

# Contribution of Credit Risk Management Strategies on Financial Stability: A Case of Commercial Banks in Kilifi County-Kenya

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## Abstract

This study sought to establish the contribution of Credit Risk Management strategies on the financial stability of commercial banks in Kilifi County. The study used descriptive research design and questionnaires were used to collect data. Analysis was done using descriptive statistics and content analysis as well as Mann Whitney and regression tests. The study shows that commercial banks use numerous tools and measures for controlling credit losses such as collaterals and credit protection. Mann Whitney tests of medians were run to determine whether banks in Kilifi perceived credit control policies to be appropriate for a variety of credit scenarios among clients and whether some measures were considered superior to others. Collaterals and Credit protection were considered to be equally ( $W=1584$   $p=0.2902$ ) robust tools to control credit losses but superior to agreements ( $W=1860.5$   $p=0.0001$ ), credit rationing ( $W=1782$   $p=0.0352$ ) and contract evaluation ( $W=1712.5$   $p=0.0368$ ). Credit protection as a strategy, to a great part contemplated as collateral by the bank, provided the most appropriate measure for handling multidimensional risks to credit for a diverse clientele operating in diverse client risk scenarios. The study recommends that Commercial Banks ought to develop risk management strategies that are consistent with their credit risk tolerance and their business goals.

**Keywords:** credit risk, commercial bank, risk, financial stability, strategy

## 1. Introduction

For a bank to sustain long-term profitability and a competitive advantage, the bank must respond strategically to challenges arising from credit risk. This will involve the formulation and implementation of strategies that will ensure full recovery of the principal and interests from the loan advanced to customers. Credit risk management is consistent with the profit-maximizing objective of the bank and is evidenced by the focus of the commercial banks on providing home and personal loan packages to profitable low-risk customers (Saunders and Lange, 2004).

The magnitude and the level of loss caused by credit risk compared to others are severe and can easily cause bank failures (Richard et al, 2008). Over the years, there have been an increased number of significant bank problems in both matured and emerging economies. Credit problems, especially weakness in credit risk management, have been identified to be a part of the major reasons behind banking difficulties (Grasing, 2004). Economic and financial crises have been linked to the lack of risk management and the willingness to adopt a more proactive risk based management styles (Bessis, 2010). Morgan (1997) pointed out that credit risk has become the key risk management challenge of today's age.

Businesses are facing increased uncertainties as well as the commercial banks that provide the funds. Evaluating the investments of business loans has become an important issue in recent years due the large number of business failures and loan defaults among the borrowers and as a result, bank failures (Abid et al., 2016). Thus, the need for proper, proactive strategic risk management is essential for commercial banks survival in the current era of declining and uncertain market and volatile interest rate.

Lending has been, and still is, the lifeblood of banking business, and this is more true to emerging economies (Richard et al., 2008; Chijoriga, 2011). Over the last five years the commercial banks in Kenya have faced problems as far as credit risk is concerned, this resulted in closure of several Banks including Imperial Bank, Dubai Bank and Chase Bank that was put under receivership. The Central Bank of Kenya pointed out that loan defaults and toxic lending practices led to the failure of the said banks. In order to survive in a dynamic environment, banks need strategies that focus on how to avoid credit risk and at a minimum cost.

Credit risk management strategies is an issue of concern in commercial banks today and there is need to come up with improved strategies to deliver better results for future performance. Effective credit risk management strategies minimize the credit risk, therefore the level of loan losses.

### 1.1 Statement of the problem

Over the last five years the commercial banks in Kenya have faced problems as far as credit risk is concerned, this resulted in closure of several Banks including Imperial Bank, Dubai Bank and Chase Bank that was put under receivership. The Central Bank of Kenya pointed out that loan defaults and toxic lending practices led to

the failure of the said banks. In order to survive in a dynamic environment, banks need strategies that focus on how to avoid credit risk and at a minimum cost. The strategies should adequately respond to challenges faced by the banks in trying to recover the loans advanced to customers as well as the interests. If superior and competitive strategies are effectively adopted, commercial banks can achieve long term and sustainable profitability and competitive advantage. Commercial banks have employed different strategies which have generated different performance results. With the different results, one would wonder just what the best strategy is or strategies for a bank to adopt in order to completely eliminate credit risk or loan defaults.

