# DETERMINANTS OF LOAN DEFAULTS BY SMALL AND MEDIUM ENTERPRISES AMONG COMMERCIAL BANKS IN KENYA

BY

KIBOSIA NAOMI CHELAGAT

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# DECLARATION

This is my original work and it has never been submitted for a degree award in any other university.

Signature: _____ Date: _____

Kibosia Naomi Chelagat

D61/71143/2009

This has been submitted for examination with our approval as the student's supervisor.

Signature: _____ Date: _____

Mr. James M Karanja

Lecturer

Department of Finance and Accounting

**SCHOOL OF BUSINESS,**
**UNIVERSITY OF NAIROBI**
**NAIROBI.**

# DEDICATION

I dedicate this work to my parents and siblings, for their loving care, support and help during my study, may the Almighty God continue to bless you all abundantly.

# ACKNOWLEDGMENT

I would like to give a special consideration to my parents Ben & Julia and siblings Lucy, Lydia, Pamela and Koech for all their love and support. May God keep you and bless you.

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# ABSTRACT

This study sought to determine the relationship between Non-performing Loans associated with SME sector and its determinants among commercial banks in Kenya. The research methodology used was a descriptive survey design and the population of was all commercial banks in Nairobi region.

The population of the study consisted of all the commercial banks in Kenya. Information collected was by use of a questionnaire which made use of both open and closed ended questions. The questionnaire used a five point likert scale which ranged from strongly agree to strongly disagree. Data was edited for accuracy, uniformity, consistency and completeness and arranged to enable coding and tabulation for final analysis. This study also used multiple linear regressions to analyze the data.

The study found out that Loan defaults by SMEs has significantly been increasing and a number of determinants affected the loan defaults key among them interest rates and how long the business has been in operation. The character of the applicant has been found to have a significant impact on loan defaults. Poor Credit Analysis and monitoring, type of loan, repayment period and economic conditions also contributed to loan defaults by SMEs. From the results, it is evident that for all the banks who lend to SME, the SME loan book contained a significant level of Non-performing loans.

The study recommends that commercial banks should put more emphasis on Credit Risk Management, training of staff and adopt credit scoring in vetting of SME customers loan requests.

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| | |
|---|---|
| CBK | Central Bank of Kenya |
| CRB | Credit Reference Bureaus |
| FSD | Financial Sector Deepening |
| IFC | International Finance Corporation |
| GDP | Gross Domestic Product |
| KCB | Kenya Commercial Bank |
| KYC | Know Your Customer |
| NPL | Non Performing Loan |
| OECD | Organization for Economic Co-operative & Development |
| PAR | Portfolio At Risk |
| SBP | State Bank of Pakistan |
| SME | Small and Medium Enterprises |
| USAID | United States Agency for International Development |

# CHAPTER ONE

# INTRODUCTION

## 1.1 Background to the Study

A bank's revenue is basically generated from its assets. However, it is worth nothing that not all assets generate revenue. Thus, the assets of a bank can basically be classified as income or revenue generating and non-income generating. Banks' income can be classified as interest income & Non-interest income. The interest income is basically derived from interest charged on loans, and overdrafts and trade finance. On the other hand, the non-interest income includes fees, commissions, brokerage charges and returns from investments in subsidiaries and securities. To this extent, Vong (1996), had asserted that a major source of income (about 80%)for commercial banks is interest income. The next important source of revenue is derived from dividends and gains from dealing in the securities market. Other minor sources of income include earnings from trust activities and service charges on deposit accounts.

The main principal activity of a commercial bank is to grant loans to borrowers. Loans are among the highest yielding assets a bank can add to its balance sheet, and they provide the largest portion of operating revenue. In this respect, the banks are faced with liquidity risk since loans are advanced from funds deposited by customers. However, the higher the volume of loans extended the higher the interest income and hence the profit potentials for the commercial banks. Devinaga (2010) noted that banks with a high volume of loans will also be faced with higher liquidity risk. Thus, the commercial banks need to strike a balance between liquidity and profitability. He further emphasized that a high volume of loans alone is not a guarantee for high interest income. If the borrowers default then the interest income will not be earned and this will certainly affect the profitability of the bank adversely. Thus, the quality of the loans would also contribute towards higher profitability. Non-performing loans can therefore be used as an indicator of the loans quality. Hence, the nonperforming loans must also be taken into account as a factor which may affect a bank's interest income and hence profitability. Furthermore, it must also be noted that higher interest income are not

merely a function of higher volume of loans but are in fact also dependent on the lending rates and the interest rate elasticity of loans as well.

Loan default is a universal phenomenon associated with all types of business enterprises. However, loan default in case of banks has special significance because extending credit is almost the exclusive business of banking institutions. Naturally, magnitude of loan default impacts negatively on a bank's profitability and value as a result of the reduced cash flows. If the Non-performing loans are not monitored over an extended period of time it may lead to illiquidity and the eventual bankruptcy of the bank. So, its importance is absolute for the very existence of a bank. As banks deal with other people's money, quick recovery of loans is one of the most important factors that banks make commercially viable.

### 1.1.1 Loan Quality

Non-performing loans are those loans that are not being serviced as per the loans contracts and expose the banks to potential losses (Central Bank annual Report, 2008). A mismatch in management of major balance sheet items can cause banks to close down. Changes in the relative structure of assets and liabilities should be a conscious decision of banks policy makers, in most cases the Board of directors. According to Simonson et al (1986), what differentiates well managed banks from badly managed banks is the proportion of the delinquent loan books. Banks must do everything they can to minimize loan delinquency. This requires them to continuously review individual exposures in order to monitor loan quality and reduce losses.

Loan being a major asset in the bank's Balance Sheet, the success of individual banks in credit risk management is largely reflected in the proportion of NPL's loans to gross lending. Asset quality which is measured by the Asset quality ratio is an indicator of the level of non-performing loans (Thygerson, 1995) calculated as:

Asset quality = Total non-performing loans

Total Loans

A high ratio of non-performing loans to advances is a reflection of imprudent lending practice and poor credit management. It poses a threat to customer's deposits. A low ratio is

therefore desirable. When loans become non-performing, they hurt the banks liquidity and impact negatively on its earnings.

Many researchers on the cause of bank failures find that asset quality is a statistically significant predictor of insolvency (Dermirgue-Kunt, (1997), and that failing banking institutions always have high level of NPL's prior to failure. Berger et al. (2002) further observed that failing banks have often shown a level of bad loans and that such banks increase in non-performing loans tend to be followed by decrease in measured cost efficiency, suggesting that high levels of problem loans causes banks to increase spending on monitoring, working out, and/or selling of these loans. Therefore, the first step to building a stable and strong financial system is to minimize the non-performing loans (Crotty and Jobone, 2004).

According to Kamara et al, (1997), a classic case of financial crises precipitated by bad debts is the financial turmoil that befell East Asia in late 1990's, affecting mainly Thailand, Indonesia, Malaysia and South Korea. At that time, more than 15% of bank loans in the four countries were non-performing compared to only 1% in the United States of America. The high level of non-performing loans continues to be an issue of major supervisory concern in Kenya. The level of non-performing loans has been increasing steadily (Bank Supervision Annual Report 2001). Even the best banks with good lending policies and procedures do become victims of non-performing loans in one way or another. The magnitudes of non-performing loans worry bank policy makers. These loans have made some banks fall into liquidation and closure. (Central Bank Annual Report, 2004).

In Kenya, the gross loans of Financial Institutions grew by 30.2 percent from Ksh. 914.9 billion in December 2010 to Ksh. 1,191.0 billion in December 2011. The growth in loans is attributed to increased demand for credit by the various economic sectors. Gross non-performing loans (NPLs) declined by 8.0 percent from Ksh. 57.6 billion in December 2010 to Ksh. 53.0 billion in December 2011. The decline saw an improvement in the ratio of gross non-performing loans to gross loans from 6.3 percent in December 2010 to 4.4 percent as at December 2011. The decline in gross NPLs was attributable to write-offs, recoveries and improved credit appraisal monitoring standards.(Bank Supervision Report 2011)

**1.1.2 Loans to SMEs**

There is no universally-agreed definition of an SME throughout the world, a variety of definitions are applied among different countries with employee numbers and financial assets the most defining criterions. In the European Union, an SME is defined as an enterprise with 50-249 employees and a turnover not exceeding EUR 50 million (OECD, 2004). However, African Development bank (2008) defines SMEs as enterprises with fewer than 500 employees while in Kenya lenders definitions vary.

The financing of small and medium-sized enterprises (SMEs) has been a subject of great interest both to policymakers and researchers because of the significance of SMEs in private sectors around the world and the perception that these firms are financially constrained. According to Ayyagari, et al (2007) on average, SMEs account for close to 60 percent of manufacturing employment. More importantly, SMEs not only perceive access to finance and the cost of credit to be greater obstacles than large firms, but these factors constrain SMEs (i.e., affect their performance) more than large firms.

In recent years a debate has emerged regarding the nature of bank financing for SMEs. Until recently, the conventional wisdom regarding SME finance was that small and domestic banks are more prone to finance SMEs because they are better suited to engage in "relationship lending", a type of financing based primarily on "soft" information gathered by the loan officer through continuous, personalized, direct contacts with SMEs, their owners and managers, and the local community in which they operate (Sengupta, 2007). However, De la Torre et al(2008) disputed this conventional wisdom and proposed a new paradigm for bank SME finance, arguing that large and foreign banks, relative to other institutions, can have a comparative advantage at financing SMEs through arms-length lending technologies (e.g., asset-based lending, factoring, leasing, fixed-asset lending, credit scoring,etc.) and centralized organizational structures instead of relationship lending.

**1.1.3 Challenges in Lending to SMEs**

There are obstacles that may prevent SMEs from obtaining adequate financing; these include informational asymmetries between SMEs and lenders, or outside investors. Informational

asymmetries are always present in enterprise financing transactions. Entrepreneurs typically possess privileged information on their businesses that cannot be easily accessed or cannot be accessed at all by prospective lenders or outside investors (Zavatta, 2008). Due to high costs of obtaining the necessary information like credit worthiness on SMEs, lenders perceive the risks of lending to this sector to be greater than they actually are; hence they will charge higher interest rates or refrain from lending to them altogether (IFC, 2008). If lenders do charge high interest rates, this increases the risk they are exposed to by discouraging low-risk, low-return borrowers from seeking loans, ultimately discouraging lenders from lending to SMEs altogether, (Malhotra et al, 2006).

One other important aspect of the information infrastructure is the accounting environment where the key issues are the non-existence of strong accounting standards and credible independent accounting firms. These are necessary conditions for informative financial statements which have vital conditions for the feasibility of many components of loan contracting  (Berger & Udell, 2004).Since SMEs are often not required to adopt international accounting standards when preparing their financial statements, large discrepancies arise in the ways they report their financial positions which limits their reliability.

