# THE EFFECT OF CREDIT ASSESSMENT PROCESS ON REPAYMENT OF BANK LOANS IN COMMERCIAL BANKS IN KENYA

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# **DECLARATION**

This research project is my original work and h	as not been submitted for a degree in any
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# **DEDICATION**

This project is dedicated to my beloved children Velarie Atieno and Christian Hawi, may God cause you to scale even greater heights in your academic pursuits and have the best in life.

#### ACKNOWLEDGEMENTS

I acknowledge the my able supervisor Dr Josiah Aduda, moderator Mr Mirie Mwangi. I salute them for their support and guidance which were instrumental in seeing through my project work. Without their dedication and commitment and selfless sacrifice this project would not have been a success.

My husband was very supportive through my entire course by proving me with the emotional and material support that was vital for accomplishing the entire master's degree course. He was and has been most supportive through the course. My mentor deserves special mention for having been a good mentor, role model, source of encouragement and support.

I acknowledge the support I got from colleagues at national Bank , friends and teachers all whom it may not be possible to make mention by names .

# LIST OF ABBREVIATIONS AND ACRONYMS

CBK Central Bank of Kenya

SBCS Small Business Credit Scoring

5Cs Capacity, Capital, Collateral, Conditions, Character

5Ps People, Purpose, Payment, Protection, Prospective

LAPP Liquidity, Activity, Profitability, Potential

CAMPARI Character, Ability, Margin, Purpose, Amount, Repayment,

Insurance

PACT Person, Activity, Collateral, Terms

NPLs Non Performing Loans

CRBs Credit Reference Bureaus

PCA Principal Component Analysis

CCAF Comprehensive Credit Assessment Framework

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#### **ABSTRACT**

The purpose of this study was to determine the impact of credit assessment process on loan repayment. The methodology employed in the study was a census survey. The study targeted all the 43 commercial banks registered in Kenya as at December 2013. Data collection was by means of a self-completion questionnaire which was filled by credit assessment officers. Secondary data was obtained from the annual reports from the publications by the Central Bank of Kenya. A response rate of 65.33 % was achieved which was considered adequate for analysis. The parameters considered under the credit appraisal processes were; the 5C's Process, 5P's Process, CAMPARI Process, LAPP Process, PACT Process and financial ratios. The factors in the credit assessment process that were analyzed include; policy, screening, appraisal and review. The study revealed that no one credit appraisal technique was used in isolation, with the banks opting to use more than one of each of the credit appraisal techniques. The most commonly used process was the 5C's followed the use of financial ratios which had means of 1.96 and 2.64 based on a scale of 1 to 5 where 5 used to a very large extent while 5 was used to very little extent. PACT was the least used appraisal with a mean of 3.54 followed by LAPP with 3.14. The CAMPARI and 5Ps techniques had means of 2.89 and 2.96 respectively. A correlation analysis revealed that the use financial ratios was closely related to CAMPARI, PACT and LAPP appraisal processes which had correlation coefficients of 0.923, 0.819 and 0.709 respectively. Banks that used the 5Cs process tended to use the 5Ps as well as this had a correlation coefficient of 0.849. A regression analysis revealed that the main predictors of the credit appraisal process were financial ratios, the personal or corporate profile and the adequacy in staffing. The level of staffing was noted to cause work overload in some of the banks which reduced staff morale and efficiency. Factor analysis applied on the collected data using principal component analysis (PCA) produced three main components which had a cumulative factor score of 93.7%. The component that was related to previous business performance had the greatest weight of 52% while factors related to the future business prediction such as business plans, and the general business profile accounted for less than 30 % in considering the credit worthiness of borrowers. The study revealed there were weaknesses in credit appraisal policies (82%), which allowed rogue bank staff to award loans to non-qualifying applicants. The respondents however agreed the drafting of appraisal policies involved the input of bank staff. The study also revealed that the banks yet to fully integrate computerized credit appraisal techniques to include lie detectors to weed out borrowers who supply false information knowingly.

# CHAPTER ONE INTRODUCTION

# 1.1 Background to the Study

Commercial banks play a vital role in the economic resource allocation of countries. The main business of Banks is to take deposits, give loans and charge interest. According to Gatonye (1995), the banking industry plays three broad roles in an economy. These include; financial intermediation between savers and borrowers, Implementation of government policies by way of money supply management, and facilitating the flow and interaction of various economic activities. Financial performance of banks has critical implications for economic growth of countries. On the other hand, poor bank performance leads to banking failure and financial crisis. According to Al-Tamimi (2010), the performance of commercial banks is influenced by internal decisions of management and country wide factors which are usually beyond the control of the bank. One of the key sources of revenue for banks is generation of interest which is generated through credit advancement. The provision of credit Ingham (2004), argues is the provision of resources such as granting a loan by one party to another party where the second party does not reimburse the first party immediately, thereby generating a debt and instead arranges either to repay or return those resources or materials of equal value at a later date. One of the key challenges facing commercial banks in Kenya however is loan repayment. According to the central bank of Kenya (CBK) survey of 2009 nonperforming (NPLs) loans increased from 58.3 billion to 64.9 billion Kenyan shillings in 2009, an increase of 7.8 %. These increased to 1.2 trillion Kenya shillings in 2011.

### 1.1.1 Credit assessment

According to Nsereko (1995), credit assessment is the process through which the credit applicant presents the necessary documentation to the bank in order to obtain a loan. Feder et al, (1980) argues that if bank lending is not properly assessed, there is a higher probability that the borrower will not be able or willing to honor their loan repayment obligations. Derban et al, (2005) argues that borrowers should be screened by banks as a form of credit assessment. He further notes that an effective analysis should include

qualitative and quantitative techniques when assessing the borrowers. Mamman et al, (1994) argues that serving borrowers requires strong loan appraisal and monitoring systems. According to the Credit reference bureau report (2005), Kenyan commercial banks employ rigorous credit assessment processes although they are yet to excel in the management of their loan portfolio. The credit appraisal system remains the only guarantee that loans are repaid by ensuring that only that only those borrowers who require credit and are able to meet repayment obligations can access credit(Polizatto et al, 1990).

Simonson et al, (1999) observed that sound credit policy would help improve prudential oversight of asset quality, establish a set of minimum standards and apply a common language and methodology (assessment of risk, pricing, documentation, securities, authorization, and ethics) for measurement and reporting of nonperforming assets, loan classification and provisioning. The credit policy should set out the bank's lending philosophy, specific procedures and means of monitoring the lending activity evaluation. The decision of granting a loan is arrived at after an analysis has been carried out by a committee of more than one person, thus reducing the risk of one person abusing the authority granted.

There are various methods of assessing credit worthiness of borrowers, they include; the 5C's, 5P's, LAPP method, CAMPARI, PACT method, Financial Analysis and Previous Experience Methods. The 5C's, according to Peavler (2013), is an approach of assessing credit worthiness which is defined as follows: Capacity refers to borrower's ability to meet the loan payments of interest and principal. Capital is the money invested in the business and is an indicator of how much is at risk should the business fail. Collateral is a form of security for the lender. Banks usually require collateral as a type of insurance in case the borrower cannot repay the loan. Conditions refer to the economic and political conditions of the country. Character is the obligation that a borrower feels to repay the loan. Since there is not an accurate way to judge character, the lender will decide subjectively whether or not the borrower is sufficiently trustworthy to repay the loan.

Abrahams et al, (2008) argue that Comprehensive Credit Assessment Framework (CCAF), offers a comprehensive rating system that enables lenders to classify credit risk using the Five Cs of credit.

Federal Reserve Center (2004), defines 5P's as a method of evaluating credit applications which consists of People, Purpose, Payment, Protection and Prospective. People; whether the borrower has a history of being honest, reputable and timely in honoring his or her financial obligations. Purpose; there should be a specific explanation of how the borrower is going to use the funds. Payment: Knowing the purpose helps identify sources of repayment and aids in structuring the loan repayment schedule based on the timing of the borrower's receipt of funds .Protection: This is collateral and other secondary sources of loan repayment. Prospective is last on the list of P's Prospective; which refers to how the loan will be supervised, and what the bank will do in the case of borrower defaults. Benz (1979), argues that LAPP Method consist of the following: Liquidity: which measures the ability of the firm to repay its short term obligations, Activity: which measures the size of the firm and its operations, Profitability: which measures how profitable the firm is. Potential: this measures the resources and strength the firm has.

According to Business coaching (2008), the CAMPARI Model represents 7 variables the bank can use to evaluate credit applications. They include; Character; ability to pay, similar to capacity. Margin of finance; this is the amount the customer contributes from the loan. The purpose of the loan, the amount of the loan and repayment terms; that is the structure, terms of repayment. Insurance; in the event the borrower dies, the loan can be settled from insurance proceeds. Financial Analysis and Previous Experience Methods as observed by Karsh (2005), depend on analyzing the financial records of the applicants and on its past records of credit. PACT; is another process of assessing a loanee, where P is the Person, A is Activity, C is Collateral and T is Terms. Each variable contains several elements and a weight for these elements is estimated to make them easy to use. Banks choose their credit policies according to the level of risk they are ready to accept.

Basel Committee on Banking Supervision (2005), stipulates that, bank's internal rating models are used for more objective approval of loans by inclusion of the client in a class rating and pricing of loans. Most banks ration credit in order to reduce risk and to avoid risk of adverse selection and moral hazard. Lapar et al, (1988) argues that bank's credit lending assessment consists of the screening stage at the evaluation stage, and the quantity-rationing stage, hence determines the optimal loan size for a borrower.

# 1.1.2 Loan Repayment

Loan repayment has been defined by the Cambridge business English dictionary, as the act of making payments towards a loan. Repayment usually takes the form of periodic payments that normally include part of principal plus the interest in payment. The other common method of repayment is a lump sum with interest on maturity. Starbiz (2010), argues that repayment problem is an unresolved issue faced by the majority of commercial banks. According to HuaShen et al, (2008) Loans recovery depends on the extent to which loans outlays are recovered in full. Measures on payment include; the use of loans guarantors, moral suasion, baring access to further credit if in default and legal action against unruly defaulters. The main factors influencing loan repayment rates include; social economic characteristics such as gender, educational level, marital status, household income level and peer pressure in group based schemes (Reta, 2011).

