stage sampling technique. For gathering data, a structured interview guide was employed. From the findings, it was determined that it is not easy for small scale tomato marketers to have access to credit. In addition, it was found out that the number of tomatoes that these marketers are able to sell per week and the amount of loan that they can obtain both tends to have a positive effect on the overall market efficiency. For this reason, it was suggested that it is essential for tomato marketers to join together and form co-operative societies as these groups will make it easier for them to cater for their financial needs. In addition, the cooperative groups will assist marketers to achieve sustainable developments and alleviate their poverty levels.

Further, Uwuigbe, Uwuigbe & Oyewo, (2015) also carried out a survey in Nigeria that aimed to examine how credit management tend to influence the overall performance of banks. For this purpose, purposive sampling technique was used to choose total of ten listed banks. Both descriptive and econometric statistics were adopted while analysing the study data. From the study results that were obtained, it was found out that negative performance of banks in Nigeria was as a result of issues to do with bad debts and non-performing loans. In addition, it was found out that the ratio of unsecured and secured loan amounts did not significantly affect banks performance. It was therefore recommended that effective lending framework, effective credit management procedures and effective

strategies to monitor lending business ought to be considered for effective management of the extended credit product.

In Rwanda, Kagoyire and Shukla, (2016) did a survey that aimed to assess how credit management affect commercial banks financial performance. Using descriptive research design, a total of 57 credit department staffs working at Equity bank were selected. The selected respondents represented the entire staffs in the bank credit department. Study data was gathered using structured questionnaires which was then analysed using both descriptive and inferential statistics. In their findings, it was established that various credit management strategies particularly credit risk control, customer appraisal and credit collection policy tend to banks overall performance. In addition, credit collection policy was found to have had the most significant effect on the bank financial performance since strict debt recovery policy is the most effective than a lenient policy.

In Kenya, a study done by Wachira (2015) aimed to evaluate how credit policy influence the financial performance of SACCO's. Six deposits taking SACCOs in the country were sampled. From the findings, it was clear that the credit policy guidelines that have been instituted tend to affect SACCOs financial performance across the country. Based on this, it was recommended that SACCOs should not put too much effort to enforce regulatory policies but should concentrate much on their credit policies as these are the ones that determines the effectiveness of their credit management strategies.

In addition, Chikamai & Mutua, (2018) evaluated how the financial performance of SACCOs operating in Kakamega town was influenced by the credit policies they employed. Using descriptive research design, a total of 99 employees working in credit departments in various SACCOs in the county were sampled purposively. Using SPSS software to analyse the data collected, it was found out that financial performance of SACCOs in the county was significantly influenced by the specific credit policies instituted. It was, thus, recommended that client evaluation and assessment was the key to avoiding issues of credit defaulting among clients.

2.3.2 Credit Standards and Asset Quality

Credit standards are generally determined based on the individual credit application standings in terms of collateral security, capacity to pay, assessment of their character as well the financial condition one is in. Though instituting

strict credit standards may cause a company to lose some of its clients, loosening them results in the firm exposing itself to a number of credit risks and losses due to high credit default rates. It is therefore clear that high credit default rate is as a result of ineffective credit policies and standards (Ouazad and Rancière, 2016). In order to create effective credit standards, firms normally carry out an in-depth analysis of their past borrowers as well as the market conditions. From such analysis, a firm is able to minimise instances where their client's default in paying their loans. Usually, credit standards comprise of strategies such as making sure that the credit history of the client is good and he/she has sufficient source of income to repay the credit extended (Anastasiou, Drakos, and Giannoulakis, 2018).

Therefore, credit standards especially in the financial sectors takes the form of 3C's i.e., collateral, conditions and capital. Collateral is considered as the security that a client offers in order to qualify for the loan and may include property or other fixed assets. Collateral normally acts as a security so that the lending institution may sell such security to recover their money in the event where the client fails to repay the amount loaned. Capital on the other hand signifies the extent of the client financial strength to repay their loans (Anastasiou, Drakos, and Giannoulakis, 2018). Condition in its part signifies the existing economic climate which is considered to significantly impact the client's ability to repay their loan amount and also affect the firm's ability to recover its money.

In Nepal, Bhattarai (2016) conducted a survey aimed at examining how various credit risk management strategies affect commercial banks performance. Using both descriptive and comparative research designs, the researcher gathered data from fourteen commercial banks for a five years period between 2010 and 2015. Using regression model to analyse the study data, it was found out that credit standards as a control strategy has a negative effect on the commercial bank's performance. The study, therefore, concluded that credit risk management strategies to a significant extent determines the overall performance of commercial banks.

Nwude and Okeke (2018) also did a study in Nigeria that assessed how bank performance in Nigeria was being impacted by the credit management strategies had instituted. Five banks with the highest asset base were selected and panel data was gathered stretching for 15 years period from 2000 to 2014. According to the findings that were obtained, it was revealed that credit risk management techniques positively impact banks total loan and advances. As a result of this, it was recommended that banks management need to put extra effort in instituting

various credit risk management techniques in order to control their non-performing loans which should be done by deeply analysing client's ability to repay their loans. In addition, it was recommended that banks management should strengthen their credit monitoring capacity.

Okeke, Aganoke and Onuorah, (2018) also did a study in Nigeria that examined operational risk management strategies and organizational performance of banks operating in Edo State. By using a survey research design, a total of 386 employees were sampled from the 1967 total targeted. Using both descriptive and correlation analysis techniques to analyse the data gathered, it was found out that process risk variables had significant influence on banks performance. In addition, it was found out that external credit risk management strategies such as policies and standards had a positive effect. It was thus recommended that analysis of all credit risk variables is very essential for banks in the Edo State.

In Kenya, Barus et al., (2017) did a survey with the aim of examining whether asset quality usually influence SACCOs financial performance. Utilizing an explanatory research design, all registered deposit taking SACCOs in the country and which had been operational in the last five years for the were selected. In order to examine the study objectives, secondary and primary data was used and analysed using SPSS and STATA software's. According to the study results that were obtained, it was revealed that SACCOs performance in Kenya is greatly influenced by their assets quality. It was, therefore recommended that management of SACCOs in the country should be very strict when it comes to instituting credit policies and standards in order to avoid instances non-performing loans that are likely to influence their overall profitability. The issue of credit sharing among SACCOs was also highly recommended.

In another study, Munene, Ndambiri and Wanjohi, (2019) examined how unsecured loans affect SACCOs financial performance in Kenya. Using a descriptive research design, a total of 177 licensed SACCOs in Kenya were selected. Secondary data from various published articles about the SACCOs was used. From the study findings, it was revealed that extension of unsecured loans by SACCOs in the country significantly impacted their performance. It was, therefore, suggested that SACCOs in the country should strive to formulate effective credit management policies in order for them to remain competitive despite stiff competition from commercial banks.

2.3.3 Credit Terms and Asset Quality

When implementing credit terms, it is required that financial firms should strive to make sure that such terms are as much attractive to their prospective clients as possible. This should essentially be done in order for the terms to act as incentive to clients which is essential in making sure that they are not likely to experience instances of non-performing loans due to strict terms. Credit terms normally stipulate the credit period, interest rate, method of calculating interest and frequency of loan installments. In addition, clients are usually offered discounts in the event where they are able to repay their loans before or by strictly within the stipulated timeframe (Fabbri and Klapper, 2016). Usually, these discounts are expressed in terms of the loan percentage and are meant to quicken loan collection while at the same time reducing costs associated with bad and doubtful debts. Woodyard et al., (2017) observes that credit terms are basically considered in terms of the credit period terms, amount of loan given as well as the available instruments acting to show evidence that the loan has been given out. The length of time it takes for a client loan to be approved and processed is one of the most notable credit terms.

In Bangladesh, Chowdhury (2015) did a study that aimed to assess how MFIs credit terms affect credit accessibility by SMEs. The study findings established that Bangladesh market competition among MFIs is based on the instituted credit terms particularly those terms relating to the amount of loans, interest rates charged, as well as the required timeframe within which SMEs must have paid their loans. It was also found out that many SMEs in the country usually opt for smaller amount of loans due to strict credit terms attached to obtaining of large loans as well as high interest rates charged. The study, therefore, recommended that the credit terms and conditions instituted by many MFIs tend to be a burden to SMEs and other borrowers since majority of these SMEs don't have collateral to secure against their loans.

Akinleye and Olarewaju (2019) also conducted a study in Nigeria assessing how credit management strategies influence growth of manufacturing firms in the country. The study used panel data that stretched for a ten years period between 2007-2016. The obtained data was analysed using computer software and presented using a regression model. The findings from the study found out that cash collection techniques adopted by manufacturing

firms tend to affect their overall profitability. The study concluded that failure of manufacturing firms to comply with standard credit management practices affected their overall growth and sustainability. It was, therefore, recommended that manufacturing firms should consider updating their credit policies continuously in order to manage their debts more effectively. In addition, it was recommended that manufacturing firms should engage qualified risk management expertise in order to ensure optimal decision making when it comes to adherence to debt collection.

Katto (2015) in his study done in Tanzania found out that MFIs loans in the country were becoming largely unsustainable due to strict credit terms particularly due to high interest rates ranging between 28% to 48% and without any grace period as well as short-term payback period. In this regard, the study observed that these strict credit terms don't only affect borrowers in the management of their day-to-day financial matters, but they as well frustrate their repayment mood due to unnecessary repayment pressure.

In Kenya, Ndereba and Simiyu (2014) examined how MFIs credit terms affect performance of SMEs in Mombasa County. Using descriptive research design, a total of 100 SMEs owners across the county were selected. The study established that MFIs credit terms tend to affect SMEs performance negatively given that many don't stand a chance to access loans due to strict credit terms. It was, therefore, recommended that MFIs in the county should consider lowering the interest rates they charge SMEs operators so that they can be able to afford to qualify for adequate loans.