The intrinsic higher risk associated with SMEs activities is another challenge in lending to this group of borrowers. Suppliers of external funds regard SME as riskier enterprises for a number of reasons. First, SME face a more uncertain competitive environment than larger companies and hence experience more variable rates of return and higher rates of failure. Olawale and Garwe, (2010) notes that despite the noted contributions of new SMEs, their failure rate in South Africa is one of the highest in the world, about 75% of new SMEs in South Africa do not become established firms. This is attributed to vulnerability to market changes and often inadequate management capabilities because of their smaller size. Secondly, SMEs are comparatively less equipped in terms of both human and capital resources to withstand economic adversities. Indeed Schiffer and Weder (2001) notes that due to vulnerability and high turnover SMEs are intrinsically riskier borrowers than large firms. In developing countries, there is also an added problem of a more volatile operating

environment including political instabilities, which has a negative impact on the security of transactions.

Irrespective of risk profile considerations, the handling of SME financing is an expensive business. The cost of appraising a loan application or conducting a due diligence exercise in view of a possible equity investment is largely independent from the size of the financing under consideration. For all practical purposes, the following costs are fixed: administrative costs; legal fees; and costs related to the acquisition of information such as the purchase of a credit profile from a specialized agency (Zavatta, 2008). In the case of smaller loans or investments, it is more difficult to recoup these costs. These costs also include what financiers must incur after disbursement, especially when conducting field inspections, or attending board meetings.

The lack of techniques by banks, such as credit scoring skills, to increase volume and lower costs also compound the problem. According to FSD Kenya (2008); credit scoring helps in the quantification of credit risks which permits precise targeting of portfolio approval rates and pricing which compensates financial providers for the risk taken. SMEs are typically characterized with lack of adequate collateral. The amount of collateral required in relation to the loan size is a measure frequently adopted to empirically assess the severity of the financing gap (Zavatta, 2008). In some cases, the enterprise may be unable to provide sufficient collateral because it is too new and hence not firmly established. In some other cases, the lender may deem the collateral insufficient in view of the size of the loan requested.Stephanou & Rodriguez (2008) notes that in practice, most SMEs have few real estate assets and can only pledge moveable property such as equipment, inventories, receivables or fixtures as guarantee.

Lastly is the fact that most SMEs in developing countries are affected by institutional and legal factors. Restrictive government regulations reinforce the tendency to adopt very conservative lending policies whereby financial providers charge high interest rates. Also insufficiently developed legal systems effectively prevent the development of certain financing instruments and even in the protection of intellectual properties which dominates SME businesses.

## 1.2 Statement of the Problem

The issue of Small and Medium Enterprises (SMEs) credit risk is of particular interest to policy makers, given both their importance on banks' balance sheets and their contribution to real economic activity. Martina et al (2012) noted that despite its importance, there is relatively limited literature on the credit risk associated specifically with SME loans and the determinants of loan performance for these firms. This is in spite of the finding that in times of recession or crisis, SMEs are particularly vulnerable as their limited diversification and dependence on short-term credit give them much less of a buffer against demand falls than are available to larger firms. From a credit risk point of view, SMEs are different from large corporate for many reasons. For example, Dietsch and Petey (2004) analyzed a set of German and French SMEs and concluded that they are riskier but have a lower asset correlation with each other than large businesses.

The purpose of this study is to establish whether factors influencing SME defaults is different from other large firm/Corporate. Local literature relating to various issues on Non-performing loans is available; Muasya (2009) carried out a study on the impact of NPLs on the performance of the banking sector in Kenya while Kagio (2010) carried out a study on the Relationship between Loan Portfolio and the level of NPLs of Commercial Banks in Kenya. He found out that four main sectors were statistically significant in relation to the level of NPLs stocks with agriculture contributing most followed by transport, manufacturing and then individuals.

Mucheke (2001) in his study of the determinants of Non-Performing Loans among Commercial Banks concluded that the key causes of non-performing loans in the banking industry are three- pronged. These are factors specific to internal organization, factors relating to the macro- economic policies, which ultimately determine how the economy works, and finally those factors relating to the actual management of business. Gerald, (2011) studied the relationship between Credit Risk Assessment and the level of non-performing loans and found out that in reviewing the credit risk, credit analysts look at the ability of the applicant to take on more additional borrowing and the character which is assessed by the past record of the applicant in meeting their financial obligations. This information is obtained from Credit Reference Bureaus. In the study of the relationship between credit

evaluation and non-performing loans, Kamau (2011) found out that: the client ability to repay the loan, market conditions and character of the applicant are the most critical aspects of credit evaluation.

Billy, 2011 sought to find out the determinants of Non-performing loans among commercial banks. He found out that the level and sources of income were the greatest causes of loan defaults. Poor Credit analysis and loanee's commitment to loan repayment also contributed to the levels of Non-performing loans. However, in the recent past the banking industry has undergone a lot of changes. Kenyan banks and Microfinance institutions are scrambling to attract SMEs which is seen as a lucrative market set to grow with the improving economy. Even though several studies have been carried out on the determinants of loan defaults in commercial banks, no study has been done on the causes of loan defaults by SMEs which is a unique sector with specific challenges. This is thus the research gap that the researcher intends to fill. The study therefore seeks to answer the following research question: 'What are the main causes of loan defaults by SMEs?'

## 1.3 Research Objective

The objective of the study was to establish the main determinants of SME Loan defaults among commercial banks in Kenya.

## 1.4 Importance of the Study

In Kenya, there has been an increase in the number of credit facilities turning bad particularly in the banking industry. Controlling non-performing loans is very important for both the performance of an individual bank and the economy's financial environment.

The study findings will benefit banks and other institutions offering loan facilities in mitigating the non- performing loans especially in SMEs which is a fast growing sector in the country. Lending to SMEs by the commercial banks has changed the way banks used to view collateral since many of the small and medium enterprises are characterized with lack of adequate collateral. There are also other unique challenges in lending to this sector and with the increase in the SME loan portfolio against the total loan book, it is important to establish the specific causes of loan defaults in this sector. Academia and other researchers will use the study as a point of reference for further research.

# CHAPTER TWO

# LITERATURE REVIEW

## 2.1 Introduction

This chapter will bring together diverse streams of literature in accounting and finance that have touched the causes of non-performing loans both locally and internationally. It will also take into account the Credit risk management practices as adopted by Commercial Banks.

## 2.2 Credit Risk Management and the Importance

Credit risk is defined as the current or prospective risk to earnings and capital arising from an obligor's failure to meet the terms of any contract with the bank (CBK, 2008). Loans are the largest and most obvious source of credit risk; however, other sources of credit risk exist throughout the activities of a bank, including in the banking book and in the trading book, and both on and off the balance sheet. However, banks are increasingly facing credit risk in various financial instruments other than loans, including acceptances, interbank transactions, trade financing, foreign exchange transactions and financial derivatives (Basel-II, 2000).

Since exposure to credit risk continues to be the leading source of problems to banks world-wide, banks and their supervisors should be able to implement proper credit risk management. Credit risk management entails the process of identifying, measuring and managing institutional credit risk exposures (CBK, 2008). The goal of credit risk management is to maximize bank's risk-adjusted rate of return by maintaining credit risk exposure within acceptable parameters.

The magnitude and the level of loss caused by credit risk compared to other risks is severe to cause bank failures. Over the years, there have been an increased number of significant bank problems in both matured and emerging economies (Richard *et al*, 2008).Credit problems, especially weakness in credit risk management have been identified to be a part of the major reasons behind banking difficulties the changing profile of the Bank's portfolio with significant growth of the private sector component and volatile operating environment as a result of the global financial and economic crisis (BrownBridge & Harvey, 1998).

Banks' intermediary function is essential for economic activity as it enhances the productivity and efficiency of the economy as a whole. If banks' amount of non-performing loans due to lack of credit risk management continue to exceed their profits it will reduce banks' net worth and lower their risk-taking capacity, making it difficult to invest funds in risky projects and to realize potentially productive businesses (GOF, 2001).Poorly managed credit risk erodes bank's profitability leading to decline in confidence in the financial system; corporations and consumers become cautious, reducing business investment and private consumption. An increase in uncertainty relating to the business condition of financial institutions and the financial system as a whole increases uncertainty of management of corporate borrowers and this, in turn, increases uncertainty about households' future income through its impact on employment (GOF, 2003).

**2.2.1 Credit Risk Management Practises**

Credit risk management practises are aimed at serving dual purpose of increasing revenues by extending credit to customers who are deemed a good credit risk and minimising risk loss from bad debts by restricting or denying credit to customers who are not a good credit risk. Malhotraet al, (2006) acknowledges that a number of banks around the globe have learnt the lending and pricing strategies that allow them to compensate for the high transaction costs of making many small loans and have adopted risk management techniques commensurate with the higher risk profiles of their SME clients. Apart from providing advice, guidance and specialist skills on how to promote best practice in management of credit risk, KCB also tries to limit concentration of exposures to counter parties, geographies and industries like SME for loans and advances (KCB, 2011).

Some of the credit risk management practises used in assessing and monitoring SME credit risk includes but not restricted to Credit Administration. Ongoing administration of the credit portfolio is an essential part of the credit process; Credit administration function is basically a back office activity that support and control extension and maintenance of credit. Credit administration is critical in ensuring the soundness of the credit portfolio; according to CBK (2008) it is the responsibility of management to set up a credit administration team to ensure that once a credit is granted it is properly maintained and administered. This will include record keeping, preparation of the terms and conditions as well as perfection and safe

custody of the securities. According to SBP (2003) the loan should also be continuously watched over. These include keeping track of borrowers' compliance with credit terms, identifying early signs of irregularity, conducting periodic valuation of collateral and monitoring timely repayments. By doing these financial institutions are able properly manage credit risks within different sectors of the economy.

The relationship-lending model is based on qualitative information with an emphasis on the character and reliability of SME owners gathered from informal sources such as suppliers and community leaders (Malhotra et al, 2006). This is different from transactions lending approach which is based primarily on hard quantitative data that can be observed and verified at the time of credit origination like: financial ratios calculated from audited financial statements, credit scores assembled from data provided by credit bureaus, or valuation of hard collateral hence relationship lending plays a vital role in SME lending.

Another important element of credit management is stress testing. This involves identification of possible events or future changes that could have a negative impact on the institution's credit portfolio and the bank's ability to withstand the changes, CBK Risk management Guidelines, (2005). The areas to examine critically are: economic or industry changes, market – risk events and liquidity conditions which are the major challenges within the SME sector. Banks use stress testing because traditional types of risk management, which examine the portfolio for expected losses, provision levels, criticized classified loans, and distribution across industries or geographies, don't give full picture of how the portfolio could be affected by unexpected events (Intrater, 2002).