Different banks use different methods to calculate loan repayment schedules depending on; their needs, borrowers' needs, the institution's interest rate policy, the length of the loan period, and the purpose of the borrowed money. They Include: Amortized loan, Sinking Fund Method, The equal principal payment plan and the balloon method. The Amortized loan method is where each payment consists of the interest due on the outstanding loan balance and the rest of the payment which goes towards reducing the outstanding loan balance, referred to as the principal payment. The Sinking Fund Method according to Gutierrez (2014) is where payments made prior to the end of the loan term do not contain any portion of the principal; they only go toward the interest hence a single "lump-sum" payment repays the entire loan at the end of the loan term.

Equal principal payments per time period plan provides for payment of accrued interest on the unpaid balance, plus an equal amount of the principal. Banks also use a balloon system where equal payments over a specified time period are made with a balloon payment due at the end to repay the balance. The balloon method often is used to reduce the size of periodic payments and to shorten the total time over which the loan is repaid. To do this, a portion of the principal will be due in a lump sum at the end of the loan period. To calculate the payment amount, all terms of the loan must be known: interest rate, timing of payments, length of loan and amount of loan, (Kuhn ,2000).

## 1.1.3 Theoretical framework

Stiglitz et al, (1981) in asymmetry theory, argues that in credit markets, borrowers typically have more information about their investment opportunities, their own character and their prior indebtedness than lenders. This asymmetry of information gives rise to selection problems for lenders and potential moral hazard of borrowers .Borrowers' peculiar characteristics, failure of lending agencies in properly screening projects and/or borrowers, government credit policy and the general economic environment of the country are hypothesized to be central issues behind the explanation of poor loan recovery of retail customers, who have a relationship with their savings bank prior to applying for a loan, default significantly less than customers with no prior relationship. Suggest that relationships of all kinds have inherent private information and are valuable in screening, in monitoring, and in reducing consumers' incentives to default.

Hoff et al, (1990) argues that major advances in theoretical understanding of the credit markets have pointed out that borrowers and lenders may have differential access to information concerning a projects risk, hence they may form different appraisal of the risk. What is clearly observed in credit market is asymmetric information where the borrower knows the expected return and risk of his project, where as the lender knows only the expected return and risk of the average project in the economy. Problems of

imperfect information and enforcement lead to inefficiency of credit market which in turn leads to default.

# 1.1.4 Commercial Banks in Kenya

According to Rose (2002), a commercial bank is a business corporation organized for the purpose of maximizing the value of the shareholders' wealth invested in the firm at an acceptable level of risk. The banking system in Kenya is regulated by the Central Bank Central Bank of Kenya (CBK). According to the banking survey report carried out by the central bank of Kenya in 2009, commercial banks in Kenya fall in three tiers based on asset value. Tier group one, are banks with an asset base of more than Ksh40 billion, tier group two are commercial banks with asset base of between Ksh40 billion and Ksh10 billion while tier group three are banks with asset base of less than Ksh10 billion.

According to the 2009 Banking Survey, there are eleven commercial banks in tier group one, eleven commercial banks in tier group two and twenty on commercial banks in tier group three comprising to a total of forty three commercial banks. Profitability of the 43 commercial banks that were in operations in 2008 averaged Ksh1027.628 billion, while of the 42 banks in 2007 averaged Ksh818.19 billion. The operations of the 40 commercial banks that were in operation in 2006, 2005 and 2004 resulted to average profits of Ksh644.3 billion, Ksh465.75 billion and Ksh351.15 billion respectively. Net profits as a proportion of total assets for the banks averaged 0.0225 in 2008, 0.02434 in 2007, 0.02444 in 2006, 0.0182 in 2005 and 0.0132 in 2004.

Credit risk as one of the most challenging risks faced by banks in Kenya (Wafula et al., 2012). Musyoki et al,(2011) that default rate accounts for 54% in total credit risk in banks in Kenya. According to Irungu(2011), the total outstanding loan portfolio for commercial banks in Kenya was 1.2 trillion and a statistic by index show the total non-performing loans was 54% in 2011. Nonperforming loans impacts on a bank's performance by reducing its revenue as they become expenses.

The Central Bank of Kenya in their Prudential Guidelines (2006) classifies the commercial banks' risk factors into nine (9) categories namely: strategic risk, credit risk, liquidity risk, interest rate risk, price risk, foreign exchange rate risk, operational risk and regulatory risk. According to Saunders et al, (2003) credit or default risk is the risk that the promised cash flows from loans and securities held by financial institutions may not be paid in full. Failure to control risks, especially credit risk, can lead to insolvency.

Kenya is an East African sovereign state; politically it is divided into 47 semi autonomous counties, governed by elected governors. Kenya has been inhabited by humans since the lower Paleolithic period and is a multi-cultural country. Its capital and largest city is Nairobi which is a regional commercial hub. Kenya lies on the equator within the Indian Ocean to the south east, Tanzania to the south, Uganda to the west, south Sudan to the North West and Somalia to the northeast the country covers 581,309 km²and has a population of about 44 million in July 2012. Agriculture is a major employer and service industry is a major economic driver country

# 1.2 Research problem

Many commercial banks that collapsed in Kenya since 1986 failed due to non performing loans. Failure to disclose vital information during the loan application process was considered to be the main customer specific factor. According to Mullei (2003), Daima bank was placed under statutory management for failing to meet the minimum core capitalization threshold, as well as poor management of loan portfolios. Sinkey et al, (1991), argues that the risk of non-performing loans mainly arises as the external economic environment becomes worse off such as economic depressions and plain bad luck. Mwega(2009) stipulates that the performance of commercial banking industry in Kenya has improved tremendously over the last decade, since only two banks have been put under CBK statutory management compared to 37 bank-failures between 1986 and 1998. However, in the same period the level of interest rates have remained high implying an attempt by commercial banks to pass their inefficiencies to consumers. Despite the growth in the Kenyan banking sector, the sector still faces many challenges

with respect to management of risks that banks are exposed. According to Odunga (2013), the banking sector in Kenya has grown tremendously over years in terms of numbers, size and profitability. Despite growth in the sector, challenges still remain, market risk, credit and operational risk posses a major challenge.

Kithinji (2010) assessed the effect of credit risk management on the profitability of commercial banks in Kenya. The findings revealed that the bulk of the profits of commercial banks are not influenced by the amount of credit and non-performing loans, therefore suggesting that other variables other than credit and non-performing loans impact on profits. According to Oloo (2010), despite the good overall financial performance of banks in Kenya, banks continue to write off bad debts as losses, thus to take precautionary and mitigating measures, there is need to determine why there is an increase in non repayment of bank loans. This study aims at investigating the impact of credit assessment on repayment of loans in commercial banks.

# 1.3 Objectives of the study

The objective of this research study shall be to:

i. Determine the impact of credit assessment process on loan repayment in commercial banks in Kenya.

# 1.4 Value of the Study

The study shall provide useful information to various categories of individuals and groups as follows;

The findings will be helpful to scholars and academicians by contributing to the already known knowledge in credit risk management and assessment procedures in the banking industry. Research gaps identified shall form a basis for further research.

The findings will be helpful to investors and users of banking services such borrowers and shareholders by providing information on the requirement on loan application so as to avoid delays upon loan application and processing.

To commercial banks, this paper will provide an insight into the credit risk attributes which may need to be incorporated in their investment decision processes and impact of different methods of assessing borrowers.

# **CHAPTER TWO**

### LITERATURE REVIEW

#### 2.1 Introduction

In this chapter, information relating to the objectives of this study is reviewed. It will involve a critical examination of important issues so as to determine the current facts. It forms the link between the current study, past studies and future studies that may need to be explored in a bid to deepen knowledge. This literature review is mainly on the impact of credit assessment on loan repayment in commercial banks. The specific areas covered include; a review of guiding theories, empirical review, general literature and the conclusion thereof.

#### 2.2.1 Information Theories of Credit

According to stiglitz (1981), Information theories of credit refer to the amount of credit to firms and individuals would be larger if financial institutions could better predict the probability of repayment by their potential customers. The more banks know about the credit history of prospective borrowers, the deeper credit markets would be. Public or private credit registries that collect and provide broad information to financial institutions on the repayment history of potential clients are crucial for deepening credit markets. The information that each party to a credit transaction brings to the exchange will have important implications for the nature of credit contracts; the ability of credit markets to match borrowers and lenders efficiently and the role played by the rate of interest in allocating credit among borrowers.

Walsh (2003), stipulates that the nature of credit markets can lead to distinct roles for different types of lenders and different types of borrowers. Stiglitz et al, (1981) argue that when lenders know more about borrowers, their credit history or other lenders to the firm, they are not as concerned about the "lemons" problem of financing non-viable projects, and therefore extend more credit. Legal origin also has implications for financial developments.

Beck et al, (2004) identified a political and an adaptability channel through which legal origin affects credit markets. The political channel depends on the balance between state power and private property rights. For example, civil law that promotes institutions that favor state power over private property rights would tend to have adverse implications for the growth of credit markets. The adaptability channel recognizes that legal traditions differ in their ability to evolve efficiently because judges respond case by case to changing conditions. Both channels imply that countries whose law is French in origin should have on average slower financial development than British common law countries. Risk is the possibility that the actual return on an investment will be different from the expected return on that investment.

Credit risk has been defined as the distribution of financial losses due to unexpected changes in the credit quality of a counter party in a financial agreement. Earlier, in both Europe and America, businessmen seeking credit information had occasionally hired agents or organized in local associations to share information and protect themselves from credit losses. The credit granting process leads to a choice between two actions; to give the new applicant credit or to refuse. Credit scoring tries to assist this decision by finding what would have been the best rule to apply on a sample of previous applicants. This is the basis of credit scoring approach where a decision to accept or reject an application is made (Thomas et al 2002). It allows for case by case risk management assessment when appraising a loan application.

# 2.2.2 Hold-up and Soft-Budget-Constraint Theories

Banks choice of multiple-bank lending is in terms of two inefficiencies affecting exclusive bank firm relationships, namely the hold-up and the soft-budget-constraint problems. According to the hold-up literature, sharing lending avoids the expropriation of informational rents. This improves firms' incentives to make proper investment choices and in turn it increases banks' profits.