In another study, Kipchumba (2016) examined how credit assessment affects loan repayment to MFIs within Nakuru town. A total of 32 credit officers were selected from four licensed MFIs operating in Nakuru town. Upon completion of data collection, the data was analysed descriptively. It was determined that a strong relationship existed between credit assessment and its repayment among MFIs in Nakuru town. It was, therefore, recommended that MFIs should institute strong credit assessment strategies in order to effectively verify the reliability of the information given by borrowers, thus, being able to avoid instances of loan defaults.

2.3.4 Credit Collection Policy and Asset Quality

When enforcing credit repayment, the overall process of collecting the credit is normally an expensive affair. Usually, credit collection may entail a number of strategies such as requiring guarantors to pay, issuing court litigations as well as seizing collateral securities secured against the loan. According to Alobari et al., (2018)**,** instituting effective credit collection policies is very essential in order to ensure that all debts are paid promptly. Therefore, rolling out debt collection policies is very important since not all individuals with loans adhere to agreed payment plans while there are some who don't want to pay their debts until they are persuaded to pay.

Many MFIs tend to send letters or make phone calls directly to the debtors in the event where the agreed repayment time elapses with seven to ten days. Failure to honor such lenient collection procedures usually leaves MFIs with no other option but to turn loan defaulters to collection agencies. Cheptum, (2019) therefore posit that credit collection policies are very essential in accelerating credit payment from slower payers, thus, being able to minimise instances of bad debts. Despite this, MFIs ought to ensure that caution is taken when it comes to debt recovery from permanent clients as strict collection policies may force them to look for alternative loan sources among the competitors in the market (Kalu, Shieler and Amu, 2018).

In Philippines, Aradanas, Palacio and Suazo, (2018) did an evaluation aimed at assessing how effective are credit collection policies and practices among selected multi-purpose cooperatives in Bohol. For the purpose of respondents, cooperative managers, credit committee as well as individual members were selected from five multi-purpose cooperatives. After the data was analysed, it was found out that specific credit collection policies are usually practiced by different multi-purpose cooperatives. From the findings, researchers concluded that there exists strong relationship between credit collection policies adopted by multi-purpose cooperatives and their overall credit repayment. It was, therefore, recommended that multipurpose cooperatives should consider enhancing their credit collection policies in order to improve their overall loan portfolio and avoid instances of non-performing loans.

Ukpong, Amos and Thomas (2018) did a study in Nigeria that assessed how credit management strategies affects loan recovery effort among MFIs in Akwa Ibom state. Using a descriptive research design, a total of 60 out of the targeted 85 MFIs that had been operating across the state between 2014 and 2017 were selected. Structured questionnaire was developed to aid in collecting data. From the study results that were obtained, it was found out

that various credit management strategies such as credit control, appraisal and collection policy were very effective when it comes to loan recovery. It was, therefore, recommended that MFIs should engage credit management experts in order to minimise credit risks at the earliest possible opportunity.

In Rwanda, Ndikubwimana (2017) conducted a study that assessed how loan management tends to influence MFIs performance across the country. In total, 54 respondents were selected from a total of 18 MFIs. SPSS was utilized in analysing the study data. Credit collection policies was established as among the key loan management strategies that MFIs have adopted in Rwanda which has significantly reduced the cases of non-performing loans. Still in Rwanda, Byusa and Nkusi (2014) analysed how credit policies affect commercial banks performance across the country. The study results obtained indicated that through adoption of effective credit management policies, commercial banks have been able to significantly reduce their bad debts, hence, these banks should consider making their lending policies more attractive to borrowers.

In Kenya, Irusa (2018) did a study that investigated how credit risk management policies affect commercial banks performance. Using descriptive research design, all licensed commercial banks in the country were sampled and secondary data obtained from published financial reports. From the findings, it was found out that a unit increase in one risk management policy while other factors remain the same causes an increase in performance of these banks due to reduced rate of bad debts. It was, therefore, recommended that effective credit management guidelines should be developed by the concerned policy makers in order to strengthen credit risk management among financial institutions in the country.

2.4 Conceptual Framework

A conceptual framework is considered as an establishment of a broad set of ideas as well as principles that have been organized from different sources after which these ideas are used to be presented diagrammatically (Bhattacharya & Sinha Roy, 2018). It is an instrument that researchers utilize it in order to gain an understanding and awareness in regards to the situation being investigated. For this reason, conceptual framework is of great significance while undertaking research given that it helps researchers to clearly establish the existing connection that normally exists

between different research variables and it is conceptualized within the variable components and their indicators. Below is a conceptual framework showing the relationship between independent and dependent study variables.

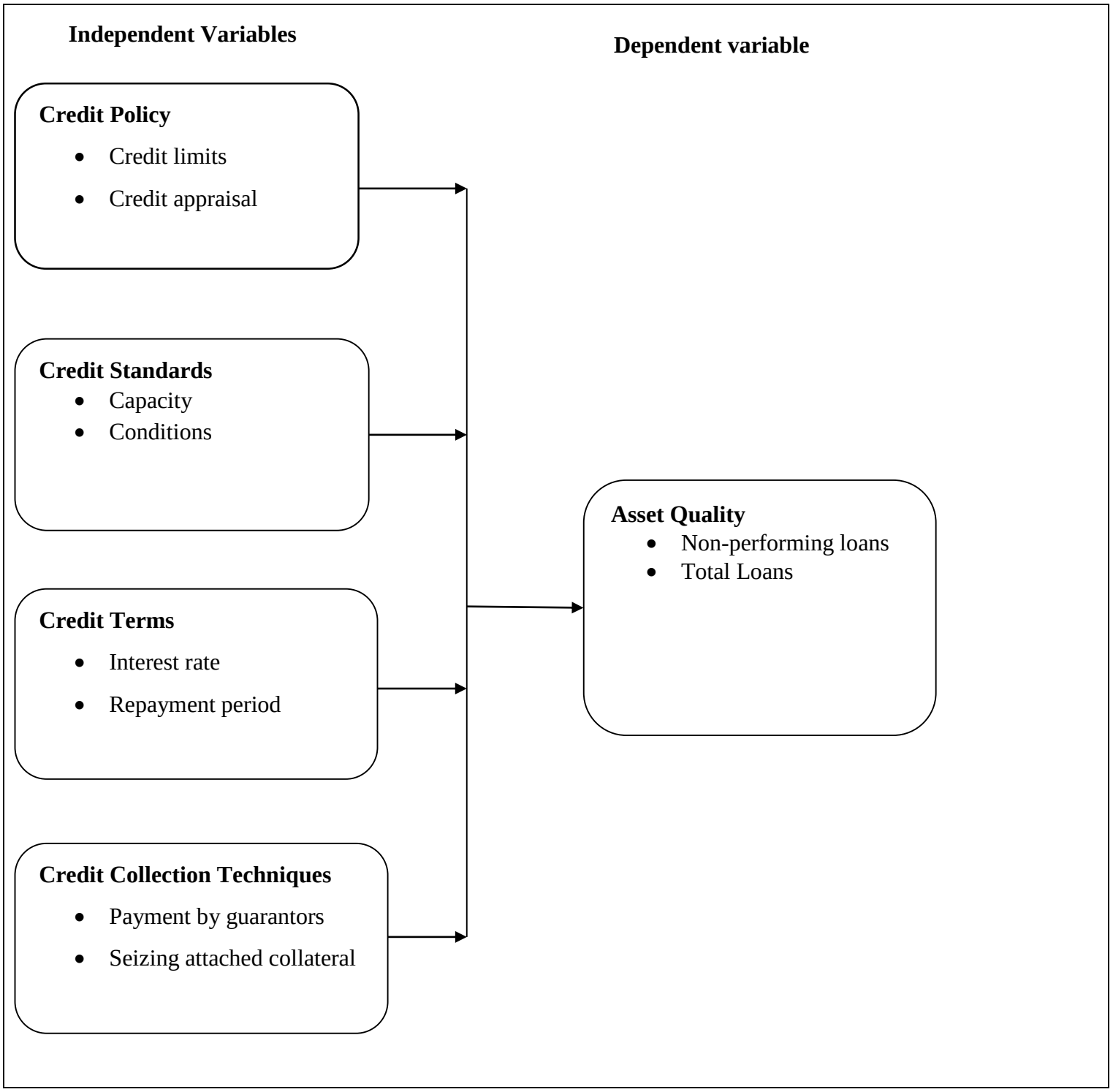

FIGURE 2. 1: Conceptual Framework

Source; Researcher (2021)

2.5 Operationalization of Variables

TABLE 2. 1: Operationalization of Variables

Variable	**Indicators**	**Measurement Scale**	**Method of Data Collection**	**Data Analysis**
Credit Policy Independent Variable	Managing credit Credit follow-ups	Likert/ordinal	Administering Questionnaires	Frequencies and percentages
Credit Standards Independent Variable	Collateral security Capital	Likert/ordinal	Administering Questionnaires	Frequencies and percentages
Credit Collection Policy Independent Variable	Court litigation Attaching collateral assets	Likert/ordinal	Administering Questionnaires	Frequencies and percentages
Credit Terms Independent Variable	Interest rate Repayment period	Likert/ordinal	Administering Questionnaires	Frequencies and percentages
Asset Quality Dependent Variable	Non-performing loans	Likert/ordinal	Cross-sectional data	Frequencies and percentages

2.6 Critique of the Study

The critics argue that theoretical investigation on the influence of credit management on the asset quality have resulted to mixed outcomes fluctuating from those supporting a positive connection among these variables to those who are not in support of it. In addition, they argue that considering the same firms as the sample might cause such association to be positive over organization size ranges and maybe negative from the others. Different empirical findings may be caused by use of different samples, sectors, time frame, indicators of the variables as well as external environment in which the business operates in. As a result of all this, a portion of the studies will along this line be consolidated together with the main empirical findings from other relevant studies done on the same (Ahlin et al, 2018).