Intensive Loan Monitoring and Credit Risk Control Methods is another tool for Credit Risk Managements. Credit risk monitoring refers to incessant monitoring of individual credits inclusive of off-balance sheet exposures to obligors (debtors) as well as overall credit portfolio of the bank. Banks need to enunciate a system that enables them to monitor quality of the credit portfolio on day-to-day basis and take remedial measures as and when any deterioration occurs (SBP, 2003).According to Malhotra et al, (2006) banks need to monitor loans through site visits timed to coincide with clients' repayment schedules and provide clients with incentives for timely repayment. Close relationships with its clients enable banks

to weather the financial and credit risks crisis relatively well and hence continue to provide loans to its existing and new clients.

Internal controls and Audit is also important.Credit risk rating is one of the internal controls put in place by a bank; it is a summary indicator of a bank's individual credit exposure. An internal rating system categorizes all credits into various classes on the basis of underlying credit quality. A well-structured credit rating framework is an important tool for monitoring and controlling risk inherent in individual credits as well as in credit portfolios of a bank or a business line (SBP, 2003).Reserve Bank of India, (1999) notes that adequate internal control structures are critical in giving assurance and maintaining effective risk management system, enforcement of procedures and controls necessary to comply with adopted policies. Institutions should have in place an independent internal system for assessment of the credit risk management process, this function is necessary in order to independently enable the board determine whether the risk management process is working effectively (CBK Risk management Guidelines, 2005).

## 2.3 Credit Analysis

Banks have credit policies that guide them in the process of awarding credit. Credit control policy is the general guideline governing the process of giving credit to bank customers. The policy sets the rules on who should access credit, when and why one should obtain the credit including repayment arrangements and necessary collaterals. The method of assessment and evaluation of risk of each prospective applicant are part of a credit control policy (Payle, 1997).

A firm's credit policy may be lenient or stringent. In the case of a lenient policy, the firm lends liberally even to those whose credit worthiness is questionable. This leads to high amount of borrowing and high profits, assuming full collections of the debts owed. With the stringent credit policy, credit is restricted to carefully determined customers through credit appraisal system. This minimizes costs and losses from bad debts but might reduce revenue earning from loans, profitability and cash flow (Bonin and Huang, 2001). The guiding principle in credit appraisal is to ensure that only those borrowers who require credit and are

able to meet repayment obligations can access credit. Lenders may refuse to make loans even though borrowers are willing to pay a higher interest rate, or, make loans but restrict the size of loans to less than the borrowers would like to borrow (Mishkin, 1998). The argument is that credit should be made available according to repayment capability based on current performance.

The inadequacies of the traditional approaches to loan processing like its problems arising from repayment and recovery have been the concerns of banking professionals over time. Credit scoring is a statistical method used to predict the probability that a loan or an existing borrower will default or become delinquent. This model assigns scores for potential borrower by estimating the probability of default of their loans based on borrower and loan characteristic data (Aremu, Suberu, & Oke, 2010). These are data available at the time of the decision, such as the time at which credit was granted to an account. For SME models, sources would include credit applications, financial statements and (where available) "external" data such as data from consumer and business credit reporting agencies/bureaus. Only those types of data that will be consistently available once the final scoring model is implemented can be used for model development.Latimer (2000).Kenyan banks need to embrace this technique because it is objective, standardized, consistent, and a transparent measurement of risk, resulting in all customers of similar risk receiving the same credit decision.

In assessing Credit Risk Canon of Lending is very important;

CAMPARI

This is one of the old but still a valid model used by banks to evaluate lending propositions is. This model looks at a range of aspects associated with lending which covers not just the finance that is being sought but the people who are seeking it. It stands for the first letters of the seven parameters that are analyzed in the process of assessing and evaluating a borrowing proposal, namely: Character, ability, Margin, purpose, amount, repayment and insurance. This technique covers a range of intangible aspects like: relationships and obligations among others (KCB, 2006).

The five C's of credit analysis

The 5C's (capacity, capital, collateral, conditions and character) are also the basic components of credit analysis. The banker needs to be sure that the company generates enough *cash flow* to service the requested debt, there is sufficient *collateral* to cover the amount of the loan as a secondary source of repayment should the company fail, there is enough *capital* in the company to weather a storm and to ensure the owner's commitment to the company, the *conditions* surrounding the business do not pose any significant unmitigated risks, and the owners and management of the company are of sound *character*, people that can be trusted to honor their commitments in good times and bad.

SWOT analysis

SWOT stands for strengths, weaknesses, opportunities and threats. It is a systematic way of assessing a business's strengths, weaknesses, opportunities and threats to see the direction in which it is heading. The technique seeks to identify strengths and weaknesses of a business and match them with the available opportunities and threats from the external environment (KCB, 2006). SWOT complements CAMPARI in addressing the factors which affect a business in its broader context.

**2.3.1 Credit Analysis Process**

Credit analysis is the process of evaluating an applicant's loan request or a corporation's debt issue in order to determine the likelihood that the borrower will live up to his/her obligations. In other words, credit analysis examines the financial history of an applicant in order to determine creditworthiness. A key element of credit analysis is the prediction of the likelihood a firm will face financial distress. According to Palepo et al (2004), the process of credit analysis varies from one lender to another. The following steps however a representative of typical approaches. The steps are in a particular order but they are interdependent.

Understanding the purpose of a loan is important not just for deciding whether it should be granted but also for structuring the loan. Loans might be required for a few months, several years or even as part of a permanent part of a firm's capital structure. The use of the loans varies from replacement of other financing, working capital needs or for acquisitions of long term assets or another firm. The required amount of the loan must also be established. For

example in financing an SME, a banker would typically prefer to be the sole financer of the business and in which case the amount of loan should be sufficient to refinance existing debt.

The next step will be to consider the type of loan and available security. The type of loan to be considered is a function of not only its purpose but also the financial strength of the borrower. There are several loan types which include: Open line credit, overdrafts, working capital loan, term loan, mortgage loan and lease financing. Bank lending is done on secured basis with smaller and more highly levered companies. Security will be required unless the loan is short term and the borrower exposes the bank to minimum default risk. Commercial lender estimates the amounts that could be lent on each of the assets available as security.

Analyzing the potential borrower's financial status is very crucial. This involves assessing the firm's ability to service the debt at the scheduled rate. This information is obtained from business strategy analysis, accounting and financial analysis. The key issue in the financial analysis is how likely it is that cash flows will be sufficient to repay the loan. The financial analysis should produce more than just assessment of the risk of nonpayment. It should also identify the nature of the significant risk.

Good credit analysis should also be supported by explicit forecasts. The basis for such cash flows will be the management. It should be prepared with a 'pessimistic' scenario. The Z-score model for predicting the likelihood that a firm would go bankrupt can be useful. The model was developed by Altam (1968). This model uses five financial ratios that combine in a specific way to produce a single number. This number, called the Z-Score, is a general measure of corporate financial health. Later, Altman developed a modified version for private manufacturing firms and a second version for use by all businesses.

Finally, the last step in credit analysis is to pull together the detailed structure: type of loan, repayment schedule, loan covenants and pricing. Loan covenants specify mutual expectations of the borrower and lender by specifying actions the borrower will and will not take. It should strike a balance between protecting the interest of the lender and providing the flexibility management needs to run the business. The essence of loan pricing is to assure that the yield on the loan is sufficient to cover, the lender's cost of borrowed funds, cost of

administration and servicing the loan, a premium for exposure of default risk and a normal return on the equity capital necessary to support the lending operations.

## 2.4 Determinants of Non-Performing Loans

Over the last few years the literature that examines non-performing loans has expanded in line with the interest afforded to understanding the factors responsible for financial vulnerability. This situation may be attributed to the fact that impaired assets plays a critical role in financial vulnerability as evidenced by the strong association between NPLs and banking/financial crises.

### 2.4.1 Macro Economic Factors

The existing literature provides evidence that suggests a strong association between NPLs and several macroeconomic factors. Several macroeconomic factors which the literature proposes as important determinants are: annual growth in *GDP*, credit growth, real interest rates, the annual inflation rate, real effective exchange rate, annual unemployment rate, broad money supply and GDP per capital etc.

Keeton and Morris (1987) present one of the earliest studies to examine the causes of loan losses. In the latter paper the authors examined the losses by 2,470 insured commercial banks in the United States (US) over the 1979-85. Using NPLs net of charge-offs as the primary measure of loan losses Keeton and Morris (1987) shows that local economic conditions along with the poor performance of certain sectors explain the variation in loan losses recorded by the banks. The study also reports that commercial banks with greater risk appetite tend to record higher losses.

Several studies which followed the publication of Keeton and Morris (1987) have since proposed similar and other explanations for problem loans. There is significant empirical evidence of a negative relationship between the growth in real GDP and NPLs (Salas and Suarina, 2002; Rajan& Dhal, 2003; Fofack, 2005; and Jimenez and Saurina, 2005). The explanation provided by the literature for this relationship is that strong positive growth in real GDP usually translates into more income which improves the debt servicing capacity of borrower which in turn contributes to lower non-performing loans. Conversely, when there is

a slowdown in the economy (low or negative GDP growth) the level of NPLs should increase.

There is evidence of a positive relationship between the inflation rate and non-performing loans. Fofack (2005), for instance, shows that inflationary pressures contribute to the high level of impaired loans in a number of Sub-Saharan African countries with flexible exchange rate regimes. According to this author, inflation is responsible for the rapid erosion of commercial banks' equity and consequently higher credit risk in the banking sectors of these African countries.

Using a pseudo panel-based model for several Sub-Saharan African countries, Fofack (2005) finds evidence that economic growth, real exchange rate appreciation, the real interest rate, net interest margins, and inter-bank loans are significant determinants of NPLs in these countries. The author attributes the strong association between the macroeconomic factors and non-performing loans to the undiversified nature of some African economies. The author argues that this result is due to the large concentration of loans to the export-oriented agriculture sector, which was adversely affected by the appreciation in the currency of these countries during the 80s and early 90s.

Empirical studies tend to confirm the aforementioned link between the phase of the cycle and credit defaults. Quagliarello (2007) find that the business cycle affects the NPL ratio for a large panel of Italian banks over the period 1985 to 2002. Furthermore, Cifter*et al* (2009), using neural network based wavelet decomposition, find a lagged impact of industrial production on the number of non-performing loans in the Turkish financial system over the period January 2001 to November 2007.Furthermore, Cifter et al. (2009) provides empirical evidence for a lagged impact of industrial production on the number of NPLs in the Turkish financial system over the period 2001–2007. Salas and Saurina (2002) estimate a significant negative contemporaneous effect of GDP growth on NPLs and infer the quick transmission of macroeconomic developments to the ability of economic agents to service their loans (Bangia et al., 2002; Carey, 2002).