Credit risk management strategies is an issue of concern in commercial banks today and there is need to come up with improved strategies to deliver better results for future performance. Effective credit risk management strategies minimize the credit risk, therefore the level of loan losses. Financial stability is a priority for all managers in the banking sector. For commercial banks managers, strategic management of credit risk is equally very important. Managers need to reduce the risk of loan default because the banks financial stability is weakened by the loss of principal and interest; also banks run under objective of maximizing benefits to members which include the role of providing loans to help members improve their livelihoods. These roles may conflict with financial stability of commercial banks if managers become less strict in the lending strategies to evaluate and screen the credit risk of member borrowers.

This study seeks to evaluate the contribution of credit risk management strategies on the financial stability of commercial banks in Kilifi County.

## 1.2 Objective of the Study

To assess the contribution of credit risk management strategies on the financial stability of commercial banks in Kilifi County

### 1.0.1. Specific Objectives

1. To identify credit monitoring strategies and techniques used by commercial banks to safeguard financial stability.
2. To examine the credit terms used by commercial banks in Kilifi County to eliminate loan defaults.
3. To identify credit risk control measures used by commercial banks in Kilifi County to ensure financial stability.

## 1.3 Research Question

1. What are the credit monitoring strategies and techniques used by commercial banks to safeguard financial stability?
2. What are the credit terms used by commercial banks to eliminate loan default?
3. What are the credit risk control measures used by commercial banks to ensure financial stability?

## 1.4 Definition of terms

### Credit Risk

Credit risk is defined as the probability that some of a bank's assets, especially its loans, will decline in value and possibly become worthless (Nikolaidou & Vogiazas, 2014).

### Financial stability

Financial stability is defined in terms of its ability to facilitate and enhance economic processes, manage risks, and absorb shocks (Smets and Villa 2016).

### Commercial bank

The Banking Act, Cap 488 defines a bank as a company, which carries on, or purposes to carry on banking business. A bank is thus an institution that deals largely with money.

### Risk

This is the vulnerability that a certain unpredictable likelihood can occur, which causes randomness in cash flow (Witzany, 2017).

### Strategy

Strategy is the course and scope of an organization over the long term, which attains advantage in a changing atmosphere through its configuration of resources and competences with the aim of fulfilling shareholder prospects (Johnson and Scholes 2008).

## 2.0 LITERATURE REVIEW

### 2.1 Competitive Credit Risk Management Strategies

Competitive strategy is about being unique from others. A strategy must be difficult to imitate. Porter suggested that competitive strategy comprises positioning the business to exploit the value of the competences that differentiate it from its competitors. Strategic positioning involves a firm identifying a portion of its industry where the competitive forces are weaker; where it can avoid buyer and supplier power, threats to new entrants

and substitutes and price-based rivalry (Maina, 2016). The firm then adapts its value chain to survive well with the forces in its industry. This is vital in formulation of long-term, maintainable and effective strategies. According to (Porter, 1985) for organizations to endure in the market, they should articulate strategies that sufficiently respond to the competition. Such strategies should fix them at a position of advantage in the market and give them a competitive advantage in the market.

Porter (1979) introduced the five competitive forces framework. Porter contends that there are five forces that influence industry structure and therefore an organization's strategies. Industry structure strongly influences the competitive nature and range of strategies open to the organization. Pearce et al., (2010) specifies that designing viable strategies for an organization requires a systematic understanding of the organization's industry and competition. Mintzberg et al., (2002) defined strategy as a plan, ploy, pattern, position and perspective. The effectiveness of strategic management of credit risk depends on three main strategic goals of the bank: growth, protection and development (Montana 2012).

## **2.2 Strategic Credit Risk Management and its Importance in Commercial Banks**

Credit risk is defined as the probability that some of a bank's assets, especially its loans, will decline in value and possibly become worthless (Nikolaidou & Vogiazas 2014). Credit risk is the risk of a loss resulting from the debtor's failure to meet their obligations to the bank in full when due under the terms as agreed and stipulated in the agreement (Raghavan, 2003). The literature has revealed that the most common cause that leads the banks to bankruptcy is credit risk (Zribi and Boujelbène, 2011). Credit risk is among the oldest and most important financial risks (Altman and Karlin 2009).