As for the soft-budget-constraint problem, multiple-bank lending enables banks not to extend further inefficient credit, thus reducing firms' strategic defaults. Both of these

theories consider multiple-bank lending as a way for banks to commit towards entrepreneurs and improve their incentives. None of them however, addresses how multiple-bank lending affects banks' incentives to monitor, and thus can explain the apparent discrepancy between the widespread use of multiple-bank lending and the importance of bank monitoring.

According to Carletti et al, (2006) when one considers explicitly banks' incentives to Monitor multiple-bank lending may become an optimal way for banks with limited lending capacities to commit to higher monitoring levels. Despite involving free-riding and duplication of efforts, sharing lending allows banks to expand the number of loans and achieve greater diversification. This mitigates the agency problem between banks and depositors, and it improves banks' monitoring incentives. Thus, differently from the classical theory of banks as delegated monitors, their paper suggested that multiple-bank lending may positively affect overall monitoring and increase firms' future profitability.

# 2.2.3 Theory of Credit Scoring and Competitive Pricing of Default Risk

Lenders use credit scores to regulate the extension of consumer credit. People with high scores are offered credit on more favorable terms. People who default on their loans experience a decline in their scores and, therefore, lose access to credit on favorable terms. People who run up debt also experience a decline in their credit scores and have to pay higher interest rates on new loans limited credit or credit at higher interest rates following default arises from the lender's optimal response to limited information about the agent's type and earnings realizations. The lender learns from an individual's borrowing and repayment behavior about his type and encapsulates his reputation for not defaulting in a credit score.

While this exogenous exclusion restriction is broadly consistent with the empirical facts, a fundamental question remains. If lenders believe that bankruptcy signals something relatively permanent about the household's unobservable characteristics, then it may be optimal for lenders to limit future credit. But if the circumstances surrounding bankruptcy

are temporary like a transitory, adverse income shock, those individuals who have just shed their previous obligations may be a good future credit risk.

Competitive lenders use current repayment and bankruptcy status to try to infer an individual's future likelihood of default in order to correctly price loans. There is virtually no existing work embedding this inference problem into a quantitative, dynamic model. Given commitment frictions, it's important for a lender to assess the probability that a borrower will fail to pay back. That is, assess the risk of default. In the U.S, lenders use credit scores as an index of the risk of default. The credit scores most commonly used are produced by a single company, the Fair Isaac and Company and are known as FICO scores .These scores range between 300 and 850. Where a higher score signals a lower probability of default are considered high risk, often called "subprime."

# 2.2.4 Theoretical Model of Equilibrium

The theoretical model of equilibrium with credit rationing follows from the pioneering work of Stiglitz et al, (1981) the model is based on imperfect credit markets characterized by information asymmetry, which makes it too costly for banks to obtain accurate information on the borrowers and to monitor the actions of the borrowers. The model assumes the existence of many banks that seek to maximize their profits through their choice of interest and collateral (thereby reducing the probability of default on their loans) and many potential borrowers who seek to maximize their profits through the choice of projects.

The probability of success of the projects is unknown to the bank but known to the firms due to information asymmetry. In addition the borrowers may choose to shift from safe projects that yield normal returns to high risk projects that promise high returns but with a low probability of success and the bank has no control over such actions of the borrowers. All projects yield the same value if they fail. Banks therefore compete by choosing interest rate and also use interest rates as a screening device for distinguishing bad risks from good risks. The borrowers are assumed to demand loans of fixed sizes to

finance projects that have the same expected returns. Under this scenario, high risk borrowers are willing to pay a higher interest rate for a loan. Increase in interest charged by the bank may actually lead to a decline in the expected profit of the bank due the adverse selection effect and the incentive effect which results from a change in the behavior of borrowers to shift from safe to high risk projects.

Banerjee (2008), argues that equilibrium with credit rationing therefore occurs at the interest rate at which the bank maximizes the expected profit. Under conditions of imperfect credit markets characterized by information asymmetry, interest rates fail to play the market clearing role of equating demand and supply. But rather the banks adopt the strategy of credit rationing using the non-price mechanisms so as to maximize their expected profits. The bank's credit rationing behavior may theoretically be influenced by a number of factors which include the borrower's observable characteristics (age, gender, wealth, experience, credit history), firm characteristics (business experience, risk profile, earnings), and loan characteristics (amount demanded, loan maturity, collateral offered, interest rate).

Lapar et al (1988) argued that the bank's credit rationing behavior against the firm's loan demand can be categorized into three stages: the screening stage, the evaluation stage, and the quantity rationing stage. At the screening stage, the bank manager interviews the potential borrower to determine their eligibility for credit. The manager then decides whether the applicant is sufficiently qualified to apply for a loan or not. At the evaluation stage, the loan officer undertakes a detailed analysis of the viability of proposed investment project including detailed investigations of the credit history, the type and value of proposed collateral, management of the firm, and probability of repayment.

Based on this information, the loan officer makes a decision as to whether it will be profitable for the bank to grant a loan or not. The borrowers deemed to be not creditworthy will be denied loans completely. At the quantity-rationing stage, the bank determines the optimal loan size for a borrower at a given interest rate. The optimal loan

size will be determined by the bank taking into account the bank's evaluation of the probability of repayment, the marginal cost of granting the loan, and the value of collateral offered.

Quantity rationing here refers to a scenario where some borrowers are granted loan amounts that are less than what they had applied for. It is at quantity- rationing stage that the bank fine tunes the loan contract to reflect the bank's subjective evaluation of the riskiness of the loan and of the borrower and the impact of these risks on expected profit. According to Hoff et al, (1990), the degree of risk of a firm also has an influence on the willingness of banks to offer bank loans. Firms for which the repayment of the loan is more uncertain are more risky for the bank, and hence are more likely to be credit rationed. The risk for the bank implies the default risk, being the risk that the firm can't fulfill its obligations to the bank. The degree of risk of the firm may be inferred from the credit history of the borrower, the expected returns of the project, business experience of the firm. According to Guido (2008) also argued that credit rationing may also originate from a lender's inability to classify loan applicants in proper risk categories, which effect is particularly strong when novel technologies are involved.

### 2.3 Determinant of repayment of bank loan

The recovery of loan advanced to bank creditors can be attributed many factors which may range from economic conditions, credit management and administration, and interest rate. One of key determinants of loan repayments depend on the robustness with which credit appraisal systems can intelligently and efficiently manage customer credit lines. Credit appraisal minimizes on the risk to borrowers' exposure to bad debts, over-reserving and bankruptcies (Sindani et al, 2012). The credit assessment gives the banks an insight into the customer's financial strength, credit score history and payment patterns. The effectiveness of the credit appraisal system depends on the procedures and methods applied in the credit evaluation (Glen, 1996). According to Horne (20007), credit appraisal methods used in banks range from simple subjective or informal techniques to fairly complex approaches such as the use of simulation and computer

generated models. The aim of these procedures is to ensure that customers are thoroughly scrutinized before advancing credit.

The ability to repay loans can be influenced to a large extent by the level interest charged on borrowed funds. Kariuki (2010) argue that when interest rates are low, borrowers are able and willing to service their loans. High interest rates on the other hand discourage payments and loan applications. Borrowers are more likely to default on loan repayment when the rates of interest increase faster than the consumer's income.

It has been observed that policies guiding credit management and administration influence loan repayments. According to Kariuki (2010) loan repayments can be improved if loan recovery from slow payers. He argues some of the bad debts incurred by banks arise because of lack of appropriate policies that can accelerate recovery. This is necessary because some customers would simply decide not to repay loan if bank conditions allow.

According to Pandy, (2008) economic conditions greatly influence loan repayments. He argues that businesses undergo economy wide fluctuation or cycles which may disrupt the ability of customers to repay their loan as earlier planned for several months or years. The credit policies on disbursement and recovery of funds should therefore factor such considerations into their planning

# 2.4 Empirical Studies

Wanjira, (2010) studied the relationship between non- performing loans management practices and financial performance of commercial banks in Kenya. The study concluded that there is a need for commercial banks to adopt non-performing loans management practices. Such practices include ensuring sufficient collaterals, limiting lending to various kinds of businesses, loan securitization, ensuring clear assessment framework of lending facilities and use of procedures in solving on problematic loans among others. The study further concluded that there was a positive relationship between

nonperforming loans management practices and the financial performance of commercial banks in Kenya which implies that the adoption of non- performing loans management practices leads to improved financial performance of commercial banks in Kenya.

Ochola (2009) conducted a study of the relationship between credit risk management and non-performing loans. The objective of the study was to establish the degree of effect of employing different credit management techniques on the level of non-performing loans. In assessing this, the study sought to establish the relationship between credit risk and management and non-performing loans by pursuing a survey in the Kenyan banking sector. The research found that in Kenyan setup, a combination of intensive credit risk management practices by the banks coupled with close supervision by Central Bank has greatly enhanced the decline of non-performing loans ratio in the banking sector. Analyzing the asset quality of the financial sector for 2003 to 2008, the ratio of gross non-performing loans to gross loans declined from a high 35% in 2003 to a low of 9.23% in 2008. The decline of this ratio confirms a close relationship between non-performing loans and credit risk management.

Vigano (1993), studying on determinants of loan default risk, employed a credit scoring model for commercial Banks a case of the Development Bank of Burkina Faso, found out that customer's characteristics, enterprise characteristics and customer's activity, profitability and revenue stability, asset value and composition, financial situation, loan use, bank-customer relationship, contractual conditions and credit risk control, quality of information and the customer's banking behavior influenced the bank's credit risk. The study revealed that being women, married, aged, proximity to the bank, use of better technology and being flexible to adjust to market changes, proper use of the loan, project diversification, frequency of loan maturity, collateral, personal guarantee and being a preexisting depositor are negatively related to loan default risk. Loans in kind, long waiting period from application to disbursement and being younger firm, past default, existence of other loan are those positively related to loan default rate.