Dimitros*et al* (2010) found it plausible to include other macroeconomic variables, aside from GDP growth, such as unemployment and interest rates as these provide additional

information regarding the impact of macroeconomic conditions on household and firms. They found out that more specifically, an increase in the unemployment rate influence negatively the cash flow streams of households and increase the debt burden. With regards to firms, increases in unemployment signals a decrease in production as a consequence of a drop in effective demand. This leads to a decrease in revenues and a fragile debt condition. The interest rate affects the difficulty in servicing debt, in the case of floating rate loans. They concluded that increased debt burden caused from rising interest rate payments leads to a higher number of NPLs.

The choice of GDP, unemployment and interest rate as the primary determinants of NPLs may also be justified from the theoretical literature of life-cycle consumption models. Lawrence (1995) examines such a model and introduces explicitly the probability of default. The model implies that borrowers with low incomes have higher rates of default. This is explained by their increased risk of facing unemployment and being unable to pay. Additionally, in equilibrium, banks charge higher interest rates to riskier clients. Rinaldi and Sanchis-Arellano (2006) extend Lawrence's model by including the possibility that agents can also borrow in order to invest in real or financial assets. After solving the optimization problem of an agent, they derive the probability of default which depends on current income, the unemployment rate (which is linked to uncertainty regarding future income) and the lending rate.

**2.4.2 Bank Specific Factors**

Apart from macroeconomic variables, there is abundant empirical evidence that suggests that several bank specific factors (such as, size of the institution, profit margins, efficiency, the terms of credit (size, maturity and interest rate), risk profile of banks (measured by several proxies including total capital to asset ratio and loans to asset ratio) are important determinants of NPLs.

Bindra (1998) argues that the true underlying cause of non-performing Loans is entirely of our own making: poor risk mismanagement. This is a situation whereby the bank credit officials do not properly access the suitability of advancing credit to their customers; they do not adhere to the good lending principles. Practically all affected banks display similar

symptoms: insider lending; poor monitoring of loan accounts, under-qualified staff, little or no cash flow appraisal of loan projects. He concludes that loan losses can be minimized through professional management of the lending function. This requires careful appraisal of loan requests, continuous monitoring of customer conditions and proper follow up on how the loan has been utilized as there is a possibility that the loan may not be utilized for the intended purpose leading to project failures.

According to Brownbridge (1998), the single biggest contributor to the bad loans of many of the failed local banks was insider lending. In at least half of the bank failures, insider loans accounted for a substantial proportion of the bad debts. Most of the larger local bank failures in Kenya, such as the Continental Bank, Trade Bank and Pan African Bank, involved extensive insider lending, often to politicians. The threat posed by insider lending to the soundness of the banks was exacerbated because many of the insider loans were invested in speculative projects such as real estate development, breached large-loan exposure limits, and were extended to projects which could not generate short-term returns (such as hotels and shopping centres), with the result that the maturities of the bank's assets and liabilities were imprudently mismatched. He sites three forces behind insider lending and lists them as political pressure, under- capitalization, over concentration in ownership. He further observes that second major factor contributing to bank failure were the high interest rates charged to borrowers operating in the high-risk segments of the credit market. This involved elements of moral hazard on the part of both the banks and their borrowers and the adverse selection of the borrowers.

Keeton (1999) uses data from 1982 to 1996 and a vector auto regression model to analyse the impact of credit growth and loan delinquencies in the US. It reports evidence of a strong relationship between credit growth and impaired assets. Specifically, Keeton (1999) shows that rapid credit growth, which was associated with lower credit standards, contributed to higher loan losses in certain states in the US. In this study loan delinquency was defined as loans which are 90 days and above.Salas and Saurina, (2002); and Jimenez and Saurina (2005) also proposed excessive lending by commercial banks as an important determinant of NPLs.

The empirical evidence relating to the impact of bank size on NPLs appears to be mixed. For instance, some studies report a negative association between NPLs and bank size (see Rajan and Dhal, 2003; Salas and Saurina, 2002; Hu et al, 2006). According to these studies, the inverse relationship means that large banks have better risk management strategies that usually translate into more superior loan portfolios vis-à-vis their smaller counterparts. There are also studies which provide evidence of a positive association between NPLs and bank size (Rajan and Dhal, 2003). Empirical studies do not provide clear-cut evidence for a differential performance and risk attitude of big banks. For example, Boyd and Gertler (1994) argue that in the 1980s the tendency of US large banks towards riskier portfolios was encouraged by the US government's 'too-big-to-fail' TBTF policy. On the other hand, Ennis and Malek (2005) examine US banks' performance across size classes over the period 1983–2003 and conclude that the evidence for the TBTF distortions is in no way definite.

There is also evidence that shows a strong positive relationship between NPLs and the ratio of loans to asset, which captures the risk appetite of banks (Sinkey and Greenwalt, 1991). The supporting rationale is that banks that value profitability more than the cost of higher risk (represented by a high loan to asset ratio) are likely to incur higher levels of NPLs during periods of economic downturn.

State ownership seems to explain the behavior of risk taking of bankers and consequently the level of NPLs. Salas and Saurina (2002) argue that to enhance the economic development of the country, state-owned banks have more incentives to fund riskier projects and to allocate more favorable credits for SMEs. This inadequate risk taking behavior will lead to a higher level of NPLs. Micco et al. (2004) report that state-owned banks tend to have higher levels of NPLs, due to their weak credit recovery capacity compared to privately owned banks. Others suggest that the interaction between private and state shareholding in the same bank could determine the risk level taken by banks. Hu et al. (2004) argue that unjustified risky behavior is lower when the two groups check and balance each other.

Foreign ownership is known to have a positive impact on banks' soundness. Levine (1996) suggests that foreign shareholding improves the supply and the quality of financial services, enhance the overall supervisory environment and ease the access to international

financialmarkets. Lensink and Hermes (2004) find that foreign ownership leads to improve human capital through foreign manager which brings better skills and technologies, in particular in developing countries. This international expertise will also lead to improve local competencies through training and knowledge transfer. Empirically,Micco et al. (2004), examining a panel of emerging countries, find that foreign controlled banks are more performers than domestic ones. At the same time, Boubakri et al. (2005) show that foreign participation reduces the level of risk taking amongst bankson a sample of 81 banks from 22 developing countries.

Finally, the banking industry concentration can also affect the credit risk taking among banks (Fernandez de Lis et al., 2000). In monopolistic banking markets, lending institutions are willing to charge higher interest rates in the future to recover the losses incurred today. In this situation, lower quality clients will obtain loans from banks which leads to an increase in the NPLs in the future. This will not happen in competitive markets where lower quality clients do not accept to be charged with interest rates above the market rates. Petersen and Rajan (1995) find that in concentrated banking systems, younger clients (supposed to be of lower quality) are financed by banks in comparison to more competitive markets, leading thus to a higher level of problem loans. At the same time, Breuer (2006) finds a small but a significant positive association between banking industry concentration and nonperforming loans.

### 2.4.3 Client Specific Factors

The determinants of NPLs should not be sought exclusively among macroeconomic and bank specific factors, which are exogenous to the banking industry. The distinctive features of each individual borrower, particularly with respect to industry, management experience and liquidity risk, are expected to influence the evolution of NPLs. A strand in the literature examines the relationship between client-specific factors and NPLs.

The problem of NPLs is related to several internal and external factors confronting the borrowers (Muniappan, 2002). The internal factors are diversion of funds for expansion/diversification/modernization, taking up new projects, helping/promoting

associate concerns, time/cost overruns during the project implementation stage, business (product, marketing, *etc.*) failure, inefficient management, strained labour relations, inappropriate technology/technical problems, product obsolescence, *etc.,* while external factors are recession, non-payment in other countries, inputs/power shortage, price escalation, accidents and natural calamities.

Loan default is closely related to corporate bankruptcy (Lízal, 2002). The causes of bankruptcy are problems in the fields of indebtedness, profitability, liquidity and solvency (Altman, 1968). Firms are more likely to default if they are highly indebted, less profitable, less liquid, and if the legal system does not create efficient incentives to repay the loans. Selected financial ratios related to these factors are commonly used to predict the probability of corporate bankruptcy in developed financial markets (Altman, 1968; Beaver, 1966).

The use of owner's personal assets as collateral to secure a business enhances the creditor's claims of new assets (Berger and Udell, 1998). Owners using personal assets to secure the loans or lines are less likely to pursue unnecessary risky projects as there is more at stake; therefore, small businesses using owner collateral are less likely to default.

In addition, there are other characteristics of the firm, which influence the degree of the moral hazard problems and ultimately the risk of default. If the debtor is fully liable, the effects of investment decisions are internalized in the payoffs. In contrast, when the degree of debtor's liability is restricted, for example, if there are insufficient assets that can be used as collateral and can be liquidated in the case of failure, the debtor repays only in the case of a successful outcome. As a consequence, the incentives of the debtor are distorted if he is not (fully) liable (Bester, 1987, Holmström, 1996, and Hainz, 2003).

The character of the borrower also determines whether he will default on loan repayments. In a study of loan losses of US banks, McGoven (1998) argued that characterhas historically been a paramount factor of credit and a major determinant in the decision to lend money. Banks have suffered loan losses through relaxed lending standards, unguaranteed credits, the influence of the 1980s culture, and the borrower's perceptions.

Bloem and Gorter (2001) suggested that a more or less predictable level of non-performing loans, though it may vary slightly from year to year, is caused by an inevitable number of "wrong economic decisions" by individuals and plain bad luck (bad weather, unexpected price changes for certain products, *etc.*).

Fergal (2012), concluded that typical financial ratios, such as the ratio of the loan to total assets, the current ratio, leverage ratio, liquidity ratio and profitability ratio, are found to be significant predictors of default. Further, the length of time the borrowing firm's owner has been with the firm mitigates the likelihood of default. He used unique borrower-level balance sheet information for a cross-section of 6,000 Irish SME loans. McCann and McIndoe-Calder (2012) also used Altman's (1968) seminal Z-score for corporate defaults and found out that indebtedness, liquidity, profitability and sector-specific effects are important borrower-level determinants of SME default.

## 2.5 Conclusion

In conclusion, the key causes of non-performing loans in the banking industry are three-pronged. These are factors specific to internal organization, factors relating to the macro-economic policies, which ultimately determine how the economy works, and finally those factors relating to the actual management of business, Mucheke (2001).

There is no comparative study for the determinants of NPLs between different types of loans. It is to be expected that the weight of the various determinants (both macroeconomic, bank and client-specific) will be variable among different types of loans. For example macroeconomic developments such as the rate of unemployment may have different quantitative implications for the future number of business and consumer NPLs.