The Basel Committee on Banking Supervision (2010) documents that for most banks, loans are the largest and most obvious source of credit risk; however, other sources of credit risk exist throughout the activities of a bank, including in the banking book and in the trading book, and both on and off the balance sheet. Indeed, credit risk can lead to financial crisis. Financial institutions are subject to a number of risks such as credit risk, operational risk, and liquidity risk (Foot, 2002). These risks are related to each other and it is rather difficult to isolate one from others in practice. Although credit risk has always been of primary concern to these institutions, its importance became paramount during the recent financial crisis. The financial crisis exposed the shortcomings of existing credit risk management systems, and several firms saw significant losses resulting from failure of their counterparties to deliver on contracts (Acharya et al., 2009).

## **2.3 Credit Risk Management strategies and Techniques Used by Commercial Banks**

The goal of managing credit risk is to maximize a bank's risk adjusted rate of return by maintaining credit risk exposure within acceptable parameters (Oldfield & Santomero, 2006). Banks need to manage the credit risk inherent in the entire portfolio as well as the risk in individual credits or transactions. Banks should also consider the relationships between credit risk and other risks. Strategic management of credit risk is a critical component of a comprehensive approach to risk management and essential to the long-term success of any banking organization (Bessis, 2011). Credit risk management strategies should also be applied in conjunction with sound practices related to the assessment of asset quality, the adequacy of provisions and reserves, and the disclosure of credit risk, all of which have been addressed in other recent Basel Committee documents (Oldfield and Santomero, 2006).

Oldfield and Santomero (2006) investigated risk management in financial institutions. In their study, they suggested four steps for active risk management techniques: the establishment of standards and reports; the imposition of position limits and rules (i.e. contemporary exposures, credit limits and position concentration); the creation of self-investment guidelines and strategies; and the alignment of incentive contracts and compensation (performance-based compensation contracts).

## **2.4 Credit Recovery and Collection Strategies**

Credit recovery is the process of following loans which have not been paid in order to recover them by convincing the debtors to repay their outstanding loans. This role of recovering loans is not a stress-free task as debtors will go out of their way to prove unreachable to the lender. Commercial banks in most cases have a debt recovery entity which is in charge of following up loans before they become default. Use of reminders has proved to be a good measure to encourage debtors to pay up their debts. Some clients are not able to remember when their debts are due. In this case, reminders such as short text (SMS), email or a simple telephone call does the magic and enable the client remember their obligation to the bank thereby making them be in a position to repay their debts (Ogolla, 2012).

The advent of Credit Reference Bureau (CRB) has brought a lot of relief to commercial banks.

## **2.5 Theoretical Framework**

The study is anchored on loan pricing theory by Smith (1980). This theory suggests that banks should consider

the difficulties of hostile selection and moral danger since it is very difficult to forecast the borrower type at the start of the banking connection. If banks set interest rates too high, they may trigger harmful selection problems because high-risk borrowers are willing to accept these high rates.

Once these borrowers receive the loans, they may develop moral hazard behavior or so called borrower moral hazard since they are likely to take on highly risky projects or investments (Chodechai, 2004). High interest rate is also likely to scare away potential borrowers hence reducing the customer base and thus lowers profits for the bank. The ultimate result of low profit is unstable bank in terms of finances. This theory is related to this study because it explains why it is not wise for banks to set very high interest rates.

## 2.6 Empirical Review

In terms of the empirical evidence, most researchers have focused on one or several countries and showed different results. In USA, Linbo (2004) evaluated efficiency versus risk and concluded that profit efficiency is sensitive to credit risk and insolvency. The study used a standard profit function and the stochastic frontier approach, and compares two standard functional forms to assess the tradeoff between precision and parsimony and found out that profit efficiency is sensitive to credit risk and insolvency risk but not to liquidity risk or to the mix of loan products. In Japan, Khambata and Bagdi (2003) evaluated the off-balance sheet credit risk across top 20 Japanese banks and found out that Loan commitments are largest source of credit. The study also indicated that financial derivatives were heavily used by the top four banks and there is a wide difference across the banks in the use of derivative leverage.

Al-Tamimi (2002) investigated the degree to which the UAE commercial banks use risk management techniques in dealing with risks and the study found out that banks were facing credit risk and that inspection by branch managers and financial analysis were the main methods used in risk identification. The study used survey based methodology for data collection. The sample for the study comprised of six commercial banks from UAE with three non-Islamic and three Islamic banks and with 148 credit risk managers as respondents for the survey.