2.7 Chapter Summary

The study looked at the literature perspective of the study. The main theories that the chapter covered are Information Asymmetry Theory, Transaction Cost Theory, Credit Risk Theory and Modern Portfolio Theory. The chapters concentrated on four credit management factors that affect asset quality of microfinance institutions; credit policy, credit standards, credit terms and credit collection techniques capital. The chapter concluded by looking at the research gaps and it has identified various gaps that are related with this study which need to be filled. For instance, the study expounded on the the knowledge gap by conducting a research on how credit management factors affect microfinance institutions in Nairobi Metropolitan area.

2.8 Research gap

Chege (2017), noted that since asset quality is very crucial to the existence of microfinance institutions in Nairobi Metropolitan area, credit risk management factors that affect it should be identified. The author notes that further research on the area of credit risk management factors that affect asset quality by incorporating any more relevant variables would enhance the understanding of the sector. The literature available on asset quality in relation to credit risk management on Kenyan context is limited. The few papers that have been written on asset quality in Kenya have been supported mainly by reviews of papers from other countries.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

The exact methodology that was used to complete this study is detailed under this chapter. The section presented research design, target population, sampling frame, sampling and data collection method, data processing and analytical tools and specification of the regression model that was used.

3.2 Research Design

According to Creswell and Creswell, (2017), the term research design denotes the major structure that is followed when a particular research study is being undertake. In addition, Cooper and Schindler (2016) provides that a research design is the overall plan that a researcher aims to use in order to effectively answer all the questions relating to the study. Therefore, a research design denotes the main blueprint of a given study as well as the overall techniques that the researcher used in order to determine precisely all the information that was needed to complete a study. An effective research design structures the study in order to indicate the main sections of the research while at the same time addressing the research questions, contributes to accurate and fair understanding of results, clarity and how the study was conducted to provide a deeper understanding of the research topic (Creswell and Creswell, 2017).

The study adopted a descriptive research design. This research design tends to be used in the event where a researcher aim is to describe a situation or a problem in a more systematic and accurate manner. In addition, descriptive research design when employed in research work helps in answering a number of questions relating to how, when, where and what issues. This research design, therefore, enabled the researcher to vividly examine the research problem. In addition, it was very effective in analysing the cross-sectional data that was used to complete this particular research study.

3.3 Target Population

Target population is considered as a set of events, elements, people or even groups of particular things that have interested a researcher and, hence, the need to research about them. In addition, a target population is regarded as the

entire group of people, elements, groups or events which portrays similar observable features. Creswell and Creswell, (2017) goes ahead to describe a target population as the entire collection of people/elements upon which a researcher aims to generalize the conclusion that will be arrived at after completing the study. For the purpose of the current study, the source of the target population comprised of all 74 credit/loans executives from all 74 MFIs registered under Association of Microfinance Institutions (AMFI) and with their operations within Nairobi Metropolitan area.

3.4 Sampling Technique

Research conclusions and generalizations are good as the sample they are based on (Creswell & Creswell, 2017). This study was based on census of the entire population of all 74 MFIs including all 74 credit executives of MFIs within Nairobi Metropolitan area. According to Ogboi & Unuafe, (2013), it is advisable for a researcher to consider the entire target population in the event where the target population in a given study is less than 100 units. In addition, the researcher in this study considered its appropriate to use census sampling method since the the population for which the study sought to research on was small.

3.5 Data Collection Method

Cross-sectional data was used for the purpose of analysis under the current study. Ogboi & Unuafe, (2013) explains that cross-sectional data is data collected by observing various subjects like at the same point in time. A cross sectional data is analyzed by comparing the differences within the subjects. This involved having primary and secondary data being combined together. Secondary data was attained from various published materials relating to all the 74 MFIs within Nairobi Metropolitan area.

In addition, primary data was used as well and was obtained using questionnaires. Questionnaire was used for data collection in this study as it enabled the researcher to collect large amount of data within a short time period, and it also provided an opportunity for respondents to give frank, anonymous answers. The researcher adopted drop and pick technique to collect data. Questionnaires contained both structured and unstructured questions based on the research objectives.

3.6 Pilot Study

Donald (2016) defines a pilot study as that initial study that a researcher normally undertakes in small scale before embarking on the final study later. Usually, a pilot study is done in order to estimate the cost of the anticipated study, problem areas as well as to allow improvement of the study instruments particularly the questionnaire before undertaking the full-scale research. For the purpose of this study, researcher conducted a pilot study in 7 MFIs within Muranga County. The pilot study targeted a total of 7employees working in the credit department for the 7 MFIs in Muranga County. The 7 employees who participated in the pilot study represented 10% of the sampled employees who participated in the final study. According to Whitehead et al., (2016), a 10% of the target population is recommended for the purpose of undertaking a pre-test of the research instruments. Questionnaire was used in gathering the pilot study data. The pilot study results aided the researcher in computation of reliability and validity of the questionnaire. However, the results obtained from the pilot study was not be included in the final study.

3.6.1 Validity of the Instruments

Validity refers to the accurateness of the study instruments (Mugenda and Mugenda, 2013). In addition, validity is considered as the extent to which the study results which have been obtained literally represents the problem that is under review. In order to ensure validity of the instrument, researcher consulted the supervisor who is a specialist on questionnaire matters. This consultation enabled the researcher to develop valid instruments particularly when it comes to issue to do with face, content and construct validity. Construct validity indicates the viability of the research tests in regards to its target. Face validity was also determined so as to examine how attractive the developed research instrument was to the eyes of respondents.

3.6.2 Reliability of the Instruments

Reliability is defined by Donald (2016) as the measure of the extent to which the research instrument being used is able to generate consistent results even after a number of retrials. In this study, test-retest technique will be adopted. This entailed administering the same scale/measure to the same respondents in two different times. The instruments in this case were readministered to the same respondents after a gross period of two weeks. Those who took part in the pilot study were excluded from the final study. After the instruments had been readministered for the second time, researcher computed the Cronbach's alpha. This was done in order to establish the extent of internal consistency

of the instrument i.e., how are the responses closely related as a set all together. From the results that were obtained, a Cronbach's alpha of above 0.7 was considered to be acceptable since it was in agreement with what Kerlinger (1983) recommends as acceptable.

3.7 Data Processing and Analysis

Cooper and Schindler, (2011), argue that data, processing entails editing, coding, classification as well as the tabulation of the data collected in order to amend it ready for its analysis. Calculation of certain measures along with looking for patterns of linking data-groups is explained by the term analysis. Polit and Beck (2003), note that data analysis refers to making deductions and inferences after investigating what has been gathered in a research. The data analytical techniques that were used was quantitative techniques in nature. These are correlation analysis and multiple regression analysis. STATA econometric software was employed while analysing the study data.

3.7 Data Presentation

According to Newing, (2011), data Presentation is the organization of data into tables, graphs or charts to derive logical and statistical conclusions from the collected measurements. Charts, percentages and frequency tables were prepared using STATA software to present the study findings. A final report was presented after the data had been analysed which provided a detailed summary of the survey findings, recommendations as well as its conclusion as well as the research recommendations.

3.8 Model Summary

The researcher further applied multivariate regression model. The research considered regression1method to be useful for its ability to test the nature of influence of independent variables on a dependent variable. This is because, with regression, researcher was able to estimate the coefficients of the linear equation, involving one or more independent variables, which is the best in predicting the value of the dependent variable. Therefore, the researcher used linear regression analysis to analyze the data.

$$\mathbf{Y= }\boldsymbol{\beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_3 X_4 + \varepsilon}$$

Where:

$\mathbf{Y}$ = Asset quality

β_0=Intercept term

$\boldsymbol{\beta_i}$=coefficients of the independent variables

$\boldsymbol{X_1}$= Credit policy

$\boldsymbol{X_2}$= Credit standards

$\boldsymbol{X_3}$= Credit terms

$\boldsymbol{X_4}$= Credit collection policy

$\boldsymbol{\varepsilon}$= error term

3.8.1 Heteroscedasticity Test

Heteroscedasticity refers to the state in which the error variance is non-constant. It is used to test for heteroskedasticity in a linear regression model and assumes that the error terms are normally distributed. It tests whether the variance of the errors from a regression is dependent on the values of the independent variables. Heteroscedasticity test assumes that that OLS estimators are not the Best Linear Unbiased Estimators (BLUE) and their variance is not the lowest of all other unbiased estimators. It is tested through the use of the Breusch-Pagan-Godfrey test. The test states that if the p-value is less than 0.05 ($p > 0.05$) then there is a constant variance and thus the null hypothesis is accepted.

3.8.2 Linearity Test

Linearity in research refers to a data that is in a straight line when graphed. Therefore, linearity test was done in order to determine the existence of linear relationship between various variables. Linearity test is, therefore, a very essential requirement in the correlation and linear regression analysis. Two key assumptions that are made in linearity test. First, if the value of the sig. Deviation from linearity > 0.05, then the relationship between the study variables is linearly dependent. Secondly, if the if the value of the sig. Deviation from linearity < 0.05, then the relationship

between the study variables is not linear. Two key statistical values in determining linearity are the slope and Y-intercepts. Ideally, the slope is equal to 1.0 with the acceptable range being between 0.9-1.1. If the slope is outside the acceptable range; then it is possible that the test is nonlinear at its highest value. Ideally, the Y-intercept is equal to zero. The Y—intercept may be much higher with no clinical significance.

3.8.3 Normality Test

Normality determines if data is normally distributed and the likelihood of a random variable underlying the data set to be also normally distributed. Some tests applied to test for normality are histograms and skewness distributions. Whereby for a normal distribution curve, skewness lies between -3 and + 3 and the kurtosis for all the variables are positive (Gujarati, 2003). Normality test is done using Kolmogorov-Smirnov Normality Test. In the statistics, the rule is that if the value of Asymp.Sig is greater than 0.05, then the data is normally distributed in that given research, and if the value of Asymp.Sig is less than 0.05, then the data is not normally distributed in that given research.