# CHAPTER THREE

# RESEARCH METHODOLOGY

## 3.1 Introduction

This chapter discusses the research design and methodology of the study; it highlights a full description of the research design and the research variables. The research instruments, data collection techniques and data analysis procedure have also been pointed out.

## 3.2 Research Design

The research design that was employed in this study was a descriptive survey design. Descriptive studies describe characteristics associated with the subject population. The dependent variable was SME NPLs and the independent variables were the economic conditions, Credit Analysis and monitoring, character and location of customer.

## 3.2 The Population of Study

The population of this study consisted of all the 44 commercial banks registered and operating in Kenya under the banking Act. Since a census survey was done, no sampling was required.

## 3.3 Data Collection Instruments

The primary data was collected using structured questionnaire. The questionnaires provided a more comprehensive view than any research tool. The questionnaires will include structured and unstructured questions and was administered through drop and pick method to two credit managers in each bank. Structured questions was used in an effort to conserve time and money and to facilitate easier analysis while the unstructured questions was used to encourage the respondents to give in-depth and felt responses without holding back in giving of information. Inflation rates & GDP data was collected from the Kenya National bureau of statistics.

## 3.4 Data Processing and Analysis

The researcher used both quantitative and qualitative techniques to analyze the data. Qualitative data from open ended questions was analyzed using content analysis and presented in prose form. Data obtained from research instruments was analyzed through Statistical Package for Social Sciences (SPSS) package and findings presented using descriptive statistical tools like graphs, tables and other measures of central tendency.

Based on review of the literature it is clear that there is extensive international evidence which suggests that NPLs may be explained by macroeconomic, bank-specific and client specific factors. In this study the client factors will be specific to SMEs. In the analysis, the researcher was employ a reduced form econometric model that is similar to Jimenez and Saurina (2005) to ascertain the determinants of SME Loan defaults in commercial banks in kenya.The model is a simple linear regression function that links the ratio of SME NPLs to total SME loans and key macroeconomic, bank specific and client specific variables. The general regression equation is of the form:

**Conceptual Model**

SME NPL=$f$($X_1$+ $X_2$+ $X_3$)…………………….Eq (i)

Where  $X_1$= Economic variables

$X_2$ = SME/Client Specific variables

$X_3$ = Bank Specific variables

**Analytical Model**

This is derived from the conceptual model depicted in equation (i) above

SME NPL=$\beta_0$ + $\beta_1$ $X_1$ + $\beta_2$ $X_2$ + $\beta_3$ $X_3$++ $\beta_3$ $X_4$+ $\beta_3$ $X_5\varepsilon$

Where

NPL=Ratio of SME NPLs to total SME loans

$X_1$ = Real Interest rate

$X_2$ = Credit Analysis and monitoring

$X_3$ = Loan Tenure

$X_4$ = Real rate of growth of the GDP

$X_5$ = Credit Analysis

$\varepsilon$ = error term

The above variables were measured as follows:-

The real interest rate was measured as the difference between weighted average lending rate and the annual inflation rate. Inflation was measured by the rate of interest over the last six months. Loan book both performing and NPLs was measured in Ksh. Loan tenure was measured by the number of years taken to repay the loan. In the model, the coefficient $\beta_0$ captures the idiosyncratic behaviour of commercial banks. The fixed effect coefficient allowed for detecting those factors affecting NPLs that do not change over time in all lending institutions and all loan types.

# CHAPTER FOUR

# DATA ANALYSIS AND INTERPRETATION

## 4.1 Introduction

This chapter presents analysis and findings of the study as set out in the research methodology. The study findings are presented on the relationship between the determinants of loan defaults by SMEs and the level of Non-performing loans associated with the SME loan book. The data was gathered exclusively from the questionnaire as the research instrument. The questionnaire was designed in line with the objective of the study. From the study population, 43 respondents from various commercial banks who deal with SME lending were selected and presented with a questionnaire, out of 43 respondents, 32 respondents filled and returned their questionnaires, constituting 74.4 % response rate. Data analysis was done through Statistical Package for Social Scientists (SPSS). Frequencies and percentages were used to display the results which were presented in tables, charts and graphs.

## 4.2 Background Information

From the findings on the respondent position in the bank, the study found that respondent held various position which were credit officers , credit analyst , operation managers , loan officer , officer , assistant managers , accountant and branch managers, this is an indication that most of the respondent were in the credit department .

**Figure 4.1: Lending to SMEs**
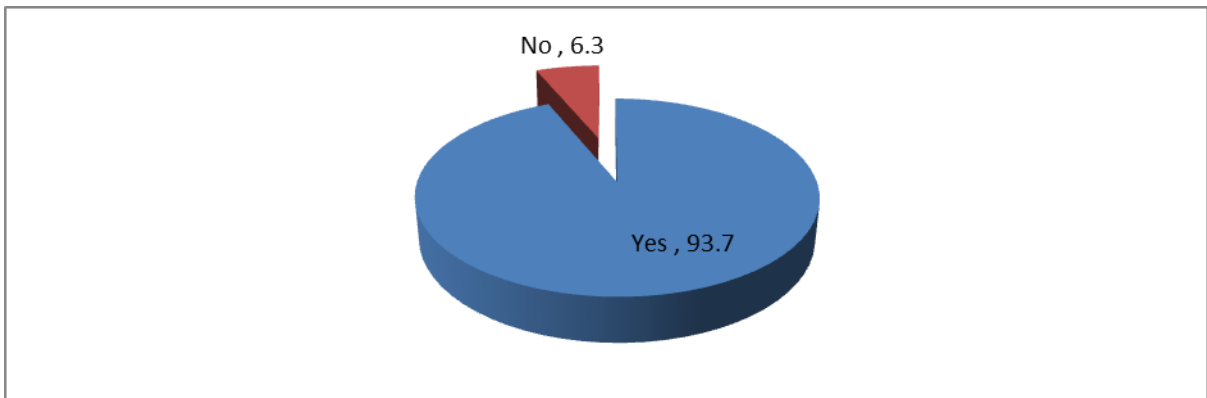
From the findings on whether the respondent bank were lending to SMEs, the study found that 93.7% of the respondent indicated that their bank was lending to SMEs whereas 6.3% (two banks, Citibank N.A and Commercial Bank of Africa) indicated that their bank didn't lend to SMEs, signifying an important realization amongst the banks of the importance of SME sector. The two banks were excluded in the analysis of the other factors.

**Figure 4.2: SMEs loan percentage**
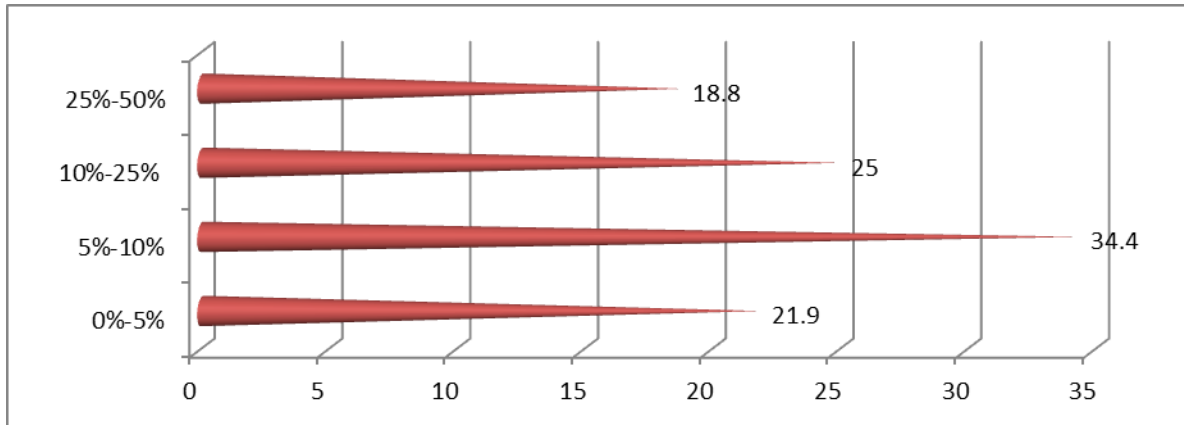


On the amount of SME Loan book as a percentage of the total Loan advances, from the findings the study found that 24.4% of the respondent indicated 5 to 10%, 25% of the respondent indicated 10% to 25%, 21.9% of the respondent indicated 0 to 5% whereas 18.8% of the respondent indicated 25 to 50%, this is an indication that most of the banks were offering more than 10% of loan to SMEs.

**Figure 4.3: Definition for small and medium enterprises by Turnover**
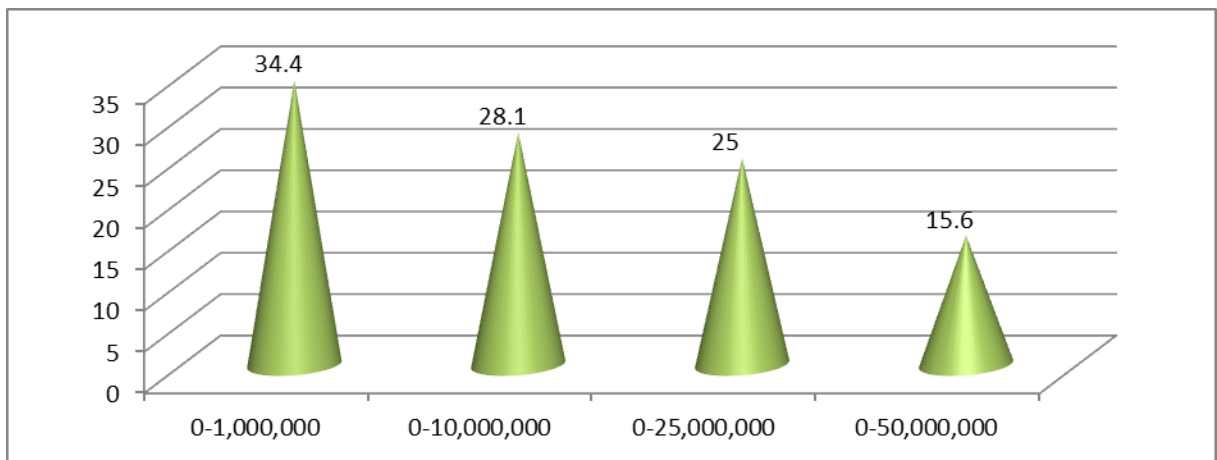
**Figure 4.4: Definition for small and medium enterprises by loan size**
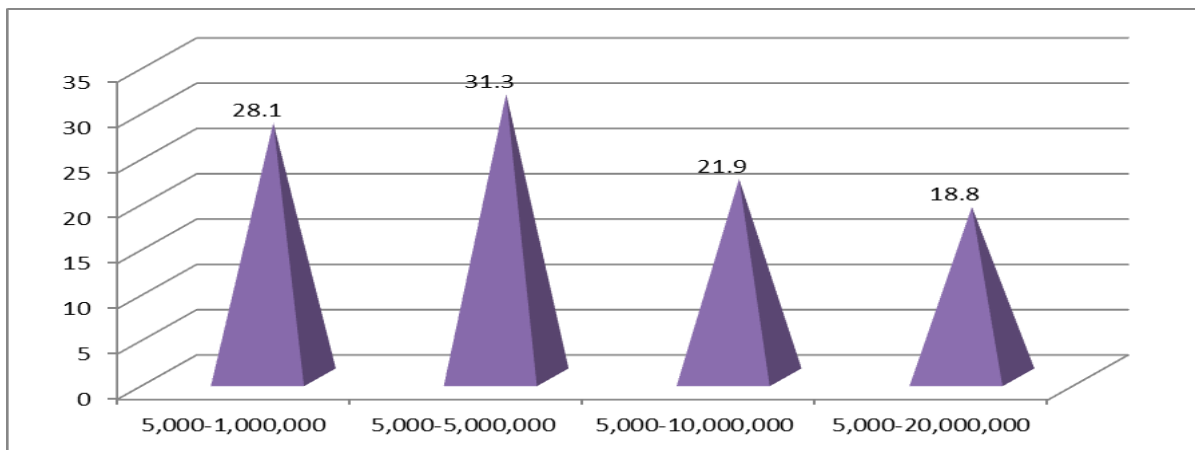