In Spain, Silas and Saurina (2002) evaluated credit risk in Spanish commercial banks and the findings of the study stressed on bank supervisory policy issues, the study used descriptive research design. Apparently, none of the above addresses the problems commercial banks in developing countries are facing. A study was conducted to examine the link between credit risk and bank performance by Felix and Claudine (2008) using return on asset and return on equity as measures of banks profitability and the ratio of non-performing loans to total loans as indicators of credit risk. It could be concluded from their findings that return on equity and return on assets both measuring profitability were inversely related to the ratio of non-performing loan to total loan of financial institutions thereby leading to a decline in profitability. Ahmad and Ariff (2007) carried out a study on the key determinants of banks performance and credit risk management, the outcome pointed out that credit risk of default in developing economies were higher than that of developed economies, indicating that guidelines and legal sensible requirement are important to the banking system that offers a wide range of services. Thus, judicious credit risk management is vital in the case of loan dominated banks in emerging market and developing economies.

In Kenya, the following studies were carried: Wanjira (2010) carried out a study on the relationship between non-performing loans management practices and financial performance of commercial banks in Kenya. The study recommended adoption of non-performing loan management practices. Ochola (2009) conducted a study on the relationship between credit risk management and non-performing loans. The research found out that credit risk management coupled with close supervision by Central Bank, greatly reduces non-performing loans. Ngare (2008) conducted a survey of credit risk management practices by commercial banks in Kenya. Most commercial banks were found to use loan diversification, bank guarantees and bank covenants to mitigate against credit risk. Simiyu (2008) analyzed techniques of credit risk management and observed that many financial institutions use 6c's techniques of credit risk management. The study also established that majority of the institutions used credit matrix to measure the credit trend and default rate.

## 2.7 Summary of Reviewed Literature

Studies have shown that even though banks are affected by many types of risk, the main type that has to be measured and monitored closely is the credit risk. Mismanagement of this type of risk has been found to bring about the occurrence of financial instability in commercial banks and ultimately the bankruptcy of commercial banks and other financial institutions causing major financial crises in various corners of the world affecting both developed and undeveloped economies. Various studies also show that credit risk is one threat that commercial banks live to fight. From the review of literature, study will focus on influence of Credit risk management strategies and its impacts on financial stability of commercial banks. This study aims at researching on contribution of credit risk management strategies on financial stability in commercial banks in Kilifi.

### 3.0 Research Methodology

The location of the study is Kilifi County, covering all the commercial banks. The target population for this study was all the commercial banks operating in Kilifi County of which the number stands at 12. A census survey was conducted involving all the 12 operating Commercial banks in Kilifi County. The target respondents were: credit manager, credit officer and recovery officer (three respondents for each bank) in each Commercial Bank in Kilifi County. The study adopted the purposive sampling technique in deciding on the respondents. Self-administered Questionnaires were used to collect data.

Data pertaining to the objectives of the study were analyzed by employing descriptive statistics, tables, graphs and charts for better understanding and Quantitative values on credit control tools and measures were derived from questionnaire ratings using a 5-tier Likert Scale ranging from 1 -for highly disagrees to 5 - for highly agree. Robustness of the factors and cause-effect relationships were analyzed using Mann Whitney and regression tests, respectively. Mann Whitney is a test used to compare the medians of two distributions that are not normal.

Normality of the data was tested using an Anderson-Darling probability test and indicated that all entries were not normal. The Anderson–Darling test is used to test the normality of a distribution while Ordinal logistic regression is used to test the influence of an independent variable on a dependent variable both of which are not normal as well as to test cause-effect relationship between variables that are not normal.

For this reason an Ordinal Logistic Regression analysis was preferred. Microsoft Excel and MINITAB soft wares were used as an aid in the analysis. The following general ordinal logistic regression model was adopted (Bender and Grouven, 1997).

$$Y_i = \alpha_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon_i$$

Where,

Y is the dependent variable

$\alpha$  is the constant (Y intercepts)

$\beta$  is the coefficient

X is the independent variable (predictor variable)

### 3.1 Data Presentation and Analysis

This chapter presents the findings of the study and discusses the results. The discussions are guided by the research objectives.

#### Objective one

What are the Credit monitoring strategies used by commercial banks in Kilifi County?