3.8.4 Multicollinearity Test

Gujarati, (2003), asserts that collinearity occurs when the explanatory variables are highly linked to each other. In this case, an implied assumption is usually made particularly when ordinary least square technique is being used since in such cases the explanatory variables are not correlated with one another. If no link is found between the explanatory variables, they would be held orthogonal to one another whereby adding or removing a variable from a regression equation would not cause the values of the coefficients on the other variables to change. Thus, this study will conduct a correlation analysis to assess the extent on collinearity between variables. The Multicollinearity rule dictates that if the VIF (Variance Inflation Factor) value lies between 1-10, then there is no multicollinearity, and if the VIF value is less than 1 or greater than 10, then there is multicollinearity.

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND RESULTS

4.1 Introduction

Presented under this section is data analysis, presentation and interpretation of findings on the effect of credit management on the asset-quality of MFIs in Nairobi Metropolitan. The chapter comprised of outputs from both descriptive and inferential data analysis, as well as interpretation of the results. Tables and pie-charts have been used for the purpose of presenting the analysis output as per each objective.

4.1.1 Response Rate

Response rate is key in data analysis as it helps in establishing whether the research finding can be relied on. The study targeted a total of 74 credit/loans executives from all 74 MFIs registered under Association of Microfinance Institutions (AMFI) and with their operations within Nairobi Metropolitan. However, out of the 74 dispatched questionnaires, the researcher was only able to obtain 61 fully-filled questionnaire. This represented a study response rate of 82.4 percent. The response rate was perceived reliable for the purpose of data analysis as it conforms agrees with Mugenda and Mugenda (2009) assessment that for the purposes of generalization, then a response rate for the study of between 50 and 60 is excellent for the purposes of reporting. Accordingly, the results can only be relied upon if the response rate meet the acceptable threshold of 60% of the sample size.

TABLE 4. 1: Study Response Rate

Response	Frequency	Percentage
Returned Questionnaires	61	82.4
Unreturned Questionnaires	13	17.6
Total	**74**	**100**

Source: Author (2021)

Findings is table 4.1 revealed that the study response rate was good as it was above the acceptable cut of 60%. Hence the results of the study can be properly interpretated based on the data analysis outputs.

4.2 Demographic Characteristics

This section consists of information that describes respondent and MFI characteristics such as the period the respondents has been working in the MFI, the number of MFI branches and the years of the MFI operations.

4.2.1 Respondent Working Years in MFI

The respondents were requested to indicate how long in years they had worked in their current MFI at the time of data collection. According to the study finding, it was established that most of the respondents had been working in their MFIs for between 4 and 7 years (48%) while 34% had been working in more than 7 years, with only 18% working for less than 4 years. This demonstrates that the respondents were well acquainted with credit management practices of the MFIs., hence, were in a better position to provide accurate information regarding the various credit risk practices that MFIs had been employing in their bid to enhance their asset quality.

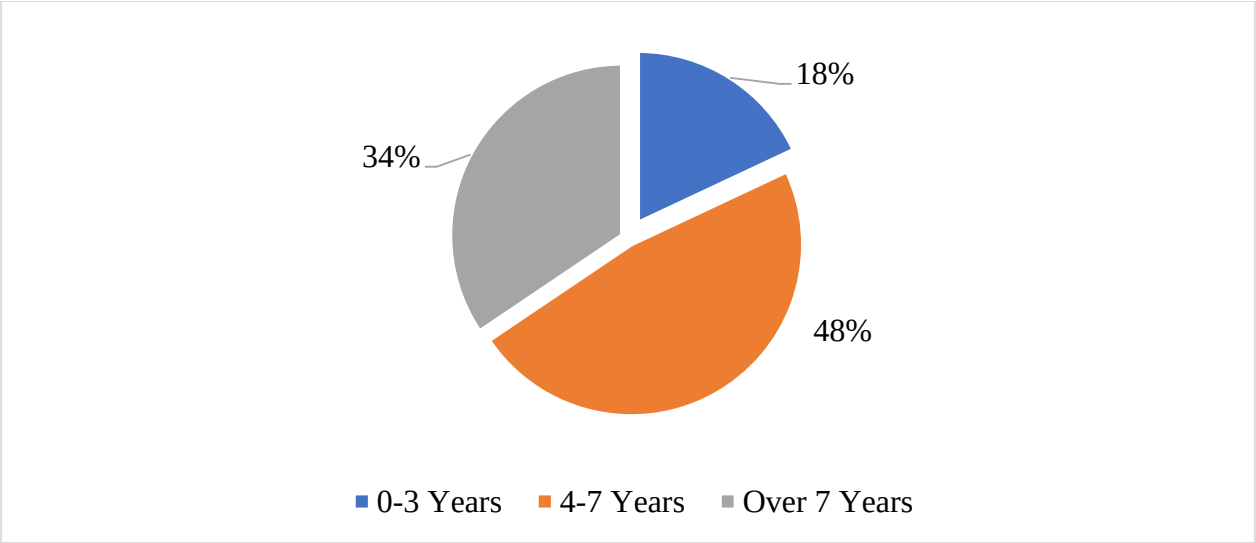

FIGURE 4. 1: Years of Service in MFIs

Source: Author (2021)

4.2.2 Duration the MFI Has Been in Operation

Respondents were also requested to indicate in years for how long their MFI had been operating. 42 % of respondents stated that the MFI had been in operation for less than 11 years, 30% stated that the MFI had been in operation for

between 11-20 years, 18% stated 21-30 years while 10% mentioned above 30 years. These results illustrate that nearly all the SACCOs have been in existence for the past 5 years and this allowed for ease in asset quality data collection from their audited financial statements.

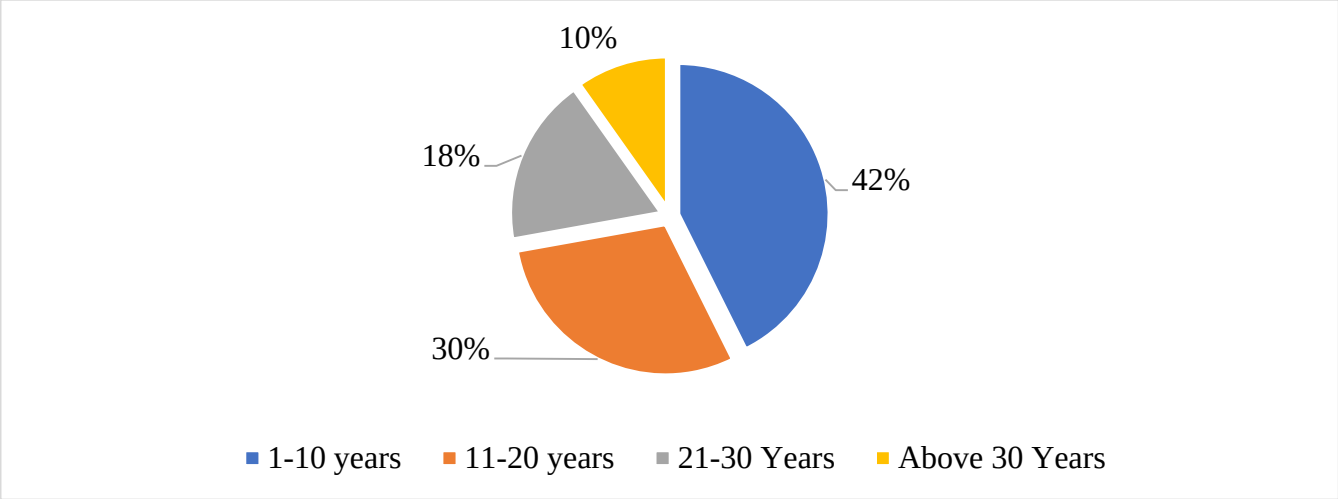

FIGURE 4. 2: Duration MFI has been in Operation

Source: Author (2021)

4.2.3 Branch Capacity of MFIs

The respondents were asked on the branch capacity of the MFIs. Nearly a third of the respondents stated 11-20 branches (31.10%), 29.50% and 27.90% stated below 10 branches and 21-30 branches respectively. 11.50% of the participants mentioned above 30 branches. This shows that majority of the MFIs have over 10 branches in the country which indicates that the MFIs have been growing in size.

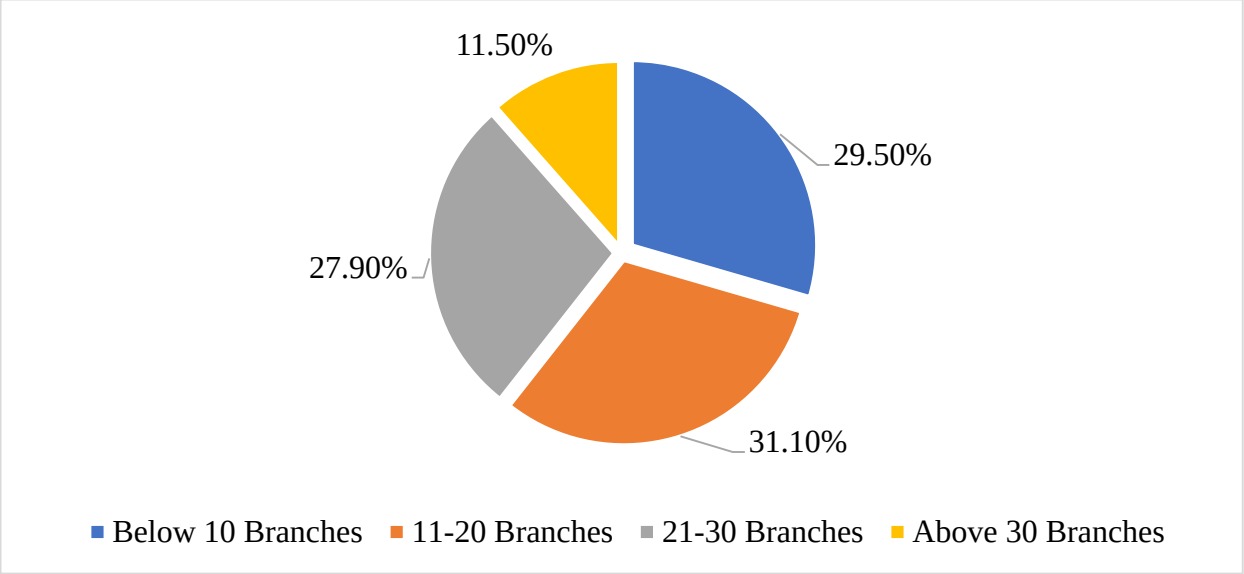

FIGURE 4. 3: MFIs Branch Capacity

Source: Author (2021)

4.3 Descriptive Statistics

This section presents the descriptive results on the various study variables credit policy, credit terms, credit standards, credit collection policy and asset quality of the MFIs.