The definition of SME differed amongst the banks interviewed. As a general note, some of the banks interviewed especially the smaller banks and those which had a strong microfinance background, tended to have very low thresholds for a business to qualify as an SME. The bigger and more established traditional commercial banks tended to have much higher thresholds. The findings according to annual turnover, found that 34.4% of the respondent indicated that their banks define SMEs as one with annual turnover of less than 1,000,000, 28.1% of the respondent indicated annual turnover of less than 10,000,000, 25% of the respondent indicated 0 to 25,000,000 whereas 15.6% indicated that their bank defined SMEs as one with annual turnover of less than 50,000,000.

From the finding on the respondent banks definition of Small and Medium Enterprises according to their loan size, the study found that 31.3% of the respondent indicated 5,000-5,000,000, 28.1% of the respondent indicated 5,000-1,000,000, 21.9% of the respondent indicated 5,000-10,000,000 and 18.8% of the respondent indicated 5,000-20,000,000, this is an indication that most of the banks define SMEs a s the one accessing a loan of between 5,000-20,000,000.

**Table 4.1: Bank loan book associated with SME lending contain NPLs**

| Opinion | Frequency | Percent |
|---|---|---|
| Yes | 30 | 100 |
| No | - | - |
| Total | 30 | 100 |

All the banks interviewed and who lend to the SME sector have considerable portion of the Loan book as Non-performing.

**Table 4.2: Current level of NPLs associated with the SME sector**

| Level of NPLs | Frequency | Percent |
|---|---|---|
| 0% | 0 | 0 |
| 2% | 2 | 6.7 |
| 3% | 4 | 13.3 |
| 4% | 5 | 16.7 |
| More than 5% | 19 | 63.3 |
| Total | 30 | 100 |

From the findings on the current level of NPLs associated with the SME sector in the bank, the study found that 13.3% of the respondent indicated 3%, those who indicated 2% and 4% were shown by 6.7% and 16.7% respectively. Majority of those who responded 63.3% indicated that the NPLs in their books were more than 5%. This is a clear indication the non-performing loans is prevalent in this sector. The study further revealed that the trend of SME NPLs in the past three years has been increasing.

**4.3 Credit risk identification, assessment, measurement, monitoring and control**
**Table 4.3: Credit risk faced by bank when lending to SMEs**

| Risk | Percent |
|---|---|
| Lack of information on SMEs | 100 |
| Legal and contractual environment | 78.1 |
| High transaction costs | 65.6 |
| Lack of adequate collateral | 85.3 |
| Lending technology to SMEs | 56.3 |
| Inherent risk related to SME sector | 71.9 |

SME-specific factors are the most serious obstacle to the development of SME lending. From the findings on the credit risks faced by the bank when lending to SME sector, the study revealed that the lack of adequate and quality information was the biggest SME-specific hindrance and obstacle to SME lending, cited by 100 percent of the banks. The issue of collateral is a significant aspect with 85.3% percent of the banks mentioning the lack of adequate guarantees as an obstacle to SME lending. Legal and contractual environment as shown by 78.1%, inherent risk related to SME sector as shown by 71.9%, High transaction costs as shown by 65.6% and lending technology to SMEs as shown by 56.3%.

**Table 4.4: Influence of SME credit risk on credit provision to SME sector**

| Influence | Frequency | Percent |
|---|---|---|
| Extremely significant | 5 | 15.6 |
| Very significant | 19 | 59.4 |
| Significant | 8 | 25.0 |
| Total | 32 | 100.0 |

On the respondent rating the influence of SME credit risk on credit provision to SME sector at the bank, the study found that majority of the respondent as shown by 59.4% indicated they were very significant, 25% of the respondent indicated that they were significant whereas 15.6% of the respondent indicated that they were extremely significant, this is an indication that SMEs credit risk was very significant on credit provision to SMEs sector by the commercial banks.

**Table 4.5: Influence of SME credit risk on credit provision to SME sector**

| credit department structured | Frequency | Percent |
|---|---|---|
| Centralized | 19 | 63.3 |
| Decentralized | 11 | 36.7 |
| Total | 30 | 100.0 |

From the findings on the structure of credit department in the banks, majority of the banks 63.3% indicate that there structure is centralized and majority have a separate unit managing the banking relation with SMEs. On whether there are approval limits given to specific people or group of people, all respondent indicated that there were approval limits given to specific people or group of people.

**Table 4.6: Factors considered in SME credit appraisal process**

| Approval Factors | Strongly disagree | Disagree | Moderate | Agree | Strongly agree | Mean | Std deviation |
|---|---|---|---|---|---|---|---|
| Adequacy of collateral | 0 | 0 | 5 | 17 | 10 | 4.1707 | .66717 |
| Purpose of loan | 0 | 0 | 13 | 16 | 3 | 3.4756 | .72415 |
| Ability to repay | 0 | 0 | 8 | 16 | 8 | 4.0000 | .70711 |
| Financial conduct/record | 0 | 0 | 3 | 16 | 12 | 4.2927 | .64202 |
| Level of risk | 0 | 0 | 2 | 16 | 14 | 4.3902 | .58643 |

From the finding on the various factors considered in SME credit appraisal process before loan approval is granted, the study established that, level of risk as shown by mean of 4.3902, financial conduct/record as shown by mean 4.2927, adequacy of collateral as shown by mean of 4.1707 and ability to pay shown by a mean of 4.0 were considered as very important while purpose of loan as shown by mean 3.7756 was rated as less important.

**Table 4.7: Methods of risk assessment/management and sources of customer information**

| | Least used | Less used | moderate | Used | Most used | Mean | Std deviation |
|---|---|---|---|---|---|---|---|
| Self-judgment | 0 | 0 | 1 | 16 | 15 | 4.4390 | .54994 |
| Statistical method (credit scoring) | 0 | 0 | 10 | 11 | 11 | 4.4122 | .63726 |
| CRB | 0 | 0 | 3 | 14 | 15 | 4.3659 | .66167 |

On the methods of risk assessment/management and sources of customer information the bank use when lending to SMEs, the study found that the method mostly used were Self-

judgment as shown by mean of 4.4390 , Statistical method (credit scoring) as shown by mean 4.4122 and CRB as shown by mean of 4.3659.

**Table 4.8: Early signs of problematic SME loans in banks**

| | Minimal impact | Less impact | Moderate | Some impact | Great impact | Mean | Std deviation |
|---|---|---|---|---|---|---|---|
| Cash flow reduction/difficulties. | 0 | 0 | 2 | 16 | 14 | 4.3659 | .66167 |
| Breach of loan agreement (such as late payments) | 0 | 0 | 5 | 12 | 15 | 4.1463 | .69141 |
| Deterioration in the value of collateral | 0 | 0 | 9 | 18 | 5 | 3.8537 | .65425 |
| Business/Enterprise Failure | 0 | 0 | 3 | 5 | 23 | 4.6341 | .66167 |

From the findings on the early signs of problematic SME loans in banks that contributes to non-performing loans, the study revealed that those that had great impact were business/Enterprise failure as shown by mean 4.6341, those rated as having some impact were cash flow reduction/difficulties as shown by mean of 4.3659 and breach of loan agreement (such as late payments) as shown by mean 4.1463. Deterioration in the value of collateral as shown by mean 3.8537 is considered not be a sign since it is usually the last resort after all recovery measures of non-performing loans have been considered.

**Table 4.9: Frequency of monitoring SME loans at the bank**

| Frequency | Frequency | Percent |
|---|---|---|
| Daily basis | 6 | 20.0 |
| Weekly basis | 16 | 53.3 |
| Monthly basis | 8 | 26.7 |
| Total | 30 | 100.0 |

From the finding on the frequency of monitoring SME loans at the bank, the study revealed that 53.3% of the respondent indicated weekly basis, 26.7% of the respondent indicated

monthly basis whereas 20% of the respondent indicated daily basis, this is an indication that all the banks were keenly monitoring SMEs loans.

**Table 4.10: Credit risk management practices utilized by the bank**

| Credit risk management practices | Percent |
|---|---|
| Credit administration | 71.9 |
| Relationship lending (character & reliability) | 78.1 |
| Stress testing (identification of possible negative events) | 59.4 |
| Intensive loan monitoring | 68.8 |
| Internal controls | 87.5 |

The study revealed that the various credit risk management practices the bank utilized in the management of SME loans were internal controls as shown by 87.5%, Relationship lending (character & reliability) as shown by 78.1% , Credit administration as shown by 71.9%, Intensive loan monitoring as shown by 68.8% and stress testing (identification of possible negative events) as shown by 59.4%. The study further revealed that all respondents indicated that the credit risk management practice(s) utilized by the bank on SME were effective.

**Table 4.11: When loan is considered non-performing**

| | Frequency | Percent |
|---|---|---|
| Two late payments | 9 | 30.0 |
| Three late payments | 21 | 70.0 |
| Total | 30 | 100.0 |

From the findings on when the loan was considered as non-performing, the study found that 70% of the respondent indicated that their bank considered non-performing loans after three late payments whereas 30% of the respondent indicated that their bank considered non-performing loan after two late payment.