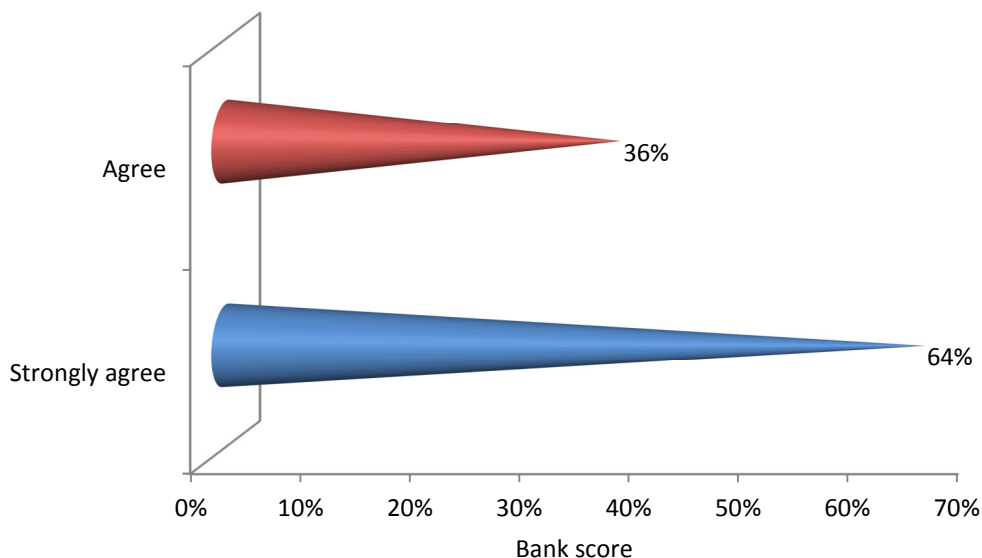


Figure 1: Descriptive Statistics (credit manual)

From Figure 4.1, it is evident that most of the respondents constituting 64% strongly agreed that their banks had credit manuals for managing credit risk. The finding of the study also shows that 36% of the respondents agreed on the statement that their banks have credit manual for managing risks. This means that all the banks process credit manuals and as a result the banks can manage their credit risk since the workers operate under the same guidelines or policies developed by the bank. Structures and processes of the banks are most effective when their design function match their environment and impact to bank's strategies (Matej, 2008). The study is

in agreement with Rahman (2011) who in his study argued that structures and processes of the banks are most effective when their design function and match their environment and have impact on the banks strategies. Also Chaplinska (2012) pointed out that lending institutions need to have a credit risk management policies in place and lack of it leads to bank failures as a result of non-performing loans.

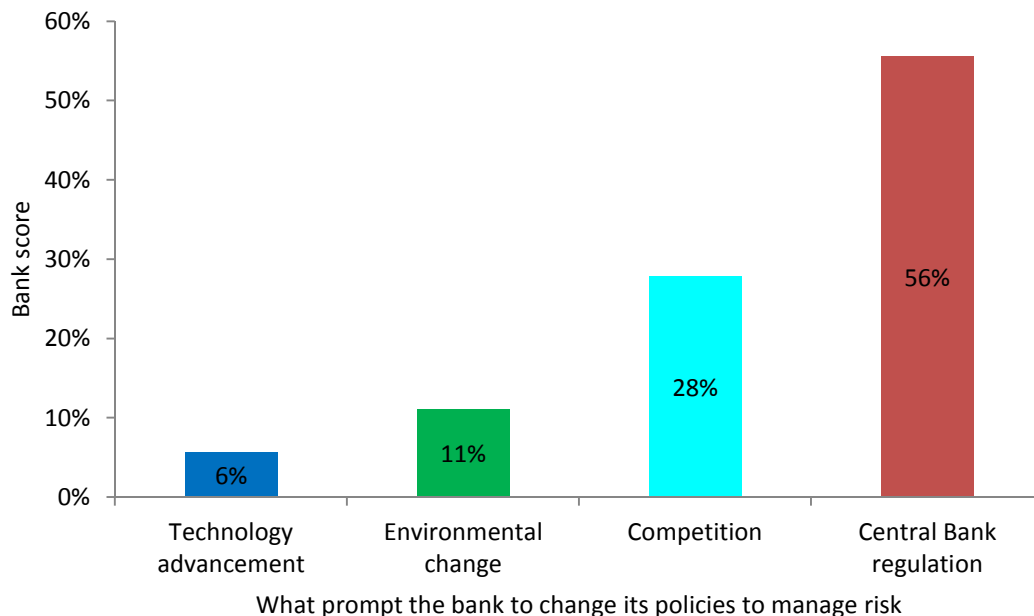


Figure 1: Descriptive Statistics (factors that prompt banks to change their policies on risk management)