4.3.1 Effect of Credit Policy on Asset Quality of MFIs

By using a scale of between 1-5, researcher requested respondents to indicate the extent to which they agreed the following statements pertaining to the effect of credit policy on asset quality of MFIs.

TABLE 4. 2: Credit Policy and Asset Quality

Statement	NA	SE	ME	LE	VLE	Mean	Std Dev
Adoption of comprehensive credit policies help in communicating a consistent standard to our clients	9.80	8.20	9.80	55.70	16.40	3.61	1.16

Available credit policies make it possible for our MFI to assess the possibility of credit risk arising from loans extended to our clients or even other risks resulting from counterparty transactions.	11.50	9.80	21.30	19.70	37.70	3.62	1.38
Credit policy enhances effective cross-functional cooperation between our MFI credit department staffs and other related departments especially sales and marketing departments, hence, helping overall credit management.	16.40	6.60	18.00	27.90	31.10	3.51	1.42
Through established credit policies, our MFI has been able to manage credit risk effectively, thus, helping to prevent any financial losses.	14.80	8.20	26.20	21.30	29.50	3.43	1.38
Overall Mean						**3.54**	

Source: Author (2021)

As per the above results, majority of participants believed that the adoption of comprehensive credit policies by MFIs has helped in communicating a consistent standard to the clients (55.70%) to a large extent. 16.40% of the participants also felt that to a large extent the credit policies have contributed in giving consistent standard. The study results agree with Uwuigbe, Uwuigbe & Oyewo, (2015) whose study examined how credit management policy tend to influence the overall performance of banks in Nigeria and recommended that effective lending framework,

effective credit management procedures and effective strategies to monitor lending business ought to be maintained so as to effectively manage credit.

On the role of credit policies in assessing credit, 37.70% believed credit policy contributed to very large extent while 19.70% believed to a large extent. 31.10% and 27.90% of the respondents believed that credit policies have a role to play in promoting coordination and co-operation between department to a very large and large extent respectively. The study results agree with Kagoyire & Shukla (2016) who did a survey that aimed to assess how credit management affect commercial banks financial performance in Rwanda and established that various credit management strategies particularly credit risk control, customer appraisal and credit collection policy tend to banks overall performance. In addition, credit collection policy was found to have had the most significant effect on the bank financial performance since strict debt recovery policy is the most effective than a lenient policy.

Nearly a third of the respondents (29.50%) felt that credit policies has helped in prevention of financial losses to a very large extent. 21.30% of the respondents also felt to a large extent on the same question. Through established credit policies, our MFI has been able to manage credit risk effectively, thus, helping to prevent any financial losses. The overall mean was 3.54 which indicates that the participants believed that credit policies to a large are helpful in the MFIs performance. The study results conform with the findings of a study done in Kenya by Wachira (2015) exploring how credit policy influence the financial performance of SACCO's in the country and recommended that SACCOs should not put too much effort to enforce regulatory policies but should concentrate much on their credit policies as these are the ones that determines the effectiveness of their credit management strategies.

4.3.2 Effect of Credit Standard on Asset Quality of MFIs

By using a scale of between 1-5, researcher requested respondents to indicate the extent to which they agreed the following statements pertaining to the effect of credit standards on asset quality of MFIs.

TABLE 4. 3: Credit Standard and Asset Quality of MFIs

Statement	NA	SE	ME	LE	VLE	Mean	Std Dev
Our MFI has instituted a number of credit standards that are aimed at assessing our clients to determine whether they are credit worthy before issuing out loans.	19.70	3.30	19.70	32.80	24.60	3.39	1.42
Our MFI credit standards have made it possible for us to evaluate and analyse credit history of all our clients hence minimizing instances of extending credit to loan defaulters which may affect our asset quality.	24.60	1.60	13.10	29.50	31.10	3.41	1.55
Our MFI credit standards are effectively set in order to establish the past loan performance of our clients, hence, being able to manage credit risks.	23.00	4.90	18.00	36.10	18.00	3.21	1.43
Our credit standards help in assessing our client's characters	19.70	14.80	21.30	19.70	24.60	3.15	1.46
Overall Mean						**3.29**	

Source: Author (2021)

The results indicates that approximately all the managers believed that credit standard issued by MFIs have helped them determine the credit worthiness of their clients to a large extent (32.80%) and 24.60% to a very large extent. 31.10% of the managers felt that credit standard has helped the banks minimize giving of credit to loan default to a very large extent while 29.50% felt that it has contributed to a large extent. Our MFI credit standards have made it

possible for us to evaluate and analyses credit history of all our clients hence minimizing instances of extending credit to loan defaulters which may affect our asset quality. The study findings are in agreement with Barus et al., (2017) who did a survey examining whether asset quality usually influence SACCOs financial performance in Kenya and found out that management of SACCOs in the country should be very strict when it comes to instituting credit policies and standards in order to avoid instances non-performing loans that are likely to influence their overall profitability. The issue of credit sharing among SACCOs was also highly recommended.

Most of the client felt that credit standard has helped in the management of credit risks to a large extent (36.10%). 18% of the respondents felt that it has helped to a very large extent on the same question. 24.60% and 19.70 of the managers felt that credit standards have contributed in analysis of credit client characteristics to a very large and large extent respectively. The overall mean of credit standards was found to be 3.29 which shows that the managers place less importance on credit standards as credit management instruments. The study results disagree with Munene, Ndambiri & Wanjohi, (2019) who did a study on the how unsecured loans affect SACCOs financial performance in Kenya and recommended that SACCOs in the country should strive to formulate effective credit management policies in order for them to remain competitive despite stiff competition from commercial banks. However, the study results disagree with the findings of a study undertaken in Nepal by Bhattarai (2016) that examined how various credit risk management strategies affect commercial banks performance and concluded that credit risk management strategies to a significant extent determines the overall performance of commercial banks.

4.3.3 Effect of Credit Terms on Asset Quality of MFIs

By using a scale of between 1-5, researcher requested respondents to indicate the extent to which they agreed the following statements pertaining to the effect of credit terms on asset quality of MFIs.

TABLE 4. 4: Credit Terms and Asset Quality of MFIs

Statement	NA	SE	ME	LE	VLE	Mean	Std Dev

Our microfinance institution has more attractive credit terms to act as an incentive to clients, hence, minimizing instances of non-performing loans which might affect our MFI asset quality.	14.80	3.30	19.70	29.50	32.80	3.62	1.37
Failing to institute effective credit terms may cause an MFI to suffer unnecessary bad debts, hence, affecting their overall asset quality.	9.80	8.20	19.70	26.20	36.10	3.70	1.31
Our credit terms clearly illustrate the method of computing loan interest as well as the loan repayment plans by our clients.	11.50	19.70	18.00	24.60	26.20	3.34	1.36
Credit repayment period is well illustrated on our credit terms	13.10	16.40	13.10	27.90	29.50	3.44	1.41
Credit terms are important in ensuring that customers do not default their loan repayment	9.80	14.80	8.20	37.70	29.50	3.62	1.32
Overall Mean						**3.54**	

Source: Author (2021)

Based on the study findings, it was found out that approximately a third of the managers (32.80% and 29.50%) felt that their credit terms have contributed to the minimizing of non-performing loans to a very large and large extent respectively. The respondents felt that implementation of credit terms is helpful in reducing bad debts to a large extent (26.20%) and very large extent (36.10%). On the role of credit terms on understanding of loan repayment

plans by clients, the respondents felt that it helps in the understanding to large extent (24.60%) and very large extent (26.10%). The study results are in agreement with Akinleye & Olarewaju (2019) who did a study in Nigeria assessing how credit management strategies influence growth of manufacturing firms in the country and found out that failure of manufacturing firms to comply with standard credit management practices affected their overall growth and sustainability. It was, therefore, recommended that manufacturing firms should consider updating their credit policies continuously in order to manage their debts more effectively. However, the study results overwhelmingly disagree with the findings of a study done in Bangladesh by Chowdhury (2015) assessing how MFIs credit terms affect credit accessibility by SMEs and found out that many SMEs in the country usually opt for smaller amount of loans due to strict credit terms attached to obtaining of large loans as well as high interest rates charged.

Similarly, the respondents felt that credit repayment period is clearly illustrate to a large extent (27.90%) and very large extent (29.50%) the method of computing loan interest as well as the loan repayment plans by our clients. Finally, the respondents were of the opinion that credit terms are important in ensuring that customers do not default their loan repayment to a large extent (37.70%) and very large extent (29.50%). The overall mean was reported as 3.54 which suggests that credit terms is a key part of the credit management practices in MFIs. The study findings disagree with Katto (2015) who did a study in Tanzania and found out that MFIs loans in the country were becoming largely unsustainable due to strict credit terms particularly due to high interest rates ranging between 28% to 48% and without any grace period as well as short-term payback period.