**Table 4.12: Bank following up payment of SME loan defaults**

| | Not important at all | Less important | Moderate | Important | Very important | Mean | Std deviation |
|---|---|---|---|---|---|---|---|
| Writing letters | 0 | 0 | 0 | 23 | 9 | 4.2683 | .44857 |
| Loan restructuring | 0 | 0 | 5 | 17 | 10 | 4.1707 | .66717 |
| Debt Collectors | 0 | 0 | 1 | 9 | 22 | 4.4585 | .52961 |
| Legal action | 0 | 0 | 4 | 12 | 16 | 4.3902 | .70278 |
| Write off | 0 | 0 | 2 | 17 | 13 | 4.3659 | .58121 |

On the methods used by bank to follow up for payment of SME loan defaults, the study found that those rate as important were debt Collectors as shown by mean of 4.4585, legal action as shown by mean of 4.3902, write off as shown by mean 4.3659, writing letters as shown by mean of 4.2683 and loan restructuring as shown by mean of 4.1707.

## 4.4 Determinants of SME NPLs and Challenges of Credit Risk Management
**Table 4.13: Type of loans where rate of default highest**

| Type of loan | Frequency | Percent |
|---|---|---|
| Overdraft | 5 | 16.7 |
| Terms of loan | 23 | 76.6 |
| Asset Based and Insurance premium Financing | 2 | 6.7 |
| LPOs | 0 | 0 |
| Total | 30 | 100.0 |

On the category of type of loans where the rate of default highest, the study found out that majority of the banks consider term loans 76.6% to have the highest rate of defaults, 16.7% of the respondent indicated overdrafts while asset based and insurance premium financing had least at 6.7%. This is an indication that term loans is the type of loan where default rate is very high amongst SMEs. On whether the Loan tenure/repayment period affect the rate of

default, the study revealed that the loan tenure/repayment affect the rate of default amongst SMEs.

**Table 4.14: Repayment period where loan defaults occur more**

|  | Frequency | Percent |
|---|---|---|
| 1 to 3 years | 7 | 23.3 |
| 3 to 5 years | 10 | 33.3 |
| More than 5 years | 13 | 43.4 |
| Total | 30 | 100.0 |

On the repayment period in which loan default occur more, the study found that 43.4% of the respondent indicated more than 5 years, 33.3% of the respondent indicated 3 to 5 years, whereas 23.3% of the respondent indicated 1 to 3 years, this is an indication that most loan with higher repayment period were susceptible to default.

**Table 4.15: Loan brackets where rate of default occur more**

|  | Frequency | Percent |
|---|---|---|
| 50,000-100,000 | 3 | 10 |
| 100,000-500,000 | 7 | 23.3 |
| 500,000-1,000,000 | 13 | 43.3 |
| Over 1,000,000 | 7 | 23.4 |
| Total | 30 | 100.0 |

On the loan bracket where the default rate occur more, the study found that 43.3% of the respondent indicated 500,000-1,000,000, 23.4% of the respondent indicated over 1,000,000, 23.3% of the respondent indicated 100,000-500,000 whereas 10% of the respondent indicated 50,000-100,000 , this is an indication that most of the loan over 500,000 by SMEs were more susceptible to default .

**Table 4.16: Major reasons why SMEs default on their loan repayment**

| | Not important at all | Less important | Moderate | Important | Very important | Mean | Std deviation |
|---|---|---|---|---|---|---|---|
| High interest rates | 0 | 0 | 2 | 12 | 18 | 4.4878 | .63726 |
| Poor credit analysis(KYC)& Loan monitoring | 0 | 0 | 1 | 14 | 17 | 4.4122 | .55326 |
| Business management and Control i.e How long the business has been in operation | 0 | 0 | 5 | 21 | 5 | 4.0000 | .59161 |
| Character of the Borrower | 0 | 0 | 9 | 12 | 12 | 4.0976 | .80015 |
| Changes in economic and political environment | 0 | 0 | 7 | 19 | 6 | 3.9756 | .65145 |
| Length of the customer relationship with the bank | 0 | 0 | 2 | 12 | 17 | 4.4634 | .63630 |

On the major reasons why SMEs default on their loan repayment the study revealed that those important were high interest rates as shown by mean of 4.4878, length of the customer relationship with the bank as shown by mean of 4.4634, poor credit analysis (KYC) and loan monitoring as shown by mean 4.4122, character of the Borrower as shown by mean of 4.0976, business management and Control i.e how long the business has been in operation as shown by mean 4.0 and changes in economic and political environment as shown by mean 3.9756.

**Table 4.17: Challenges the bank face in provision of credit to SMEs**

| Challenges | Percent |
|---|---|
| Data Integrity (accuracy, completeness & relevance | 78.1 |
| SME Credit Personnel (technical depth, expertise & level of turnover) | 56.3 |
| Collection Strategy (timely & involves specialists like debt collectors) | 71.9 |
| Internal risk ratings (timely, accurate & well documented) | 65.6 |
| SME Credit structure (effective, responsible & accountable) | 52.6 |

On the various challenges the bank face in provision of credit to SMEs, the study revealed that the major challenges were Data Integrity (accuracy, completeness & relevance as shown by 78.1 % and Collection Strategy (timely & involves specialists like debt collectors) as shown by 71.9%. Internal risk ratings (timely, accurate & well documented) as shown by 65.6% is also a challenge. Other challenges are SME Credit structure (effective, responsible & accountable) as shown by 52.6% and SME Credit Personnel (technical depth, expertise & level of turnover) as shown by 56.3%. The study revealed that the strategies that the bank can put in place to overcome the challenges associated with SMEs non performing loans and could help to reduce the level of NPLs associated with SME were stringent lending policies , use of six c of lending , credit risk scoring, risk monitoring and organizing training for SMEs on business management.

## 4.5 Regression Analysis

**Table 4.18: Model Summary**

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|---|---|---|---|---|
| 1 | .874[a] | .764 | .731 | .12225 |

Adjusted R squared is coefficient of determination which tells us the variation in the dependent variable due to changes in the independent variable, from the findings in the above table the value of adjusted R squared was 0.731 an indication that there was variation of 73.1% on non performing loan by SMEs due to changes in real interest rate, credit analysis and monitoring, loan tenure, real rate of growth of the GDP and Credit analysis. This shows that 73.1 % changes non performing loan by SMEs could be accounted for by due to changes in real interest rate, credit analysis and monitoring, loan tenure, real rate of growth of the GDP and Credit analysis. R is the correlation coefficient which shows the relationship between the study variables, from the findings shown in the table above there was a strong positive relationship between the study variables as shown by 0.874.

**Table 4.19: Coefficients**

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|---|---|---|---|---|---|---|
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | .878 | .357 | | 2.459 | .016 |
| | Real Interest rate | .305 | .097 | .402 | 3.145 | .002 |
| | Credit Analysis and monitoring | -.371 | .093 | -.091 | -.760 | .049 |
| | Loan Tenure | .158 | .100 | .183 | 1.583 | .017 |
| | Real rate of growth of the GDP | -.245 | .147 | -.182 | -1.664 | .010 |
| | Credit Analysis | -.162 | .063 | -.223 | -2.583 | .011 |

The established regression equation was

$Y = 0.878 + 0.305\ X_1 - 0.371\ X_2 + 0.158\ X_3 - 0.245\ X_4 - 0.162\ X_{5on}$

From the above regression equation it was revealed that holding real interest rate, credit analysis and monitoring, loan tenure, real rate of growth of the GDP and Credit analysis to a constant zero, non-performing loan by SMEs would stand at would stand at 0.878, a unit increase in real interest rate would lead to increase in the level of non-performing loan by a factors of 0.305, a unit increase in the level of credit analysis and monitoring would lead to decrease in the level of non-performing loan by a factors 0.371, unit increase in loan tenure would lead to increase in the level of non-performing loan by a factor of 0.158, a unit increase in Real rate of growth of the GDP would lead to decrease in the level of non-performing loans by a factors of 0.245 , a unit increase in credit analysis would lead to decrease in the level of non-performing loan by a factor of 0.162.

# CHAPTER FIVE

## SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

### 5.1 Introduction

This chapter presents analysis and findings of the study as set out in the research methodology. The study findings are presented on the relationship between the determinants of loan defaults by SMEs and the level of Non-performing loans associated with the SME loan book. The data was gathered exclusively from the questionnaire as the research instrument. The questionnaire was designed in line with the objectives of the study.

### 5.2 Summary of Finding

Contrary to the general view that financial institutions are averse to SME finance, Kenyan banks are on the whole very keen to have SMEs as clients and are adapting their internal systems to better serve this market segment. The findings indicate that banks consider the SME segment strategically important and are actively pursuing SMEs. The average SME loan portfolio in the study amounts to an average of 31 percent of total loans.

The role of credit risk management practices used by banks are to guard against potential default both at approval and even at the entire life span of any SME loan. The researcher found out that banks perceived SMEs as inherently risky with inadequate collateral and lack of information about them as the main challenges while engaging with them. Other constraints include legal and contractual environment, particularly judicial inefficiencies, and some bank-specific factors for example staffing and technology. The banks rated these perceived risks very significantly.

Kenyan banks have developed coping mechanisms to overcome the challenges in lending to the SME segment. Most banks have established separate units to be more responsive to the needs of their SME clients, in recognition of the inherent differences between SMEs and consumer and corporate clients. A few banks are allocating resources to provide training to their SME clients to improve their management skills and financial reporting. Though loan products remain largely standardized, there is an observable trend towards increasing tailoring, and banks are pursuing innovation and differentiation as a part of their SME

strategy. Lending remains overall based on collateral. Risk management is increasingly automated though banks, with the exception of foreign-owned institutions, have not yet embraced on a large scale the use of scoring and risk-rating technologies.

It was established from the study that there are various factors which are considered in SME credit appraisal process before loan approval is granted; level of risk, financial conduct/record, adequacy of collateral, purpose of loan and ability to repay. The methods commonly used by banks in risk assessment/management when lending to SMEs were self-judgment, statistical method (credit scoring) and CRB.

All the respondents analyzed in this study showed that the SME loan book in their banks had an element of Non-performing loans. The major reasons cited why SMEs default on their loan repayment include high interest rates, length of the customer relationship with the bank, poor credit analysis (KYC) and loan monitoring, character of the Borrower, business management and Control i.e how long the business has been in operation. Changes in economic and political environment were also considered. The respondents revealed that the strategies banks can put in place to overcome the challenges associated with SMEs non-performing loans and help to reduce the level of NPLs associated with SME are stringent lending policies, intensive loan monitoring, internal controls ,relationship lending (character & reliability) and organizing training for SMEs on business management.