A study made on loan repayment determinants under the Social Emergency Loan Scheme in Nigeria by Njoku et al, (1991) indicated that poor loan repayment performance was due to late release of loan funds, cumbersome loan application procedures, disbursement procedures, and emphasis on political considerations in loan approvals. In addition, loan diversion to non-agricultural enterprises as well as low enterprise returns resulting from low adoption rate of improved agricultural technologies contributed to poor loan repayment performance of small holders. Loan volume, years of farming experience, farming as major occupation, years of formal education, household size, loan period, farm size, farm output, value of assets and interest paid on loan were all highly significant determinants of loan default. The coefficients of loan volume, years of formal education, household size and interest paid on loan are positive while the coefficients for years of farming experience, loan period, farm size, and farming as major occupation, farm output and value of assets are negative.

The Credit control policy has also been noted to influence the loan repayment as it determines the criteria of selecting loans. Credit 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. 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. 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 (Payle1997). Greuning et al (1999) observe that the lending policy should be in line with the overall bank strategy and the factors considered in designing a lending policy should include; the existing credit policy, industry norms, general economic condition and the prevailing economic climate

# 2.5 Summary of literature

The board and management of commercial banks establish policies and procedures which ensure that the bank has a well documented credit granting process, a strong portfolio management approach, prudent limits, effective credit review and loan classification procedures and an appropriate methodology for dealing with problem exposures. Because lending represents the central activity of banks and underpins their profitability, loan pricing tends to be the focal point of both revenues and costs.

Borrowers are screened by banking institutions in form of credit assessment. Collection of reliable information from prospective borrowers becomes critical in accomplishing effective screening as indicated by asymmetric information theory. Qualitative and quantitative techniques are used in assessing the borrowers although one major challenge of using qualitative models is their subjective nature. screening is important in reducing adverse selection and moral hazard where money is advanced in exchange for the promise of future repayment, moral hazard is controlled by reducing the asymmetric information between borrower and a bank. This is done by collecting sufficient information on which to base loan decisions. Bank screening process is not deterministic, but includes elements of subjective assessment or discretion which is associated with lower frequencies of default. It can be based on quantitative credit scores or a deterministic function.

The findings from this study did reveal that the Kenyan commercial emphasize the historical financial performance what the loan will be used for. A study by done in Nigeria by Njoku et al, (1991) revealed that borrowers who diverted funds to other projects other than those originally approved were likely to default on loan repayments. This finding therefore is a clear signal to commercial banks that the credit appraisal should be tied to the loan intended purposes. In the same study it was observed that poor loan repayment was caused by the giving of loan based on political considerations.

# CHAPTER THREE METHODOLOGY

### 3.1 Introduction

This chapter presents the research design, the population, sample size, sampling technique, nature of data to be used by the study, data collection tools, pretesting of research instruments, data collection procedure, measurement and analysis. To achieve the objective of this chapter, it therefore includes target population, sample, data collection instruments, data collection procedures and finally data analysis techniques.

# 3.2 Research design

Research design constitutes the blueprint or the roadmap for the collection, measurement, and analysis of data. According to Kothari (2004), research design is a plan, a roadmap and blueprint strategy of investigation conceived so as to obtain answers to research questions (Kothari, 2004), it is the heart of any study. A research design refers to an overall strategy chosen to integrate the different components of a research study in a coherent and logical manner. The purpose of a research design is to ensure that that the critical issues of the study are adequately addressed. A Research designs provides an action plan or model which dictate the manner in which sampling, data collection and analysis is carried out (Creswell, 2003)

This research study adopted a descriptive census survey design. According to Mugenda and Mugenda (2003), a descriptive design is adequate in describing phenomena, attitude and values and characteristics. Orodho (2003) argues that a descriptive design survey design allows researchers to gather, present and interpret information. This study sought to find out the relationship between loan repayment and credit assessment process which can be answered by adopting a descriptive design. A survey usually involves selecting a group of people or items to be studied for purposes of collecting information which is considered as representative of the entire group. Collected information when analyzed is used to draw generalizations for the entire group (Nworgu, 1991)

### 3.3 Population

Cooper and Emory (1995) define population as the total collection of elements about which the researcher wishes to make inferences. The population for the study is the 43 commercial banks operating in Kenya as at December 2013 (Appendix II). The researcher targeted respondents who are credit mangers from all the commercial banks in Kenya because they are best placed to provide information about credit assessment in the banks.

### 3.4 Sample size

This being a survey study on credit assessment processes in commercial banks in Kenya; the respondents were credit managers in all the 43 commercial banks. A total of 43 respondents were targeted, one respondent from each of the banks.

#### 3.5 Data collection

Primary data was collected through questionnaires which were given out to the respondents. The data collected provided answers to the impact of credit assessment process on loan repayment in commercial banks in Kenya.

The structured questionnaire which involved both closed and open ended questions was developed from an extensive review of literature and was designed on the on the basis of the research objective, that is the determination of impact of credit assessment process on loan repayment in commercial banks in Kenya. Completed questionnaires were collected directly from the respondents, and this enabled the researcher to clarify any issues that were not clear to the respondents.

Secondary data will be gotten from the financial statements of the banks, of the commercial banks. Loan default rates and information on riskiness in the banking sector were obtained from the central bank quarterly and annual surveys. Bank discussion and interviews were also used to clarify and get more information on responses that were not clear

# 3.6 Data analysis

This study used both descriptive and inferential statistics to analyze the data. Analysis was done using the Statistical package for social scientists (SPSS Version 20). Secondary data was collected and then the regression analysis was carried out. Analyzed data was arranged in a meaningful form, using tables of frequencies, percentages and charts. Factor analysis was used to reduce the dimensionality of original space and to give an interpretation to the new space, spanned by a reduced number of new dimensions which are supposed to underlie the old ones and explain the variance in the observed variables in terms of underlying latent factors, and enable the interpretation of the data easily. Factor analysis was used as a technique of reducing the dimensionality of the factors used in the study.

The multi linear Regression Model bellow was used. The regression equation is of the form:

$$Y = \alpha + \beta X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \epsilon$$

Where:

Y = loan repayment rate

 $X_1$  = credit policy

 $X_2$  = credit appraisal technique

 $X_3 = screening$ 

 $X_4$  = credit appraisal

 $X_5$  = credit review

 $\alpha$ = is the constant term.

β are coefficients

 $\varepsilon$  is the error term

Where Y is the dependent variable measured by loan default rate (loan repayment rate).

 $\alpha$ = is the constant term.  $\beta$  is the regression coefficient,  $\beta_1$ ,  $\beta_2$ ,  $\beta_3$ ,  $\beta_4$ , and  $\beta_5$ , are the slopes of the regression equation while  $\varepsilon$  is an error term.

 $X_1$ ,  $X_2$ ,  $X_3$ ,  $X_4$ , and  $X_5$  are the independent variables.  $X_1$  is the control variable, while  $X_2$  -  $X_5$  the components of the credit assessment process.

Different credit appraisal techniques are applied, and the various banks indicated their preferred technique. Credit policies establish the framework for lending and guide the credit-granting activities of the bank by addressing such topics as target markets, portfolio mix, price and non-price terms, the structure of limits, approval authorities, and exception processing and reporting. Screening criteria sets out who is eligible for credit and for how much. Credit appraisal involves the assessment of various risks that can impact on the repayment of loan, and evaluation processes of determining the creditworthiness of the borrowers. Credit review process is done to assess the quality of credit or a credit relationship based on documentation such as financial statements.

### 3.7 Validity and Reliability

Validity is the ability of an instrument to measure what it is designed to measure. According to Mugenda et al, (2003) validity is the accuracy and meaningfulness of inferences which are based on the research results. According to Nachmais et al (1996)., reliability refers to the extent to which a measuring instrument contains variable errors that appears inconsistently from the observation to observation during any one measurement attempt or that vary each time a given unit is measured by the same instrument. He further continues to look at it as a ratio of the true score variance to the total variance in the scores as measured.

Half split method was used to test reliability, where correlation coefficient was adjusted using the Spearman-Brown prophecy

#### CHAPTER FOUR

### DATA ANALYSIS, FINDINGS AND DISCUSSION

#### 4.1. Introduction

This chapter presents the results obtained from the research study together with the appropriate interpretations and the discussion of the findings. The chapter presents the main findings of the research study based on the main research objective which was to determine the impact of credit assessment process on loan repayment amongst commercial banks in Kenya.

The methodology used was a census survey design because of the small number of banks involved in the study. The researcher targeted 43 respondents from all the registered commercial banks in Kenya. The researcher used both primary and secondary data sources. Questionnaires were used to collect primary data while secondary data was obtained from central bank of Kenya. Out of a total of 43 questionnaires issued, a total of 28(65.33%) fully filled and usable questionnaires were recovered. A response rate of 50% is considered good in surveys as it can be assumed to be representative of the population under study (Mugenda & Mugenda ,2003).

### 4.2 The demographic profile of respondents

The researcher considered the demographic profiles of the respondent as important for this study. The respondents were therefore required to indicate their levels of education, work experience and if they had undertaken any educational training in credit assessment and evaluation prior to assuming their responsibilities as credit assessment officers.

# **4.2.1. Educational qualifications**

The researcher was interested to know about the Educational qualifications of the respondents. This was important for the research study because the education level is a predictor of the ability to understand well the issues that were the subject of the study. The respondents were therefore requested to indicate their highest academic educational

qualifications. The findings were summarized, tabulated and presented as shown in table 4. 2.1

**Table 4.2.1 Educational Qualifications** 

Education level	frequency	Percent	total
Graduate	18	64.3	64.3
Post graduate	10	35.7	100.0
Total	28	100.0	

The findings were evident that the minimum qualification for credit appraisal personnel was university level education. There were a total of 18(64.3%) respondents whose maximum education qualification was a basic university degree. There were 10(35.7%) respondents who were holders of post graduate degree qualifications while the majority 18(64.3%) had post graduate educational qualifications. The researcher was therefore satisfied that the respondents were knowledgeable enough to provide information that would be relevant to answering the questions raised under the study.