4.3.4 Effect of Credit Collection Policy on Asset Quality of MFIs

By using a scale of between 1-5, researcher requested respondents to indicate the extent to which they agreed the following statements pertaining to the effect of credit collection policy on asset quality of MFIs.

TABLE 4. 5: Credit Collection Policy and Asset Quality of MFIs

Statement	NA	SE	ME	LE	VLE	Mean	Std Dev

Collection policies available at our MFI have helped in effective management of credit practices as they ensure that all credits extended are collected on timely basis.	4.90	4.90	14.80	19.70	55.70	4.16	1.16
Through implementation of guarantee policies, our MFI has been in a better position to recover loan in case a client defaults, thus, helping to manage our credit more effectively.	9.80	4.90	4.90	27.90	52.50	4.08	1.29
Our MFI has set in place staff incentives aimed at improving the overall process of recovery of delinquent loans therefore minimizing instances of non-performing loans.	16.40	8.20	6.60	31.10	37.70	3.66	1.47
To better the state of management of credit, our MFI has undertaken a detailed review regarding loans collection policies on a regular basis	16.40	1.60	11.50	31.10	39.30	3.75	1.42
Our MFI has instituted strict collection policy which is effectual in recovery of debt compared to a moderate approach adopted by some institutions.	21.30	8.20	16.40	42.60	11.50	3.15	1.35
Overall Mean						**3.80**	

Source: Author (2021)

The respondents were in agreement that the existing credit collection policies have helped in collection of credit on a timely basis to a very large extent (55.70%) and large extent (19.70%). In regard to credit collection role in the management of credit effectively, 52.50% and 27.90% felt that they have helped to a very large extent and large extent respectively. 31.10% and 37.70% of the participants agreed that staff incentivization as a part of credit collection policies have minimized non-performing loans to a large extent and very large extent respectively. Detailed review of loan collection policies is a key part of credit collection policies to a large (31.10%) and very large extent (39.30%). The study results obtained are in agreement with Aradanas, Palacio and Suazo, (2018) who did a study in Philippines examining how effective are credit collection policies and practices among selected multi-purpose cooperatives in Bohol and found out that there exists strong relationship between credit collection policies adopted by multi-purpose cooperatives and their overall credit repayment. It was, therefore, recommended that multipurpose cooperatives should consider enhancing their credit collection policies in order to improve their overall loan portfolio and avoid instances of non-performing loans.

The respondents felt that the existing credit collection policies of their institutions are effective as compared to other institutions to a large extent (42.60%) and very large extent (11.50%) MFI have instituted strict collection policy which is effectual in recovery of debt compared to a moderate approach adopted by some institutions. The overall mean of 3.804 is indicative of the fact that credit collection policies is considered a critical part of credit management practices. Through implementation of guarantee policies, MFI have been in a better position to recover loan in case a client defaults, thus, helping to manage their credit more effectively. The study results agree with Ukpong, Amos and Thomas (2018) who did a study in Nigeria assessing how credit management strategies affects loan recovery effort among MFIs in Akwa Ibom state and found out that credit management strategies such as credit control, appraisal and collection policy were very effective when it comes to loan recovery. It was, therefore, recommended that MFIs should engage credit management experts in order to minimise credit risks at the earliest possible opportunity.

4.5 Asset Quality of MFIs

The table below gives the descriptive summary of asset quality of micro-finance institutions for the period 2015-2019. The table also gives a descriptive statistic of the mean, average standard deviation and the maximum and minimum values of the asset quality for the study period.

TABLE 4. 6: Asset Quality of MFIs

Variable	Obs	Mean	Std. Dev.	Min	Max
AQ2015	61	2.054754	.6798593	.54	3.51
AQ2016	61	2.072131	.631356	.59	3.45
AQ2017	61	2.021475	.7155996	.65	3.58
AQ2018	61	2.05123	.7157622	.72	3.89
AQ2019	61	2.052459	.707914	.72	3.75

Source: Author (2021)

From the summary above, the lowest value for asset quality was recorded in 2015 at 0.54 while the year 2018 recorded the highest value for asset quality at 3.89. Additionally, the standard deviation values shows that 2016 had the lowest standard deviation while 2017 had the highest standard deviation. This shows that variability in asset quality was high in 2017 and low in 2016. Therefore, the study findings in regards to the asset quality of MFIs is an indication that Grant for Loan and Lease Losses (LLL) among MFIs in Nairobi metropolitan was higher in 2017 as indicated by the higher results of the asset quality and lower in 2016 as indicated by the lower results of the asset quality of the MFIs. This, therefore, had a significant effect on the intensity of MFIs intensity of exposure to counter-party, the issuer or borrower default under actual or implied contractual agreements during the two years (Nocco & Stulz, 2016). Thus, the higher results of MFIs asset quality in 2017 can be attributed to underlying value of the loan portfolio as well as their credit control management of the MFIs.

4.6 Integration of Primary and Secondary Data for Analysis

The study used both secondary and primary data. The former was collected for dependent variable (Asset quality) while the latter was utilized for independent variables credit policy, credit terms, credit standards and credit collection techniques). The secondary data was used for regression analysis whereby the researcher transformed the Asset quality data for 2015-2019 period into one data of average asset quality. The average asset quality for all the MFIs in Nairobi metropolitan was the used in ANOVA regression analysis. ANOVA regression method requires that the dependent variable must be continuous (Asset quality) while the independent variable (Likert based data from credit management) can be categorical or continuous (Field, 2013). Given that this was met during data transformation stage, analysis was conducted and findings presented in the sections below.

4.7 Inferential Statistics

Inferential analysis was used in the generation of correlation and regression outputs on the effect of credit management practices on asset quality of micro-finance institutions in Nairobi Metropolitan. Correlation and regression outputs are interpreted based on the p-values and the values of regression or correlation co-efficient. The results in Table 4.7 are the findings of correlation outputs. According to Kennedy (2018), correlation coefficients of below 0.40 indicate that weaker relationships exist among the independent variables, co-efficient between 0.4 and 0.6 indicates moderate relationships while co-efficient above 0.6 indicates strong relationships between variables.

4.7.1 Correlation Analysis

TABLE 4. 7: Correlation Results

	ASSET_~Y	CREDIT~Y	CREDI~DS	CREDI~MS	CREDIT~N
ASSET_QUAL~Y	1.0000				
CREDIT_POL~Y	-0.2798*	1.0000			
	0.0290				
CREDIT_STA~S	-0.1602	0.1813	1.0000		
	0.2173	0.1620			
CREDIT_TERMS	-0.2337	-0.0150	-0.0488	1.0000	
	0.0699	0.9089	0.7089		
CREDIT_COL~N	0.3315*	0.0260	-0.0523	-0.0959	1.0000
	0.0091	0.8426	0.6890	0.4623	

Source: Author (2021)

The results revealed that credit policies and asset quality are significantly related and have weak negative correlation (r= -0.280, p=0.029). These findings contradict with that of Muriki, (2017) assessment which established that there existed a positive relationship between various credit policies formulated and the overall performance of banks. The results also indicated that credit collection techniques are positively and significantly associated with asset quality of micro-finance institutions (r= 0.3315, p=0.0091). The findings also agreed with that of Gatuhu (2013) who found that credit collection policy resulted to positive and significant improvement of banks financial performance in Kenya.

Credit terms was also found to have a negative yet non-significant relationship with asset quality (r= -0.233, p=0.069). This aligns with the results of the study by Rukundo (2018) who showed that credit terms have no significant effect on financial performance of banks in Burundi. Credit standards demonstrated non-significant negative relationship with asset quality (r= -0.160, p=0.217).

4.7.2 Regression Analysis and Asset Quality of MFIs

In statistical modeling, regression analysis is applicable whenever the relationship among variables needs to be tested. In regression analysis the steps are as followed: model fit, model summary and regression co-efficient table. Before conducting the regression, analysis there is need for certain assumptions to be met, more so if the study adopted parametric statistics. Given that the study adopted parametric statistics, diagnostic tests were performed to

check the suitability of ANOVA in analyzing the study variables. The first step in presentation of regression findings is in checking the model fit of the data. The model fit findings are presented in table 4.8.

TABLE 4. 8: Regression Analysis

Source	SS	df	MS	Number of obs	=	61
				F(4, 56)	=	4.58
Model	12.4959091	4	3.12397729	Prob > F	=	0.0029
Residual	38.2293644	56	.682667221	R-squared	=	0.2463
				Adj R-squared	=	0.1925
Total	50.7252735	60	.845421226	Root MSE	=	.82624

ASSET_QUALITY	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
CREDIT_POLICY	-.2638432	.1144759	-2.30	0.025	-.4931659	-.0345205
CREDIT_STANDARDS	-.0789579	.089012	-0.89	0.379	-.2572703	.0993546
CREDIT_TERMS	-.1493788	.0818892	-1.82	0.073	-.3134225	.014665
CREDIT_COLLECTION	.1737444	.0649129	2.68	0.010	.0437081	.3037806
_cons	2.929892	.5799803	5.05	0.000	1.768052	4.091732

Source: Author (2021)

Results in table 4.10 showed that the ANOVA model on the relationship between credit management and asset quality is fit to be used in the establishment of relationship. This was confirmed with a p-value < 0.05(0.029). Hence the findings from the regression analysis can be relied upon in determining the effect of credit management practices on asset quality of micro-finance institutions. Coefficient of determination also known as the R-square demonstrates the effect of credit management practices on asset quality. Thus, it can be concluded that 24.6% of changes in asset quality is accounted by credit management practices (credit policies, credit terms, credit standards and credit collection policies) of micro-finance institutions.

It can also be deduced that credit management practices have a small effect on asset quality as the change expected is less than 30%. The study results agree with the results from a study undertaken by Chowdhury (2015) in Bangladesh examining how MFIs credit terms affect credit accessibility by SMEs and established that many SMEs in the country usually opt for smaller amount of loans due to strict credit terms attached to obtaining of large loans as well as high interest rates charged.