## 5.3 Conclusion

The inherent risk in the SME sector induces banks to charge high interest rates on the loans granted to this sector. From the findings the study found that interest rates affect the level of Non-performing loans in commercial banks. It was also established that character of SME borrowers is a major determinant of Loan defaults and how long the business has been in operation. Most SMEs engage in start-up businesses which tend to fail resulting to loss of income and thus unable to meet loan repayment. Other factors that were considered to have contributed to the loan defaults by SMEs are loan term, type of loan, poor credit analysis and monitoring. In addition economic and political conditions affect the loan defaults to a larger extent. This is so because most SMEs rely on their businesses for their daily needs thus in times of hard economic times the SME borrower will channel all the business income for

survival. The study also revealed that loan loss by SMEs was high compared to other sector this is because the collateral offered by this sector to a larger extent is irrecoverable resulting to huge write-offs.

## 5.4 Recommendations

Irrespective of the inherent risk associated with SMEs, banks should consider reducing the interest rate charged. This can be achieved by employing credit scoring models in vetting the customers and also Credit Reference Bureaus. Customers with good financial record should be granted loans at a lower interest rate. The study further recommends proper training of the SME staff and frequent monitoring of the SME Loans. SME customers should also be trained on business management and financial skills; this can be one on one when appraising/vetting the customer or through scheduled seminars.

## 5.5 Areas for Further Research

The study recommends an in-depth study to be carried out to investigate the effectiveness of Credit Scoring Models used by Commercial Banks in Kenya in reducing the level of Non-performing Loans.

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## Appendix I: Questionnaire

Dear Respondent,

Introduction

Thank you for your willingness to respond to this questionnaire, I am carrying out a research to assess the determinants of the Non-performing loans by SMEs. All the information you will provide will be treated as confidential and will only be used for purposes of this study. The final report of this study will not disclose individual names or any other information that may identify you as an individual.

Kindly answer the questions by ticking and explaining where necessary.

**Section I: Background Information**

1. Institution information
   a) Bank
      Name…………………………………………………………………………
   b) Your position in the Bank
      ……………………………………………………………….

2. Does your bank lend to SMEs?

   Yes                  [ ]

   No                 [ ]

3. What is SME Loan book as a percentage of the total Loan advances?

   0%-5%                [  ]

   5%-10%              [  ]

   10%-25%            [  ]

   25%-50%            [  ]

   Greater than 50%    [  ]

4. Specifically provide your bank's definition for Small and Medium Enterprises
   a) Annual Turnover
      0-1,000,000                         [  ]

0-10,000,000            [   ]

0-25,000,000            [   ]

0-50,000,000            [   ]

0-100,000,000            [   ]

0-500,000,000            [   ]

b) Loan Size

     5,000-1,000,000         [   ]

     5,000-5,000,000         [   ]

     5,000-10,000,000         [   ]

     5,000-20,000,000         [   ]

     5,000-> 20,000,000         [   ]

5. NPL Levels

a) Does your bank loan book associated with SME lending contain NPLs?

     Yes            [ ]

     No            [ ]

b) What is the current level of NPLs associated with the SME sector in your bank?

     ➤ 0%            [ ]

     ➤ 1%            [ ]

     ➤ 2%            [ ]

     ➤ 3%            [ ]

     ➤ 4%            [ ]

     ➤ More than 5%         [ ]

c) Has the trend of SME NPLs in the past three years been increasing, constant or decreasing? State as appropriate?

**Section II: Credit risk identification, assessment, measurement, monitoring and control**

6. What credit risks are faced by your bank when lending to SME sector? (**Select all that apply**)

   Lack of information on SMEs         [  ]

   Legal and contractual environment      [  ]

   High transaction costs            [  ]

   Lack of adequate collateral          [  ]

   Lending technology to SMEs         [  ]

   Inherent risk related to SME sector     [  ]

   Others (Specify)

   -------------------------------------------------------------------------------------------------------

7. How would you rank the influence of SME credit risk on credit provision to SME sector at your bank?

   Extremely significant            [  ]

   Very significant               [  ]

   Significant                  [  ]

   Not significant                [  ]

   Not at all                   [  ]

8. Credit Appraisal/Analysis

   a) How is your credit department structured?

   Centralized     [  ]

   Decentralized   [  ]

   b) Does the bank currently have a separate unit managing the banking relation with SMEs?

   Yes           [  ]

   No            [  ]

   c) Are there approval limits given to specific people or group of people?

   Yes           [  ]

   No            [  ]

d) The following factors are considered in SME credit appraisal process before loan approval is granted (**starting with 1 – Strongly disagree to 5-Strongly agree**) rank the factors with respect to credit risk measurement at your bank?

| Approval Factors | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| Adequacy of collateral | | | | | |
| Ability to repay | | | | | |
| Purpose of loan | | | | | |
| Financial conduct/record | | | | | |
| Level of risk | | | | | |

e) Which of the following methods of risk assessment/management and sources of customer information does your bank use when lending to SMEs? **Rate on a scale of 1 to 5 where1=Method least used and 5=Method most used.**

| | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| Self-judgment | | | | | |
| Statistical method (credit scoring) | | | | | |
| CRB | | | | | |
| Others, specify…………………….. | | | | | |

9. The following are some of the early signs of problematic SME loans in banks, kindly list the factors in a scale of **1(Greatest impact) to 5 (Minimal impact)** in the proportion it contributes to non-performing loans?

| | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| Cash flow reduction/difficulties. | | | | | |
| Deterioration in the value of collateral | | | | | |
| Breach of loan agreement (such as late payments) | | | | | |
| Business/Enterprise Failure | | | | | |

10. What is the frequency of monitoring SME loans at your bank?

Daily basis            [   ]

Weekly basis          [   ]

Monthly basis         [   ]

Annual basis           [   ]

11. The following are credit risk management practices; does your bank utilize any of them in management of SME loans? (**Select all that apply**)

Credit administration                                              [ ]

Relationship lending (character & reliability)                     [ ]

Stress testing (identification of possible negative events)        [ ]

Intensive loan monitoring                                          [ ]

Internal controls                                                  [ ]

Others (Specify) --------------------------------------------------------------------------

12. Do you think the credit risk management practice(s) utilized by your bank on SME is/are effective?

Yes                    [  ]

No                     [  ]

13.  If Yes, explain

…………………………,…………………………………….....................................

……………………………………………………………………………………………

…………………………………………………………………………………………….

14. If No, explain

………………………………………………………………………..……………

……………………………………………………………………………………

15. When is a loan considered as Non-performing?

One late payment        [  ]

Two late payments       [  ]

Three late payments     [  ]

Others, specify………    [  ]

16. How does your bank follow up for payment of SME loan defaults? **Rate on a scale of 1 to 5 where1=Very important and 5=Not at all important**

|  | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| Writing letters |  |  |  |  |  |
| Loan restructuring |  |  |  |  |  |
| Debt Collectors |  |  |  |  |  |
| Legal action |  |  |  |  |  |
| Write off |  |  |  |  |  |
| Others, specify……………………………………… |  |  |  |  |  |

**Section III: Determinants of SME NPLs and Challenges of Credit Risk Management**

17. What category of type of loans is the rate of default highest?

    a) Overdrafts (ODs)                                 [  ]

    b) Term Loans                                              [  ]

    c) Asset Based and Insurance premium Financing    [  ]

    d) LPO's                                                [  ]

    e) Any Other,………………………….        [  ]

18. Does the Loan tenure/repayment period affect the rate of default?

    Yes                    [  ]

    No                    [  ]

19. Between which repayment period(s) do loan defaults occur more?

    Less than 1 year       [  ]

    1-3 years            [  ]

    3-5 years            [  ]

    More than 5 years   [  ]

20. Between which loan brackets does the rate of default occur more?

    0-50,000                       [  ]

    50,000-100,000            [  ]

    100,000-500,000          [  ]

    500,000-1,000,000       [  ]

    Over 1,000,000           [  ]

21. What are the major reasons why SMEs default on their loan repayment? **Rate on a scale of 1 to 5 where1=Very important and 5=Not at all important.**

| | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| High interest rates | | | | | |
| Poor credit analysis(KYC)& Loan monitoring | | | | | |

| Business management and Control i.e How long the business has been in operation | | | | | |
|---|---|---|---|---|---|
| Character of the Borrower | | | | | |
| Changes in economic and political environment | | | | | |
| Length of the customer relationship with the bank | | | | | |

22. What challenges does your bank face in provision of credit to SMEs? (**Select all that apply**)

    Data Integrity (accuracy, completeness & relevance)            [ ]

    SME Credit Personnel (technical depth, expertise & level of turnover)     [ ]

    Collection Strategy (timely & involves specialists like debt collectors)    [ ]

    Internal risk ratings (timely, accurate & well documented)        [ ]

    SME Credit structure (effective, responsible & accountable)       [ ]

    Others (Specify)

    ……………………………………………………………………………………………

23. What strategies do you think your bank can put in place to overcome the challenges stated above and reduce the level of NPLs associated with SME?

    ..............................................................................................................................................

    ..............................................................................................................................................

Thank you & God bless.

**Appendix II: List of Commercial Banks in Kenya**

1. African Banking Corporation Ltd
2. Bank of Africa Kenya Ltd
3. Bank of Baroda (K) Ltd
4. Bank of India
5. Barclays Bank of Kenya Ltd
6. CFC Stanbic Bank Ltd
7. Charterhouse Bank Ltd(Under-Statutory Management)
8. Chase Bank (Kenya)
9. Citibank N.A. Kenya
10. Commercial Bank of Africa Ltd
11. Consolidated Bank of Kenya Ltd
12. Co-operative Bank of Kenya Ltd
13. Credit Bank Ltd
14. Development Bank of Kenya Ltd
15. Diamond Trust Bank Kenya Ltd
16. Dubai Bank Kenya Ltd
17. Ecobank Kenya Ltd
18. Equatorial Commercial Bank Ltd
19. Equity Bank Ltd
20. Family Bank Ltd
21. Fidelity Commercial Bank Limited
22. Fina Bank Ltd
23. First Community Bank Ltd
24. Giro Commercial Bank Ltd
25. Guardian Bank Ltd
26. Gulf African Bank Ltd
27. Habib Bank AG Zurich
28. Habib Bank Ltd
29. I & M Bank Ltd
30. Imperial Bank Ltd
31. Jamii Bora Bank Ltd
32. Kenya Commercial Bank Ltd
33. K-Rep Bank Ltd
34. Middle East Bank (K) Ltd
35. National Bank of Kenya Ltd
36. NIC Bank Ltd
37. Oriental Commercial Bank Ltd
38. Paramount Universal Bank Ltd
39. Prime Bank Ltd
40. Standard Chartered Bank Kenya Ltd
41. Trans-National Bank Ltd
42. UBA Kenya Bank Ltd
43. Victoria Commercial Bank Ltd
44. Housing Finance