# 4.2.2 Years of experience

The years of experience were pertinent to the study because it was the researcher wanted to be sure that the respondents had accumulated sufficient knowledge about credit appraisal techniques and procedures in commercial banks which the research was interested about. Respondents were therefore required to indicate the level of their work experience with the banks which was captured in the number years. The findings were captured and presented as shown in table 4.2.2

Table 4.2.2 . Years of experience

Experience	Frequency	Percent
0-3	4	14.3
4-7	11	39.3
8-10	7	25.0
>10	6	21.4
Total	28	100.0

The findings from the study revealed that the majority of the respondents 11(39.3%) had a work experience of between 4 and 7 years. There were 7(25%) respondents who had worked for between 4 and 7 years. Those respondents who had worked for more than ten years were 6(21.4%), while 4 (14.3%) respondents had worked for fewer than 3 years. The majority of the respondents 24 (85.7%) had worked for more than 4 years as credit assessment and appraisal officers with their banks. The experience gathered as credit officers was sufficient to understand and provide information that was required for the study relating to credit assessment.

### 4.2.3 Courses undertaken in credit assessment

The researcher was interested to know if the credit appraisal staff had undertaken any special courses in credit appraisal and credit assessment processes. This was important for the study because the objective of the study was to determine the impact of credit assessment on loan repayment. The years of experience would be a reflection of the level of expertise on credit appraisal which would impact on the ability to handle the credit appraisal process in a manner that would filter high borrowers at the appraisal stage. The findings were captured and tabulated as shown in table 4.2.3

Table 4.2.3. Training undertaken on credit appraisal

Parameter	Frequency	Percent	frequency	c. frequency
Yes	23	82.1	82.1	82.1
No	5	17.9	17.9	100.0
Total	28	100.0	100.0	

## 4.3 credit appraisal techniques

The main objective of the study was to determine the impact of the credit appraisal process on loan repayment. The researcher considered that credit appraisal process techniques were a critical component in determining the objectivity and accuracy of the credit assessment process. Respondents were therefore required to indicate the extent to which various credit assessment techniques were used.

The credit appraisal techniques chosen included the 5C's Process, 5P's Process, CAMPARI Process, LAPP Process, PACT Process and the use of financial ratios. These techniques are models that are used to establish the credit worthiness of borrowers. The techniques can summarized as 5C's: Capacity, Capital, Collateral, and Conditions & Character, 5P's: People, Purpose, Payment, and Protection & Prospective. LAPP: Liquidity, Activity, Profitability& Potential. CAMPARI: Character, Ability, Margin, Purpose, Amount, Repayment &Insurance. PACT: Person, Activity, Collateral &Terms. The use of financial ratios and past experience were also considered.

## 4.3.2 5C's process.

The 5C's process credit appraisal process involves the examinations of borrower's riskiness using capacity capital, and collateral as the key parameters. The respondent therefore were required to indicate the extent to which the 5Cs model was applied based on a scale of 1 to 5, where 1 was very large extent, 2 large extent, 3 not sure, 4 little extent and 5 no extent. The findings were presented in table 4.3.2

Table 4.3. 2. 5C's credit assessment process.

Extent	frequency	Percent
Very large extent	17	60.7
not sure	6	21.4
no extent	5	17.9
Total	28	100.0

The study findings revealed that the 5C's there were 17(60.7%) of banks that used the 5C's process to a large extent. The majority of the banks it was therefore evident did not consider this process as important. Those banks that did not use the model of 5 C's to a large would therefore be assumed to be less than 40 % of all the banks surveyed. The researcher concluded that the 5C's technique model was the most preferred technique among the alternatives available to the banks for credit assessment.

#### 4.3.3. The 5 Ps Process

The researcher was interested in knowing the extent to which the commercial banks used the 5Ps appraisal technique. The findings were captured and presented as shown in table 4. 3.3

Table 4.3.3 the 5 Ps Process

Extent	Frequency	Percent
large extent	11	39.3
not sure	12	42.9
no extent	5	17.9
Total	28	100.0

The findings revealed that the 39 % of the banks used the 5ps appraisal technique to a large extent where as 42% were not sure if this was applied. The rest of the banks (17.9 %) indicated that the process was not applied. It was observed that this process was less popular than the 5Cs which among other things included the character of the borrowers.

### **4.3.4 The LAPP Process**

The researcher was interested to know the extent to which the banks used The Lapp Process. The findings for the technique were captured and presented as shown in table 4.3.4.

**Table 4.3.4 The LAPP Process** 

Extent	frequency	Percent
large extent	6	21.4
not sure	17	60.7
no extent	5	17.9
Total	28	100.0

The findings from the study revealed that revealed that the Lapp process was ranked the same as the 5Cs process by the respondents. There were six banks that were using the process to a large extent. The majority of the respondents did not seem to be sure if the process was used or not.

# **4.3.5** The CAMPARI process

The CAMPARI process is one of the credit assessment techniques that is used to evaluate credit worthiness of borrowers. It involves the assessment based on various parameters which include: Character, Ability, Margin, Purpose, Amount, and Repayment and Insurance.

**Table 4.3.5 The CAMPARI process** 

Extent	Frequency	Percent	c. percent
very large extent	6	21.4	21.4
large extent	6	21.4	42.9
not sure	6	21.4	64.3
little extent	5	17.9	82.1
no extent	5	17.9	100.0
Total	28	100.0	

The study revealed that there were 12 banks which were using the CAMPAPRI process to a large extent. Compared to the 5 P process, the 5 Cs process, and the LAPP process, the CAMPARI process was observed to be a more popular borrower credit riskiness assessment process in commercial banks.

The process was found to be in use among 42.9 % of the commercial banks that participated in the study. Five of the banks indicated that the process was used to a little extent, while another five indicated that they were not sure if the process was used. It was safe to assume that where respondents were not sure of the use of the use of a given technique then the process was not used or if used to a very little extent.

## 4.3.6 The Financial ratios Analysis and Previous Experience Process

The researcher considered the use of financial ratio and previous experience as an important component for predicting the riskiness of borrowers. Financial ratios give the historical financial performance and this can be used to predict the future repayment ability ceteris paribus. The respondents were therefore required to indicate the extent to which the use of financial ratios was applied. The findings were captured, analyzed and presented in table 5.3.6

Table 4.3.6 the Financial Analysis and Previous Experience Process

Extent	Frequency	Percent	c. percent
very large extent	12	42.9	42.9
large extent	6	21.4	64.3
no extent	10	35.7	100.0
Total	28	100.0	

What was evident was that the majority of the banks employed the use of financial ratios and past historical financial performance as an assessment process. A total of 18(64.3%) of the banks used the process to either large to or very large extent. Those banks that did not seem to use the financial ratios and past experience were 10(35.7%).

## 4.3.7 The use of PACT process

The researcher considered that the use of as PACT process as one the parameters in evaluating the credit process. The respondents were required to indicate the extent to which the process was applied to assess the creditworthiness of borrowers. The findings were captured and presented in table 4.3.7.

Table 4.3.7, The use of PACT credit assessment process

Extent	Frequency	Percent
large extent	6	21.4
not sure	6	21.4
little extent	11	39.3
no extent	5	17.9
Total	28	100.0

The findings revealed that six banks (21.4%) used the PACT assessment process. There were 5(17.6%) of the banks that used the PACT process. A majority of the respondents 11(39.3%) indicated that the process was used to a little extent. Some respondents 6(21.6%) indicated that they were not sure if the process was used in their banks.

## 4.3.8 Correlation analysis

The researcher carried out a correlation analysis to establish if there was any relationship among the credit assessment techniques since it was apparent that most banks used more than one technique. The results were presented as shown in table 4.3.8

Table 4.3.8 Correlation analysis

Technique of assessment	5Cs	5Ps	Lapp	CAMPARI	Financial	PACT
					ratios	
5Cs	1	.849	117	126	.251	.015
5Ps	.849	1	137	.143	.409	.218
Lapp	117	137	1	.709	.697	.879
CAMPARI	126	.143	.709	1	.923	.819
Financial ratios	.251	.409	.697	.923	1	.808
PACT	.015	.218	.879	.819	.808	1

There was a strong relationship between the use of 5Cs and 5Ps. The correlation coefficient between the two parameters was 0.849. There was strong positive relationship between the LAPP process and the pact process which was 0.879. The CAMPARI process had the highest positive relationship with the use of financial ratios. It was also revealed that the banks that used the PACT process had a tendency to use LAPP, the CAMPARI process, and the financial ratios.

## 4.3.9 Regression analysis

Regression analysis was carried out to establish how the loan repayment would be influenced by the choice of techniques used in credit appraisal. Since the outcome of the appraisal outcome would be dictated by the outcome of the training, a regression analysis carried out to determine the relationship revealed that the main predictors which were presented in table 4.3.9 as shown.

Table 4.3.9 regression analysis

# Coefficients<sup>a</sup>

Model		Unstandardized		Standardiz	T	Sig.
		Coefficients		ed		
				Coefficient		
				S		
		В	Std. Error	Beta		
1	(Constant)	1.668	.035		47.464	.000
	F ratios and Exp	.261	.011	.978	23.702	.000
	(Constant)	1.435	.037		39.252	.000
2	F ratios and Exp	.234	.007	.877	32.891	.000
	profile	.155	.020	.202	7.588	.000
	(Constant)	1.500	.000		•	
3	F ratios and Exp	.500	.000	1.875		
3	profile	.500	.000	.653		
	staffing adequate	500	.000	-1.288	•	
	(Constant)	1.500	.000			
	F ratios and Exp	.500	.000	1.875		
4	profile	.500	.000	.653		
4	Staffing adequate	500	.000	-1.288		
	coordination	-7.208E- 015	.000	.000		
		013				

a. Dependent Variable: appropriate training

The findings from the regression model revealed that the main predictors of the credit appraisal process were financial ratios, the personal or corporate profile and the adequacy in staffing. Ceteris paribus, the credit appraisal process and the effectiveness of the process would be influenced by the quality of the training provided. Coordination among the departments was found to be having a zero coefficient, therefore was ignored in the regression equation model: all the predictors were found to be significant with p< 0.001.

Repayment rate = 1.67 + 0.26(financial ratios) +0.5 (profile) - 0.5(adequacy of staffing) + error term. A regression model summary for the data, the coefficient of determination R square was 95.6 %.