Regression of coefficients results in table 4.10 shows that credit policies and asset quality of MFIs in Nairobi Metropolitan are negatively and significant associated (r=-0.264, p=0.025). These findings are in line with the results by Mburu, Mwangi & Muathe (2020) that revealed the existence of negative and significant relationship between credit policies and loan performance in Kenya. The table further indicates that credit standards and assets quality is negatively and non-significantly related with asset quality in Kenya (r=-0.079, p=0.379).

These findings contradict that of Rukundo (2018) who demonstrated that credit standards have a positive and significant effect on loan performance in Burundi. It was further demonstrated that credit terms and asset quality were negatively and non-significantly related (r=-0.149, p=0.073). These findings agreed with that of Muchemi (2013) who found that credit terms and loan performance have a non-significant relationship. In addition, credit collection policy and asset quality were also positively and significantly related (r=0.174, p=0.010). These findings agreed with that of Muriki (2017) whose findings indicated positive association with financial performance of commercial banks in Kenya.

Therefore, based on the above results, the regression model was fit as follows:

$$\mathbf{Y=2.93-0.264X_1-0.789\ X_2-0.194\ X_3+0.174\ X_4}$$

4.8 Diagnostic Tests

4.8.1 Normality Test

The most common tests for normality tests through tables include the Shapiro–Wilk test, skewness and Kurtosis and Kolmogorov–Smirnov test. The first is more applicable in cases where the sample size is less than 50 while the last two are more applicable in cases where the sample size is more than 50. The study used skewness and Kurtosis test.

Normality tests was also used to check the assumption of linearity and heteroscedasticity. This is because Schützenmeister, Jensen & Piepho, (2012) argues that when the assumption of normality is met these assumptions too are realized.

TABLE 4. 9: Kolmogorov–Smirnov test of Normality

Skewness/Kurtosis tests for Normality

				joint	
Variable	Obs	Pr(Skewness)	Pr(Kurtosis)	adj chi2(2)	Prob>chi2
CREDIT_POL~Y	61	0.0052	0.6816	7.19	0.0275
CREDIT_STA~S	61	0.4553	0.0157	6.00	0.0497
CREDIT_TERMS	61	0.3384	0.0000	14.57	0.0007
CREDIT_COL~N	61	0.0490	0.0000	44.10	0.0000
ASSET_QUAL~Y	61	0.0561	0.8727	3.86	0.1454

Source: Author (2021)

Based on Skewness/Kurtosis tests prob>chi2 greater than 0.05 implies that normality assumption has been met as the null hypothesis cannot be rejected. Based on this it can be confirmed that only the asset quality (a continuous variable) met the normality assumption while other variables did not meet the assumption. Therefore, according to the Skewness test for normality, residuals of asset quality show normal distribution. The study results agree with Boone & Boone (2012) who asserts that categorical variables as used in Likert scale responses need not met the assumption of normality because they are mostly used in regression after transformation. Mircioiu & Atkinson (2017) argues that in ANOVA the normality assumption is important for the dependent variable which should always be continuous variables, thus based on this argument it can be concluded that the data met the assumption of normality as the dependent variables-asset quality was normally distributed.

4.8.2 Multi-Collinearity Test

The study used variance inflation factor (VIF) tests in establishing the presence or absence of multicollinearity amongst the credit management practices.

TABLE 4. 10: Multi-Collinearity Test

Variable	VIF	1/VIF
CREDIT_STA~S	1.04	0.961199
CREDIT_POL~Y	1.04	0.965862
CREDIT_COL~N	1.01	0.986299
CREDIT_TERMS	1.01	0.987897
Mean VIF	1.03	

Source: Author (2021)

The findings revealed that there is no multicollinearity amongst credit management variables as shown with VIF values less than 3 for all the factors. Since there was no multicollinearity that was found to exist between the study variables, then the study variables should be held orthogonal to one another whereby adding or removing a variable from a regression equation would not cause the values of the coefficients on the other variables to change. Thus, this study will conduct a correlation analysis to assess the extent on collinearity between variables. This is because Franke (2010) states that values of between 1-10 indicates absence of multi-collinearity. The study results agree with the findings from a study undertaken by Bhattarai, (2016) examining how various credit risk management strategies affect commercial banks performance in Nepal and concluded that credit risk management strategies to a significant extent determines the overall performance of commercial banks.

4.8.3 Heteroscedasticity Test

In this study, Heteroskedasticity was conducted to examine whether the variance of the errors from a regression is dependent on the values of the independent variables. Heteroscedasticity was tested through the use of the Breusch-Pagan-Godfrey test. To treat the heteroscedastic condition, robust standard errors were introduced. From the findings,

the F statistic was 3.12 from 4 variables, while the p-value was 0.0153, which is less than 0.05 (p > 0.05), the it was conclude that there is a Heteroskedasticity problem between the various study variables.

TABLE 4. 11: Heteroscedasticity Test

```
. hettest, rhs fstat

Breusch-Pagan / Cook-Weisberg test for heteroskedasticity
         Ho: Constant variance
         Variables: Herdll Overll Rall Anchll

         F(4 , 343)    =     3.12
         Prob > F      =   0.0153
```

Source: Author (2021)

4.8.4 Linearity Test

TABLE 4. 12: Linearity Test

Skewness/Kurtosis tests for Normality

				joint	
Variable	Obs	Pr(Skewness)	Pr(Kurtosis)	adj chi2(2)	Prob>chi2
CREDIT_POL~Y	61	0.0052	0.6816	7.19	0.0275
CREDIT_STA~S	61	0.4553	0.0157	6.00	0.0497
CREDIT_TERMS	61	0.3384	0.0000	14.57	0.0007
CREDIT_COL~N	61	0.0490	0.0000	44.10	0.0000
ASSET_QUAL~Y	61	0.0561	0.8727	3.86	0.1454

Source: Author (2021)

Linearity test was done in order to determine the existence of linear relationship between various variables. Based on the study results that were obtained, it was found out that the value of the sig. Deviation from linearity was greater than 0.05 which implies that the linear relationship between the study variables is linearly dependent. The study results obtained conforms to the findings of a study done by Mircioiu & Atkinson (2017) who argues that both the

normality and linearity assumptions are important for the dependent variable which should always be continuous variables, thus based on this argument it can be concluded that the data met the assumption of normality as the dependent variables-asset quality was normally distributed.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

The section provides detailed summary of the study results, conclusion as well as the recommendations that were drawn thereafter on the study topic. This has been done in line with the objectives of the study. Therefore, the chapter is structured into summary of the findings, conclusion, recommendation drawn thereafter as well as suggestions for further study

5.2 Summary of Findings

5.2.1 Credit Standards and Asset Quality of MFIs

The first objective was to determine the effect of Credit standards on asset quality of micro-finance institutions in Nairobi Metropolitan. The findings revealed that there was a negative yet insignificant effect of credit standards on asset quality of micro finance institutions. The findings were backed with the summary statistics of credit standards that revealed that only to a moderate extent do the managers consider credit standards as important credit management practices of MFIs. These results implies that microfinance banks in Kenya may not necessarily improve their loan quality through credit standard. It also implies that microfinance banks that tighten their credit standards may end up lowering their asset quality.

5.2.2 Credit Policy and Asset Quality of MFIs

The second objective was to determine the effect of credit policy on asset quality of MFIs in Nairobi Metropolitan. The findings revealed that credit policy and asset quality of MFIS is negatively and significantly related. The findings were also supported by credit policy summary statistics that indicated a mean of large extent in regards to the importance of credit policy as credit management practices. A similar study conducted on Microfinance institutions in Kenya indicated the existence of positive and significant

5.2.3 Credit Terms and Asset Quality of MFIs

The third objective was geared at examining the effect of credit terms on asset quality of microfinance institutions in Nairobi Metropolitan. The findings demonstrate that credit terms are negatively and non-significantly associated with asset quality of micro-finance institutions in Nairobi metropolitan. Credit terms summary statistics also indicated that the bank managers to large extent agreed on their importance as credit management practices. The study findings suggest that using credit terms as credit management practices doesn't necessarily leads to changes in asset quality in micro-finance institutions.

5.2.4 Credit Collection Policy and Asset Quality of MFIs

The final objective was to determine the effect of collection techniques on asset quality of microfinance institutions in Nairobi Metropolitan. The findings demonstrated that credit collection techniques have a positive and yet significant effect on the asset quality of MFIs in Nairobi Metropolitan. The summary statistics in terms of mean also showed that the bank managers were in agreement that credit collection techniques are key credit management practices to a large extent. This finding implies that micro finance institutions that implement credit collection techniques are more likely to have better asset quality as compared to MFIs that don't implement credit collection techniques.

5.3 Conclusions

In relation to the study findings the study concluded that credit policies and credit collection techniques influences asset quality of micro-finance institutions in Kenya. The findings also revealed a strong positive relationship between credit collection techniques and asset quality. Hence it can be concluded that investment in credit collection techniques can leads to better asset quality of MFIs in Nairobi Metropolitan. The findings of the study showed that credit policy is negatively associated with asset quality. This suggests that microfinance institutions that seek to enhance their asset quality should put more emphasis on credit policies. The findings revealed that credit standards and terms have non-significant effect on asset quality. This highlights the weaker position that credit standards and terms hold in improving asset quality of microfinance institution in Kenya.

5.4 Recommendations

5.4.1 General Recommendations

The study found that credit collection techniques have a positive and significant effect on asset quality of microfinance institutions in Kenya. The study therefore recommends that microfinance institutions should continue improving on their credit collection techniques/systems as a way of improving asset quality.

The study also found that credit policies have a negative and significant effect on asset quality of MFIs in Kenya. Therefore, the study recommends that MFIs should adopt a more stringent credit policy but a much more lenient policy for improvement in their asset quality.