The findings in figure 2 indicate that Central Bank is the key player in determining policy changes. Central Bank carries out both on-site surveillance and off-site surveillance. On-site surveillance involves routine inspections conducted by Central Bank officers (inspectors) at the institution's places of business to examine business records to confirm the institution's state of compliance with the legal and regulatory requirements. Off-site surveillance entails the review of the periodic returns submitted to the Central Bank by the commercial banks. The study is supported by Ongore *et al*, (2013) who said that Central Bank of Kenya has played a significant role in prevention of bank failures through its supervision and regulatory role and has protected many customers from the effects of bank failures due to toxic lending practices.

Table 1: Descriptive Statistics (Approaches employed by the bank to identify viability of the borrowers)

| Approaches            | Frequency (f) | Percent (%) |
|-----------------------|---------------|-------------|
| Equity based approach | 7             | 19%         |
| Sensitivity analysis  | 7             | 19%         |
| Credit portfolio view | 22            | 61%         |
| <b>Total</b>          | <b>36</b>     | <b>100%</b> |

Credit portfolio approach seems to be the most preferred by commercial banks in (61%) identifying viability of the borrowers, equity based and sensitivity analysis approaches are preferred by a few respectively (19%) as a way of determining the and proving the credit worthiness of the borrowers. It is important to understand the character of every borrower in regard to his or her ability to repay the loans given to them so as to only give or advance loans to those who have the highest chances of repaying the loan not only in full but in time.

Equity based approach also known as asset-based lending is any kind of lending between the bank and the borrower that is secured by an asset (Shadab, 2013). This asset could be anything and is taken by the bank in case the borrower hasn't re-paid the money back to the bank as agreed. Sensitivity analysis is an approach based on evaluating borrowers' repayment capacity and general loan performance based on the level of risk exposure regarding the business they invest (Barnard and Yeager, 2013).

Credit Portfolio View is an approach based upon the argument that loan default (non-performing loans) and migration probabilities are not independent of the business cycle but the prevailing economic status (Derbali, 2011). Credit portfolio view in risk includes assessing the risk involved with each potential loan given to borrowers and analyzing the total amount of risk the portfolio incurs as a whole. The process is crucial to the banks who issue loans as a major part of doing business. Majority of the banks seems to prefer this because it helps to identify the viable borrowers and thus averting financial crisis that comes with loan default.

### Objective two

What are the credit terms used by commercial banks to eliminate loan default?

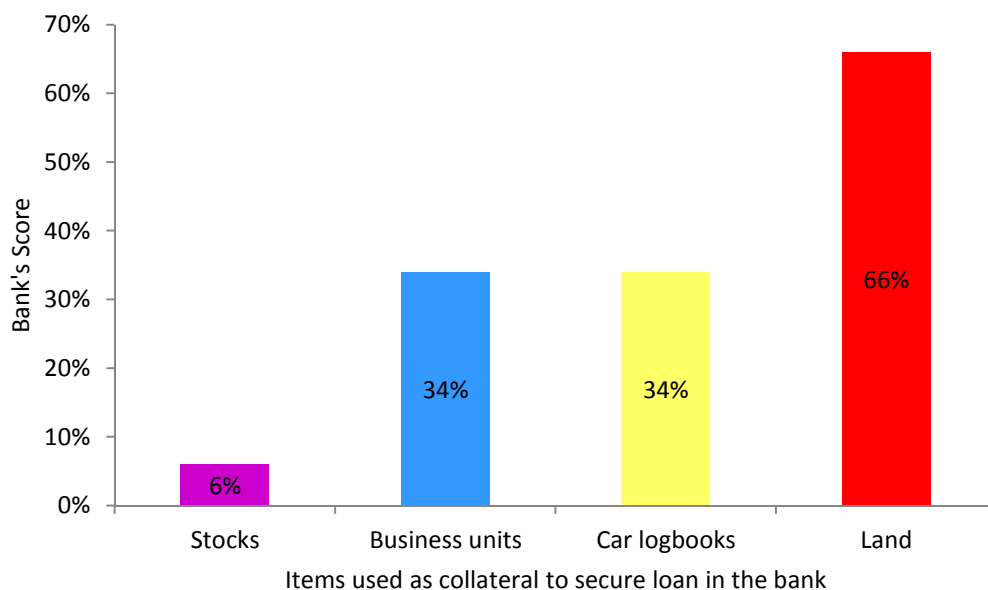


Figure 3: Descriptive Statistics (Items used as collaterals to sure loan in the bank)