## 4.3.10 ranking of assessment processes

The researcher carried further analysis to the relative preference of the credit assessment processes among the commercial banks to establish the most preferred credit assessment process. The result were tabulated as shown in table 4.3.10

Table 4.3.10 Ranking of assessment processes

	Minimum	Maximum	Mean	Std. Deviation
5Cs	1.00	4.00	1.9643	1.26146
Financial ratios	1.00	5.00	2.6429	1.83008
CAMPARI	1.00	5.00	2.8929	1.42307
5Ps	2.00	5.00	2.9643	1.07090
LAPP	2.00	5.00	3.1429	.97046
PACT	2.00	5.00	3.5357	1.03574
Valid N (listwise)				

The findings revealed that on a scale of 1 to 5, where 1 was very large extent, 2 large extent, 3 not sure, 4 little extent and 5 no extent, the 5Cs assessment process was used to a large extent having a mean of 1.96. The use of financial ratios ranked high among the techniques with a mean of 2.62 and a standard deviation of 1.83. The high deviate implied that the disparity in preference was high. The CAMPARI process was also considered as a preferred mode of assessment, with a mean of 2.88, with a standard deviation of 1.42. The PACT was the least preferred mode of assessment.

### 4.4. Credit policy procedures and procedures

The researcher considered the credit policies and procedures at the banks were important in determining the accuracy and the efficiency of the assessment process. Parameters that were considered pertinent to credit policy such as the use of the credit reference bureaus, training requirement for the credit officers through seminars and the credit policy formulation procedures—were considered. The respondents were to indicate the level of agreement as very strongly agree, agree undecided, disagree and strongly disagree. A scale of 1 to 5 was used where 1 was very strongly agree, 2 was agree and , 3 was undecided, 2 was disagree and 1 disagree strongly.

### 4.4.1 The Credit Reference Bureau

The researcher considered the use of credit reference bureau as important in the credit assessment process. The researcher therefore required the respondents to indicate the extent to which the banks used the credit reference bureaus before loans were dispatched. This was important because advancing loans to borrowers that had defaulted before increases chances of non repayment.

All the respondents indicated that the use of the credit reference bureaus was one the most important institutions in the assessment and disbursement and of loans. The responses obtained indicated that the all respondents agreed strongly that the credit reference bureau was an important indicator for the suitability of borrowers to repay loans. It was a policy requirement that all assessment of borrowers be counterchecked with the CRB.

# 4.4.2 Training policy of Credit Officers

The researcher was interested to know there was a policy guiding the training of credit staff before they embarked on their jobs .The respondents were therefore required to indicate extent to which they agreed with the statement. The responses were summarized and tabulated as shown in table 5.3.2

**Table 4.4.2 Training policy of Credit Officers** 

Extent of agreement	Frequency	percent
Strongly Agree	17	60.7
Agree	11	39.3
Total	28	100.0

The finding revealed that there were policies on training staff before they undertook their job on how to do the evaluation process. The majority of the respondents 17(60.7) agreed strongly to the presence of a policy on training. There were 11(39.3%) of the respondents who agreed that there was a training policy in place requiring that staff be trained before they were posted. The opinion of the researcher was that the differences in responses would imply that this policy was not strongly adhered to.

## 4.4.3 Suitability of training given to credit officers

The suitability of training given to the credit officers was important for the research study. This was because besides being trained, the quality of training translates to efficiency and effectiveness in output. The findings were captured and presented as shown in table 4.4.3

Table 4.4.3 Suitability of training given to credit officers

Extent	Frequency	percent
Agree	18	64.3
Undecided	10	35.7
Total	28	100.0

The findings revealed that the majority of the respondents 18(64.3%) were of the opinion that the training offered was relevant while 10(36.7%) were not sure if the training was really relevant. The opinion of the researcher was therefore that the training needs to be reviewed.

### 4.4.4 Seminars and routine training on credit assessment

The researcher was interested to know if there were other empowerment training courses provided in the form of seminars and workshops. This was necessary because of the dynamism of the modern business risk and changing economic conditions. The findings were presented as shown in table 5.4.4

**Table 4.4.4 Seminars and routine training** 

Extent	frequency	percent
Agree	23	82.1
Disagree	5	17.9
Total	28	100.0

It was evident that there were frequent seminars and workshops to train credit officers on the credit assessment procedures and techniques. There were 23(82.1%) of the respondents who agreed that they frequently underwent training through seminars to train on how to asses borrowers. The researcher therefore concluded that the banks were serious in their concern for reliable and accurate credit assessment procedures from credit officers.

## 4.4.5 Adequate Staffing of Credit Section

The research sought to find out if the level of staffing was adequate at the credit sections. This was because overstretching the human resource capacity reduces efficiency occasioned by work overload. The responses were analyzed and tabulated as shown in table 4.4.5

**Table 4.4.5 Adequate Staffing of Credit Section** 

Extent	Frequency	Percent
Agree	18	64.3
Disagree	5	17.9
Strongly Disagree	5	17.9
Total	28	100.0

What was evident from the endings was that there were banks that were overstretched in the credit department while others were adequately staffed. There were 18(64.3%) of the banks were reported as being adequately staffed while 10 (35.8) were reported as being inadequately staffed. The opinion of the researcher was therefore that addressing the issue of staff would improve on morale and efficiency of the credit officers

## 4.4.6 Formulation of Policies Using Input of Staff.

The research was keen to know if the formulation of policies on credit assessment had the input of staff. This was because the credit officers would be instrumental in drawing and up and creating policies based on their experience and judgments on their work. The results were tabulated and presented as shown in table 5.4.6

Table 4.4.6 Formulation of Policies Using Input of credit Staff.

Extent	Frequency	Percent	Cumulative Percent
strongly agree	5	17.9	17.9
agree	18	64.3	82.1
strongly disagree	5	17.9	100.0
Total	28	100.0	

The findings revealed that there was a significant input of the staff working as credit officers in commercial banks in Kenya. The number of respondents that agreed that they were involved in the credit policy formulation was (82.1%). There were 5(17.9%) of respondent who were however of the opinion that their input was never considered at all.

It was therefore opinion of the researcher that sometimes that the management of banks did not consider the input of credit staff in formulating their policies.

## 4.4.7 Effectiveness of loan policies

The researcher sought to find out if the policies in place were had loopholes that would be manipulated easily to allow for people that do meet the basic credit assessment process to qualify for loans. The respondents were therefore asked to indicate the extent to which this was possible. A scale of 1 to 5 was used, where 1 was very strong agreement and 5 was very strong disagreement. The results were for the analyzed data were presented as shown in table 4.4.7.

**Table 4.4.7 Effectiveness of loan policies** 

Extent	Frequency	Percent	Cumulative Percent
Agree	12	42.9	42.9
Undecided	11	39.3	82.1
Disagree	5	17.9	100.0
Total	28	100.0	

The findings were evident that there was no common agreement about the effectiveness of loan policies to prevent non qualified borrowers qualifying for loans. There were 12(42.9%) of the respondents who agreed that getting loans for unqualified applicants was difficult. There was a high number of respondents 11(39.3%) who were not sure while the minority 5(17.9%) disagreed. It can therefore be argued that the loan policies were good guidelines which however under some circumstances would be manipulated especially by dishonest staff. Would especially be so in complex loan appraisal cases involving organizations or huge amounts of cash outlay.

#### 4.4.8 Coordination between different sections

The credit assessment process requires the participation of various bank sections. The effectiveness of the outcome in the whole process depends on the ease with which

various sections are able to coordinate with each other. The researcher therefore required that that the respondents indicate what their opinion on the level of coordination was. a scale of 1 to 5 was used where 1 was very good coordination and 5 was very poor coordination.th results were tabulated as shown in table 4.4.8

Table 4.4.8 Coordination between different sections

Extent of agreement	Frequency	Percent
Strongly Agree	6	21.4
Agree	11	39.3
Undecided	6	21.4
Strongly Disagree	5	17.9
Total	28	100.0

The findings revealed that there were wide disparities of opinion on the level of coordination. Those that agreed that there was good coordination were 17(60.7%). There were 5 (17.9%) of the respondents who were of the opinion that coordination was very poor. There were 6(21.6%) of the respondents who were undecided. It would therefore be argued that since they were not sure about the level of coordination then there are doubts about the smoothness of the coordination process among various departments. It was therefore the opinion of the researcher that the bank management can increase the efficiency of their credit officers by increasing the level of coordination among various sections of the banks.

## 4.4.9 Frequency of policy review

The researcher was interested to know the frequency of policy reviews on loans. This was important in answering questions related to the study. The results of the study were captured an tabulated as shown in table 4.4.9

Table 4.4.9 Frequency of policy review

Review mode	Frequency	percent
quarterly	5	17.9
Semi Annually	12	42.9
Annually	5	17.9
Six months	6	21.4
Total	28	100

The policies on credit assessment were usually reviewed after one year. The highest majority of the banks (42.9%) were observed to review their policies after six months. Those banks that reviewed their lending policies after one year were 17.9%. There were six banks that reviewed their policies after one month. It was the opinion of the researcher that the frequency at which the policies were reviewed was adequate to accommodate changes in micro and micro economic factors that would affect the future paying abilities of borrowers.

## 4.5 Credit screening

The research was interested in knowing the effectiveness of the credit screening process. The respondents were required to indicate the extent to which the credibility of the process can be judged based on various factors. The results were captured and tabulated as shown in table 4.5.1.

## **Table 4.5.1. Credit Screening**

The researcher was interested in knowing if there were adequate measures in place to ensure that the screening was this included having credit committees, the review of credit conditions and how they were formed. The findings were captured an presented as shown in table 5.5.1

parameter	Mean	Std. Deviation
Review committee	1.0000	.00000
Information irrelevant	1.8214	.39002
Pay slip	2.1429	.97046
Lying	2.1786	.77237
Willingness	2.2143	.41786
Manipulation of appraisal reports	2.2857	1.18187
Credit history	2.3929	.49735
Computer screening	2.5714	1.31736
Valid N (Listwise)		

The findings revealed that all banks had credit review committees (m=1, std=0.00).the information collected was also found to be relevant to be relevant since the mean was 1.8, and the std 0.40. Asked to indicate if the credit committees had computer software systems for screening, the respondents indicated that they were not sure; meaning much of the evaluation relied on manual systems.