The study found that credit terms and standards are negatively but non-significantly associated with asset quality in microfinance institutions. Hence the study findings recommends that MFIs prioritize the use of basic credit and standards and terms in management of their credit portfolio. This is because strengthening credit terms and standards to a more complex ones are more likely to lead to negative impact of asset quality.

5.4.2 Policy Recommendations

The study findings were of great significant to the policy makers especially those concerned with the regulation of MFIs. Therefore, the study recommends that policy makers in Kenya that are concerned with MFIs regulation should ensure that that MFIs across the country implement and adopt effective and sound credit management strategies in order to minimize instances of MFIs plunging into financial crisis that has caused many people across the country to lose a lot of money in the past.

The study also recommends that the management of MFIs across the country need to ensure that they are involved in designing their credit management strategies that are very likely to effectively mitigate against any possible credit risk which may arise due to non-performing loans. This is because, ineffective credit management techniques normally reduce the profitability of a financial institution, affects their assets quality and increase loan losses and non-performing loan which may eventually lead to financial distress.

5.5 Areas for Further Studies

The study sought to determine the effect of credit management on the asset quality of MFIs in Nairobi Metropolitan. This is amongst the first studies that have examined this relationship in financial sector. There is need for more studies focusing on commercial banks and SACCOs in Kenya on the same variables.

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APPENDIX I: INTRODUCTION LETTER

ANNE WAMBUI MWANGI

P.O Box XXXX

Nairobi

Dear Sir/Madam,

RE: YOUR INTENDED PARTICIPATION IN THE RESEARCH PROJECT

Your kind attention is drawn to aforementioned issue.

You have been carefully selected to participate in this research study entitled "**Effects of Credit Management on Asset Quality of MFIs in Nairobi Metropolitan".**

Kindly fill this questionnaire and return it to the undersigned. Any information given by you

will be treated with utmost confidentiality and shall not be divulged to anybody without your

express approval.

Thanks in advance for your anticipated cooperation

Thanks, and Regards,

Anne Wambui Mwangi

APPENDIX II: RESEARCH QUESTIONNAIRE

The purpose of this questionnaire is to collect data which will strictly be used for the purpose of this research only. The main purpose of the data will be to evaluate the **Effects of Credit Management on Asset Quality of MFIs in Nairobi Metropolitan.**

Your kind support in this regard will be sincerely appreciated.

Section A: Background Information

Please respond to the questions by ticking in the boxes where appropriately;

1. **No of years you have been working at the MFIs**

0 – 3 Years [ ]

4 - 7 Years [ ]

Over 7 Years [ ]

2. **Duration the MFI has been in Operation**

1-10 Years [ ]

11-20 Years [ ]

21-30 Years [ ]

Above 30 Years [ ]

3. **Branch Capacity of MFIs**

Below 10 Branches [ ]

11-20 Branches [ ]

21-30 Branches [ ]

Above 30 Branches [ ]

4. **Name of the Microfinance institution**……

Section B: Credit Policy and Asset Quality of Microfinance Institutions

By using a scale of between 1-5, kindly indicate the extent to which you agree with the following statements pertaining to the effect of credit policy on asset quality of MFIs in Nairobi Metropolitan.

	1	**2**	**3**	**4**	**5**
Adoption of comprehensive credit policies help in communicating a consistent standard to our clients					

Available credit policies make it possible for our MFI to assess the possibility of credit risk arising from loans extended to our clients or even other risks resulting from counterparty transactions.					
Credit policy enhances effective cross-functional cooperation between our MFI credit department staffs and other related departments especially sales and marketing departments, hence, helping overall credit management.					
Through established credit policies, our MFI has been able to manage credit risk effectively, thus, helping to prevent any financial losses.					

Section C: Credit Standards and Asset Quality of Microfinance Institutions

By using a scale of between 1-5, kindly indicate the extent to which you agree with the following statements pertaining to the effect of credit standards on asset quality of MFIs in Nairobi Metropolitan.

	1	**2**	**3**	**4**	**5**
Our MFI has instituted a number of credit standards that are aimed at assessing our clients to determine whether they are credit worthy before issuing out loans.					
Our MFI credit standards have made it possible for us to evaluate and analyse credit history of all our clients hence minimizing instances of extending credit to loan defaulters which may affect our asset quality.					
Our MFI credit standards are effectively set in order to establish the past loan performance of our clients, hence, being able to manage credit risks.					
Our credit standards help in assessing our client's characters					

Section D: Credit Terms and Asset Quality of Microfinance Institutions

By using a scale of between 1-5, kindly indicate the extent to which you agree with the following statements pertaining to the effect of credit terms on asset quality of MFIs in Nairobi Metropolitan.

	1	**2**	**3**	**4**	**5**
Our microfinance institution has more attractive credit terms to act as an incentive to clients, hence, minimizing instances of non-performing loans which might affect our MFI asset quality.					
Failing to institute effective credit terms may cause an MFI to suffer unnecessary bad debts, hence, affecting their overall asset quality.					
Our credit terms clearly illustrate the method of computing loan interest as well as the loan repayment plans by our clients.					

Credit repayment period is well illustrated on our credit terms					
Credit terms are important in ensuring that customers do not default their loan repayment					

Section E: Credit Collection Policy and Asset Quality of Microfinance Institutions

By using a scale of between 1-5, kindly indicate the extent to which you agree with the following statements pertaining to the effect of credit collection policy on asset quality of MFIs in Nairobi Metropolitan.

	1	**2**	**3**	**4**	**5**
Collection policies available at our MFI have helped in effective management of credit practices as they ensure that all credits extended are collected on timely basis.					
Through implementation of guarantee policies, our MFI has been in a better position to recover loan in case a client defaults, thus, helping to manage our credit more effectively.					
Our MFI has set in place staff incentives aimed at improving the overall process of recovery of delinquent loans therefore minimizing instances of non-performing loans.					
To better the state of management of credit, our MFI has undertaken a detailed review regarding loans collection policies on a regular basis					
Our MFI has instituted strict collection policy which is effectual in recovery of debt compared to a moderate approach adopted by some institutions.					

Section E: Asset Quality of Microfinance Institutions

Data Collection Matrix

	Net Non-Performing Assets	Total Assets	Asset Quality	2015	2016	2017	2018	2019
1								
2								
3								

THANKS FOR YOUR TIME

APPENDIX III: LIST OF MFIS IN NAIROBI METROPOLITAN

1.CHOICE MFI BANK LIMITED
2. REMU MFI BANK LIMITED
3. SUMAC MFI BANK LIMITED
4. U & I MFI BANK LIMITED
5. UWEZO MFI BANK LIMITED
6. CENTURY MFI BANK LIMITED
7. MAISHA MFI BANK LIMITED
8. DARAJA MFI BANK LTD
9. FAULU MFI BANK
10. CARITAS MFI BANK
11. KENYA WOMEN MFI BANK LIMITED
12. SMEP MFI E BANK LIMITED
13. MUSONI MFI BANK LIMITED
14. VISION FUND KENYA
15. GREENLAND FEDHA LTD
16. PLATINUM CREDIT LTD
17. DIVERSITY MICROCREDIT LTD
18. MOMENTUM CREDIT
19. JIWEZE LTD
20. SPRINGBOARD CAPITAL LTD
21. ASA KENYA
22. BIMAS LTD
23. FIN CREDIT LTD
24. JUHUDI KILIMO MFI LTD
25. LONGITUDE FINANCE
26. MICRO ENTERPRISES SUPPORT PROGRAMME TRUST (MESPT)

27. INUKA AFRICA MFI
28. PADDY MICRO-INVESTMENT LIMITED
29. COINAGE INVESTMENT LTD
30. NEEMA HEEP MFI
31. PREMIER CREDIT LTD
32. USHINDI BORA MFI
33. MILEMBE INVESTMENT LTD
34. ECLOF KENYA
35. JIJENGE CREDIT LTD
36. BIDII CREDIT LTD
37. CAPITAL CREDIT LIMITED
38. MIDENATT CREDIT LTD
39. ACE CAPITAL & CREDIT LTD
40. BUSINESS CAPITAL ACCESS LTD
41. CANYON RURAL CREDIT LTD
42. JITEGEMEA CREDIT SCHEME LTD
43. BCF KENYA LTD
44. NGAO CREDIT LTD
45. SISDO MFI
46. PAMOJA WOMEN DEVELOPMENT PROGRAMME (PAWDEP)
47. SELECT MANAGEMENT SERVICES LTD
48. GREEN CREDIT GROUP LTD
49. COMET CREDIT LTD
50. SWIFTBRIDGE CAPITAL LTD
51. EDENBRIDGE CAPITAL
52. SPEED CAPITAL LTD
53. SPERO CAPITAL LTD
54. REAL PEOPLE LTD MFI

55. GETBUCKS MFI BANK LTD
56. PRIVATE EQUITY MICROFINANCE BANK
57. FOUNTAIN ENTERPRISES PROGRAMME (FEP) MFI
58. SAMCHI CREDIT LTD
59. BASHY AFRICAN CREDIT LTD
60. USHINDI BORA MFI LTD
61. AFRICA CREDIT LTD
62. STRAC INVESTMENTS LTD
63. MICRO MOBILE LTD
64. PROGRESSIVE CREDIT LTD
65. MY CREDIT LIMITED
66. MOLYN CREDIT LIMITED
67. JAMBO CAPITAL MFI
68. IMARIKA CAPITAL LTD
69. SELECT MANAGEMENT SERVICES LTD
70. MWANANCHI CREDIT LTD
71. BRIDGES CREDIT AFRICA LTD
72. SHAPING AFRICA CREDIT LTD
73. AAR CREDIT SERVICES LTD
74. KEY MFI BANK

APPENDIX V: BUDGET

ITEMS	**AMOUNT Kshs:**
Stationeries	5,000
Data collection expenses	15,000
Project printing	2,000
Miscellaneous	5,000
Total	**27,000**