From Figure 3, it emerges that land (title deeds) is the most preferred item used to secure loans in the bank as confirmed by 66%. Nevertheless, business units and car logbooks at 34% respectively serves as collaterals in some instances. With land the banks are assured of security for the loan advanced to the customers just in case the borrower is not able to repay the loan as agreed. This is informed by the fact that land value keeps on appreciating every year unlike other assets such as cars that depreciate with time. The study by Charles *et al.*, (2016) suggest that movable assets increase the likelihood that borrowers perceived to be less creditworthy will obtain loans from both informal and formal sources such as banks as opposed to immovable assets such as land

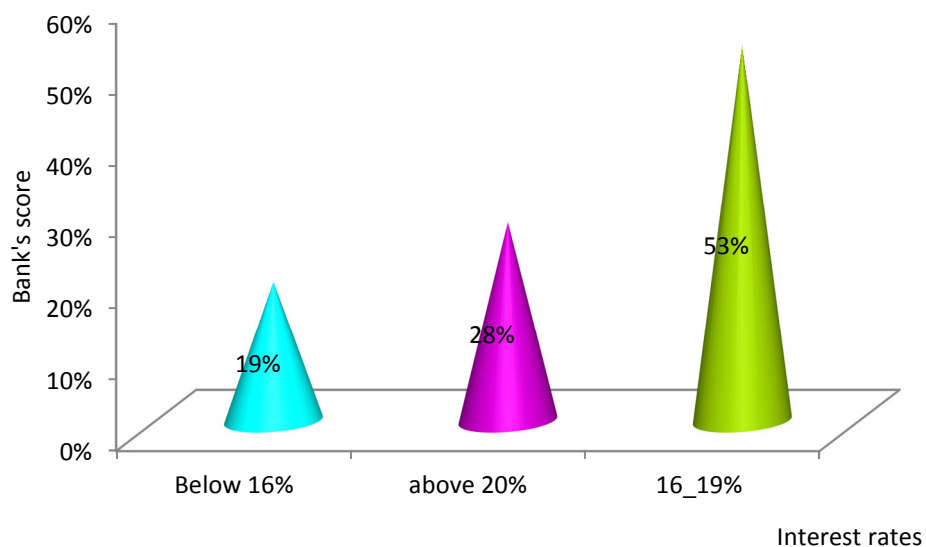


Figure 4: Descriptive Statistics (Preferred interest rates)

From figure 4 above, respondents answered a question on the preferred interest rates that their respective banks use and that is able to yield profit for the banks. Majority (53%) said that interest rates of between 16 to 19 is good for the bank, 28% of the respondents indicated that interest rates of above 20% is preferred and yields high profit for their banks while 19% preferred interests rates. The banks choose interest rates that will give them high returns as well as attracts potential borrowers.

### Objective three

What are the credit risk control measures used by commercial banks to ensure financial stability?

Table 2: Descriptive Statistics (Tools used by commercial banks to control credit losses)

| Variables            | Very much % | Much % | Somehow % | Neutral % | Not at all % |
|----------------------|-------------|--------|-----------|-----------|--------------|
| Agreements           | 33          | 36     | 17        | 8         | 6            |
| Collaterals          | 67          | 31     | 3         | 0         | 0            |
| Credit rationing     | 50          | 28     | 6         | 17        | 0            |
| Loan securitization  | 44          | 33     | 8         | 14        | 0            |
| Evaluating contracts | 50          | 33     | 8         | 6         | 3            |
| Credit protection    | 64          | 33     | 0         | 3         | 0            |