The findings revealed that the tendency of customers to give wrong information to secure loan was high (m=2.2, std=0.77).the opinion of the researcher was therefore was that more should be done to ensure information obtained was accurate.

## 4.5.2 Nonperforming loans in Kenya

The researcher was interested to link the effectiveness of screening with the level of nonperforming loans in Kenya amongst commercial banks. An analysis of the reports revealed that the level of nonperforming loans remained high as shown in table 4.5.2 Loan amounts in billions,

Period	Loans and	NPLs	% of NPLs	GDP %	Interest	Inflation%
	Advance				rates%	
2012	1,296,452	61.9	3.9	3.9	20.40	16
2011	1,152,011	58.3	4.4	4.4	14.14	18.1
2010	786,591	61.5	5.8	5.8	13.87	3.2
2009	668580	68.8	2.6	2.6	14.79	5.23
2008	555,062	58.3	1.6	1.6	14.1	17.8
2007	518,917	56.1	7.0	7.0	13.32	9.8
2006	396,149	65.4	6.1	6.1	13.7	15.6
2005	338,399	68.6	5.8	5.8	13.2	7.6
2004	382,290	70.8	4.2	4.2	13.19	8.6
2003	315,321	73.9	2.7	2.7	13.5	9.8

Source CBK,2013

### 4.6 Factor Analysis

Further analysis was conducted amongst the parameters that were used in the study to reduce their dimensionality and get a better understanding on the assessment procedures and therefore determine where there weaknesses in the borrower credit assessment processes lay. A factor analysis approach using varimax rotation yielded three main components that were considered important in the credit assessment process. The analysis converged after 25 iterations .Table 4.6.1 has the extracted components

Table 4.6.1 total variance explained

Componen	In	nitial Eigen valı	ues	Extraction	Sums of Squa	red Loadings
t	Total	% of	Cumulative	Total	% of	Cumulative
		Variance	%		Variance	%
1	6.261	52.178	52.178	6.261	52.178	52.178
2	3.270	27.249	79.426	3.270	27.249	79.426
3	1.713	14.273	93.700	1.713	14.273	93.700
4	.756	6.300	100.000			
5	5.835E-016	4.862E-015	100.000			
6	3.426E-016	2.855E-015	100.000			
7	2.688E-016	2.240E-015	100.000			
8	1.313E-017	1.094E-016	100.000			
0	-1.330E-	1 1005 015	100,000			
9	016	-1.108E-015	100.000			
10	-4.286E-	2 572E 015	100,000			
10	016	-3.572E-015	100.000			
1.1	-6.387E-	5 222E 015	100,000			
11	016	-5.323E-015	100.000			
12	-8.532E-	7 1105 015	100.000			
12	016	-7.110E-015	100.000			

Extraction Method: Principal Component Analysis.

The analysis revealed that there were three components that accounted for more than 93.7% of the factors that were considered as key determinants of the credit appraisal process. A rotated component matrix was also extracted so that the factors would be identified easily. The extracted factors were identified as shown in table 4.7.2, which the components extracted by principal component analysis.

Table 4.6.2 component matrix for credit assessment process parameters

		Component	
	1	2	3
5Cs	.364	.668	532
5Ps,	.549	.578	588
Lapp	.582	717	016
CAMPARI	.877	374	.247
Financial ratios and Experience of	.985	140	.073
borrowers	.963	140	.075
PACT	.753	603	263
Financial reports	.910	.070	237
Business plans	.317	.681	.645
Profile of borrowers	.558	.678	.165
Experience of appraisers	.828	510	.191
Financial ratios for applicants	.893	.280	234
Bank balances	.676	.430	.598

Extraction Method: Principal Component Analysis.

a. 3 components extracted.

**4.6.3** Factor loadings for extracted components

parameter	loading	Combined factor loading
Past records and experience		
Exp of appraisers	0.828	
CAMPARRI	0.887	
Financial ratios	0.985	
PACT	0.753	5.191
Financial reports	0.91	
Experience of borrowers	0.828	
Bank balances	0.676	
Lapp	0.587	
Business profile		2.021
5Cs	0.668	
Business plans	0.681	
Profile	0.678	
5ps	0.578	
Total weight		8.800

Based on the findings from the factor loadings, it was evident that the banks mainly relied on historical records in the assessment of the credit riskiness of borrowers. The parameters that are mainly associated with historical facts of the borrowers had a combined factor loading of 5.191 compared to those that related to business plans and the profile which may be better predictors of the future. The 5Ps credit appraisal technique was negatively related to the rest of the factors meaning it was linearly correlated to the other factors used in credit the assessment process.

The study therefore reveals that credit assessment relies more on historical records rather than factors that can predict the future repayment of loans. It is the researcher's opinion that the parameters that focus on the future ability to repay loans, such as projections into

specific sector future performances and business plans, should be integrated fully into the credit assessment process.

## 4.7 Summary and Interpretation of Findings

The aim of research study was to determine the effect of credit assessment process on loan repayment among commercial banks in Kenya. The key issues under the investigation included the appraisal techniques, the policies in place, the screening process and the review of policies on credit assessment.

The research study revealed that the banks most commercial banks in Kenya heavily relied on the use of 5Cs as a method of credit assessment process. This involved this procedure the respondents indicated that consideration was mainly was based on capital and capacity to repay rather any other consideration. The use of financial ratios it emerged was a key consideration in the evaluation process.

It was also evident that the credit assessment departments lacked a proper and well coordinated system of communicating with one another. Some banks were noted to be working with limited staff resulting in work overload. Credit assessment process was also found not fully automated. An automated system will enable the evaluation process gather information that may not be easily captured by the borrowers in their self assessment. The study observed not all information sought was relevant towards the assessment of borrowers.

The policies in place had the input of staff which made them own the process. This was positive indicator. It was however noted that there were cases when the credit officers were not involved. The credit policies in place though reported to be good in guiding the process, it was the opinion of the some respondents 57.1% that there loopholes through which dishonest staff would give loans to borrowers that were not qualified. This would affect loan repayments for borrowers.

The factor analysis conductors on the parameters of credit appraisal techniques revealed that the weighting of the factors past historical records such as experience, previous and bank balances rather than focus on such factors as purpose for the loans and the specific future anticipated sector performance — where the funds will be invested.

The findings based on the open questions to respondents revealed that there were weaknesses in the policies on credit appraisal which limited the screening to the mere identification of personal documents and credit history provided by the borrowers which more often was not true. There were suggestions to affect that effect that credit assessment procedures had leveraged on technology to increase efficiency.

The findings of the study on policies used credit assessment among commercial banks agree with studies by Simonson et al, (1999) on credit policy and its influence on repayment of loans. He argues that sound credit policy would help improve prudential oversight of asset quality, establish a set of minimum standards and apply a common language and methodology in assessment of risk, pricing, documentation, securities, authorization, and ethics for measurement and reporting of nonperforming assets, loan classification and provisioning.

The credit policy should set out the bank's lending philosophy, specific procedures and means of monitoring the lending activity evaluation. The study revealed that weaknesses in the credit lending policies were responsible for insider lending practices which compromised the existing policies. The study agrees with the findings that the uses of credit committees are set in place to reduce chances of credit officers abusing authority granted. The decision of granting a loan is arrived at after an analysis has been carried out by a committee of more than one person, thus reducing the risk of one person abusing the authority granted

The findings of the study reveal that the Kenyan commercial banks are yet to fully automate their credit appraisal techniques to facilitate proper classification of borrowers.

This finding agrees with Guido (2008) who argued that lack of novel technology in credit assessment is responsible for improper classification of credit worthiness of borrowers based on proper abilities to repay loans advanced.

A major finding of the study was that the use of 5Cs is the most preferable credit assessment technique. This finding largely agrees with Abrahams et al, (2008) who observed that comprehensive credit assessment Credit Assessment Framework (CCAF), involves the use of the 5Cs credit assessment technique. The technique it is argued offers a comprehensive rating system that enables lenders to classify credit risk using the Five Cs of credit.

#### **CHAPTER FIVE**

### SUMMARY, CONCLUSION AND RECOMMENDATIONS

### **5.1 Summary**

The study was aimed at establishing the effect that the credit assessment process may have on loan repayment in commercial banks in Kenya. The findings of the study are based on the responses obtained from credit assessment officers working in commercial banks in Kenya. The study revealed that all the credit officers were degree holders with 64.3% of them being degree holders and 35.7% being holders of post graduate qualifications.

The research study revealed that there commercial banks employed various credit appraisal techniques to asses borrower creditworthiness. The main credit appraisal techniques found to be in use in commercial banks in Kenya were found to be the 5C's credit appraisal technique. The mean score for this technique was found 1.96 to be based on a scale of 1 to 5, where 1 was very large and 5 was least extent. Other techniques were found to be financial ratios 2.62, CAPMARI 2.89, 5Ps 2.96 and the LAPP technique was 3.14.

A correlation analysis revealed done on the variables revealed that some of the techniques used for credit assessment were closely correlated. Those banks that used 5Cs also tended to use 5Ps appraisal technique as well. The correlation coefficient between the two parameters was 0.849. There was strong positive relationship between the LAPP process and the pact process which was 0.879. The CAMPARI process had the highest positive relationship with the use of financial ratios. It was also revealed that the banks that used the PACT process had a tendency to use LAPP, the CAMPARI and the financial ratios techniques.

The research revealed that the credit weighting for factors that were related to credit appraisal relied more than 70% on the historical factors such bank balances, financial reports and credit history. This implied that low risk borrowers without a history were left

out. This would be true to entrepreneurs with profitable venture lacking in capital to jump start their business operations.

#### **5.2** Conclusions

The study established that the main credit assessment techniques used in commercial banks were the 5Cs and the 5Ps process. The research study findings revealed that there were cases of workers being overworked which would affect their work out put. The researcher concluded that some of the reasons in poor repayment would be in the inability of some of the credit assessment processes being unable to collect timely and relevant information. Some of the respondents indicated that some the borrowers when seeking for loans would easily falsify information and data to qualify for bigger loans which they would later not be able to service.

The findings revealed that some of the weaknesses that result in poor loan repayment arise from failure to adhere to laid down policy procedures. Respondents had indicated that it was possible for both credit staff and bank managers to manipulate credit appraisal results and give loans to borrowers who do not qualify the revision of policies on credit appraisal processes can be done to include measures that can deter staff from giving falsified information on borrowers to advance loans that later turn out to be un recoverable.

Banks should be revise training programs on credit appraisal to reflect the changing trends in credit markets. Majority of the respondents indicated that though they attended credit assessment sessions frequently, the trainings usually were not very relevant. Failure to equip with appropriate skills credit appraisal staff will continue to impact negatively on loan repayment since they will be poorly prepared to classify borrowers based on actual riskiness.

Poor coordination it was revealed existed amongst credit appraisal techniques. It would therefore be in the interest of the banks to improve the efficiency of information between the departments that deal with credit screening, credit appraisal, credit monitoring and credit monitoring. Information communication technology can be leveraged to improve the flow of information relating to borrowers.

## 5.3 Policy recommendations

One of the key findings of the study was that banks usually relied on the previous historical records in determining creditworthiness of borrowers heavily. This included records such as past financial ratios, past credit history and past business performance. These factors accounted for more than 50% chance of one qualifying for credit. Probable borrowers without solid historical records but who would be less risk borrowers were left out. The recommendation of the study is that banks should integrate techniques that would be more predictive of future performance because past historical performance may not always predict the ability of the borrower's future loan repayment abilities.

It was revealed through the findings of the study that the credit appraisal process was yet to be automated. It should be noted that automation increases the efficiency of staff and their ability to predict and classify borrowers more efficiently. It is recommended commercial banks should consider fully automating their credit appraisal process and screening processes to reduce chances of prospective borrowers supplying falsified information to qualify for higher loans.

The study findings revealed that some of the information required by commercial banks during the credit appraisal was irrelevant in ascertaining the creditworthiness of borrowers. Commercial banks should therefore seek to get information that would reflect the ability of the borrower to pay loans advanced based on such factors as the type of sector the funds are invested in or the purpose for which funds are committed.

The researcher recommends for the restructuring of credit policies so that credit staff and bank officials do not take advantage of loopholes to advance loans to friends and borrowers who do not qualify. This is based on the research findings where it was observed that the policies in place were not immune to manipulation especially by senior banking staff who can give loans to borrowers who are not qualified. Strengthening of policies would ensure that there is transparency and objectivity in the screening, credit appraisal and credit evaluation procedures.

## **5.4 Limitations of the Study**

There were challenges encountered in cause of carrying out this study. Most banks have restrictions on the information that can be divulged to the public and therefore information given out is well measured and calculated.

There was only one respondent from each of the targeted banks and therefore there would be errors in the quality of information and also that an individual perspective may not be wholly objective. This short coming can be improved by having more than one respondent from every bank which was not possible in this study because of time limitations.

The data collected was through self completion questionnaire. The respondents were to fill the questionnaires which were collected later. It was observed that most of the staffs are overworked and therefore there are possibilities that they may not take sufficient time to fill the questionnaires and supply all the necessary information.

It was a challenge trying to follow up with questionnaires which was the reason for not getting a response rate of 100%. Some respondents opted to fill and send the questionnaire by mail. Others did not return the questionnaires which occasioned giving fresh respondents and this affected the length of time that it took to collect data.

#### **5.5 Suggestions for further studies**

The researcher recommends further research on loan repayment in the following areas; Micro finance institutions play an important role in the mobilization of credit for development. The client specifications and profiles for may be different and the operating conditions. A study therefore can be carried to determine the impact of credit assessment process on loan repayment among microfinance institutions in Kenya. Findings from the study can be helpful in developing policies which would strengthen the sector in Kenya.

A study on the influence of credit monitoring can be done to determine its influence on loan repayment. The influence of credit risk monitoring on loan repayment among commercial banks in Kenya will yield important information on why loan once advanced are a challenge to pay. Kariuki (2010) on causes of poor loan repayment in Kenyan commercial banks observes that some borrowers default when not closely monitored.

A study by Njoku(1991) on Nigerian banks reveal that some borrowers run into problems when they divert funds from originally intended projects which result in project failure. This is also an area that needs further scrutiny.

Further research needs to be done to determine the influence of 5Cs credit appraisal technique on loan repayment. This is because it was the most prevalent means of credit assessment. The process can therefore be improved through further research.

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### **APPENDICES**

# **Appendix I: Questionnaire**

Fill in the relevant information, or tick where appropriate.

### SECTION I DEMOGRAPHIC DETAILS

1. Name of the bank
2. Educational qualifications (a) KCSE { } (b) Graduate { } (c) Post graduate
{ }
3. Years of work experience (a) 0-3 yrs { } (b) 4-7yrs { (c) 8 -10yrs { } (d) more
than10 { } 4. Please indicate if you have undertaken any special course in credit
appraisal
(a) Yes { } (b) No { }

## SECTION II CREDIT APPRAISAL TECHNIQUES

This section concerns credit appraisal techniques.

(a) There are various methods of assessing credit worthiness of borrowers which include 5C's: Capacity, Capital, Collateral, Conditions & Character. 5P's: People, Purpose, Payment, Protection & Prospective. LAPP: Liquidity, Activity, Profitability & Potential.

**CAMPARI:** Character, Ability, Margin, Purpose, Amount, Repayment & Insurance.

**PACT:** Person, Activity, Collateral & Terms

Kindly indicate the extent, to which each of the techniques is applied in determining the credit worthiness of customers. Use a scale of 1 to 5 where 1 is to a very large extent, 2 large extent, 3 not sure 4 little extent, 5 no extent

Appraisal Techniques	1	2	3	4	5
5C's Process					
5P's Process					
LAPP Process					
CAMPARI Process					
Financial Analysis and Previous Experience					
PACT Process					

(b) Specify any other credit appraisal technique used
(c) Please give your comments on the suitability of the technique that is mostly used in
your bank to asses credit worthiness of customers

# SECTION III CREDIT POLICY AND PROCEDURES AT THE BANK

This section concerns the credit policy and procedures used by the bank:

(a) Please indicate the extent to which you agree or disagree with the appropriateness of the existing credit policy in your bank.

Credit Policy Parameters	Strongly	Agree	Undecided	Disagree	Strongly
	agree				disagree
Credit reference bureau is always used before					
loans are dispatched					
All credit officers must be trained before they					
are posted to their duty stations					
The training given to credit officers is					
appropriate					
There are routine training seminars for credit					
officers to improve their efficiency					
Credit section is always adequately staffed					
The formulation of credit policies always has					
the input of staff					
The loan policies in place make it difficult					
for non qualifying persons to get loans					
There is always good coordination between					
all sections that are involved with credit					
appraisal					

(D)	Please comn	nent on the challenges that credi	t officers encounter with bank
	policies rega	rding loan issuance	
(c)	Please give s	suggestions on what you think c	an be done to improve the efficiency
	of the loan a	appraisal methods, so as to redu	ce the risk of loan redundancy
( <b>d</b> )	Please indica	ate when the credit policy was la	ast reviewed
	i.	Two to four years ago	{ }
	ii.	Five to seven years ago	{ }
	iii.	More than eight years ago	{ }

# SECTION IV CREDIT SCREENING

This section deals with credit screening procedures. Please indicate the extent to which you agree with the statements based on a scale of 1 to 5, where 1 is strongly agree, 2 is agree 3 is not sure

4 disagree 5 strongly disagree

Screening Parameters	1	2	3	4	5
Most often the loan applicants ability to repay a loan depends on					
the most current pay slip rather than other assets owned					
Screening process is a computerized program that helps credit					
officers in decision making					
Some of the information required for screening is not very helpful					
in determining the riskiness of borrowers					
The screening process does not gather enough credit history from					
individuals					
Rogue bank managers can manipulate screening results to a ward					
loans to risky customers					
Sometimes customers can lie about their credit history without					
being detected by credit officers.					
Clients are not always willing to give true information about their					
financial status					
Senior credit managers always go through all loan applications					

# **SECTION V CREDIT REVIEW**

<ol> <li>Please indicate if the bank has a credit review comr</li> </ol>
--

(a) Yes (b) No

2. If your above is yes, how frequently do they review credit terms and conditions?

	(a) Monthly	<b>(b)</b> Quarterly	(c) Semi annually	(d) Yearly	(e) Other	
3.	Please state tl	he composition	of the credit commi	ttee		_
4.			e to improve credit r		11	
						-
						-

# SECTION VI CREDIT APPRAISAL

Please respond to the following statements by indicating the extent to which you agree or disagree as per the given choices.

(a) Please indicate importance given to the following factors in loan appraisal, based on a scale of 1 to 5 where 1 is very important 2 important 3 not sure 4 least important and 5 not important

Parameter	1	2	3	4	5
Financial reports					
Business plan					
The profile of the management team of companies applying for					
loans					
Years of experience of the applicants					
Financial ratios					
Bank balances					

	ease suggest how the appraisal process can be improved
	ease suggest what else that can be included in the appraisal that banks ignore
SECT	TON VII PERSONAL OBSERVATION
1.	Give suggestions on the bank may improve the assessment of the credibility of loan applicants
2.	Highlight some of the most serious challenges you encounter in trying to appraise
	loan applicants if any

# **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 Ltd
- 9. Citibank N.A.
- 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 Ltd
- 22. First Community Bank Limited
- 23. Giro Commercial Bank Ltd
- 24. Guaranty Trust Bank (Kenya)
- 25. Guardian Bank Ltd
- 26. Gulf African Bank Ltd
- 27. Habib Bank A.G Zurich
- 28. Imperial Bank ltd

- 29. Investments and Mortgages
- 30. Jamii Bora Bank Ltd
- 31. Kenya Commercial Bank Ltd
- 32. K-Rep Bank ltd
- 33. Middle East Bank (K) Ltd
- 34. National Bank of Kenya Ltd
- 35. National Industrial Credit Bank ltd
- 36. Oriental Commercial Bank Ltd
- 37. Paramount Universal Bank Ltd
- 38. Prime Bank ltd
- 39. South Credit Banking corporation
- 40. Standard Chartered Bank of Kenya
- 41. Trans-National Bank
- 42. UBA Kenya Bank Ltd
- 43. Victoria Commercial Bank Ltd