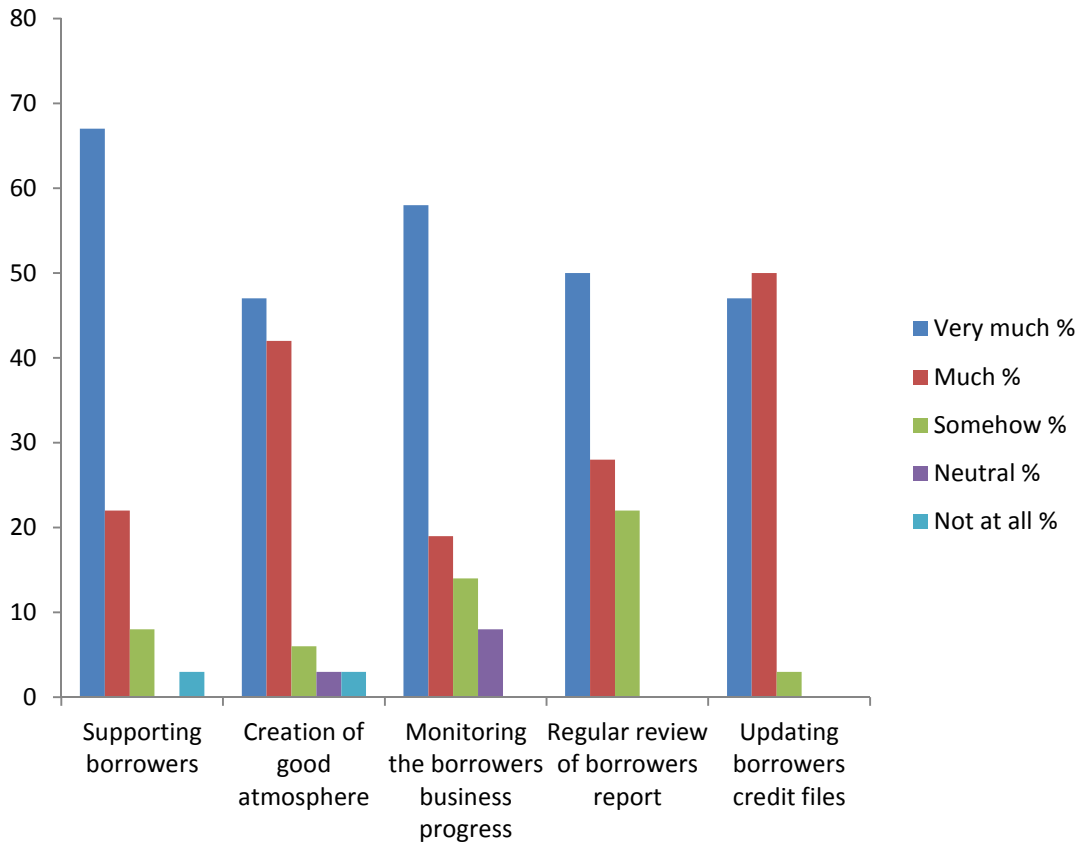


Figure 5: Descriptive Statistics (Activities carried by the banks as a measure of credit loss control)

#### Robustness of Credit Control Measures

Mann Whitney tests of medians were run to determine whether banks in Kilifi perceived credit control policies to be appropriate for a variety of credit scenarios among clients and whether some measures were considered superior to others. The results are summarized in Table 1 below. Collaterals and Credit protection were considered to be equally ( $W=1584$   $p=0.2902$ ) robust tools to control credit losses but superior to agreements ( $W=1860.5$   $p=0.0001$ ), credit rationing ( $W=1782$   $p=0.0352$ ) and contract evaluation ( $W=1712.5$   $p=0.0368$ ).



Table 3: Mann Whitney Test (comparisons for various credit control measures and tools )

| Comparisons                           | W      | P       |
|---------------------------------------|--------|---------|
| Collaterals > Agreements              | 1860.5 | 0.0001* |
| Collaterals > Credit ration           | 1782.0 | 0.0352* |
| Collaterals > Contract Evaluation     | 1712.5 | 0.0194* |
| Collaterals > Credit protection       | 1584.0 | 0.2902  |
| Regular contact> Problem solving      | 1427.5 | 0.0751  |
| Regular contact> Supporting borrowers | 1480.0 | 0.0194* |
| Regular contact> Monitoring progress  | 1385.5 | 0.1738  |
| Regular contact> Regular review       | 1446.0 | 0.0482* |
| CRM > Evaluation frequency            | 1459.5 | 0.0313* |
| CRM > Repayment period                | 1717.5 | 0.0000* |
| CRM > CRS                             | 1399.0 | 0.1348  |

\*indicates that results were significant at 95%

Key credit control services were also subjected to a similar test. The results indicated that Regular contact with borrowers, creating an atmosphere that encourages problem solving and monitoring progress of borrowers' businesses through their bank accounts (W=1427.5 p=0.0751), (W=1386.5 p=0.1738), and (W=1446 p=0.0313) respectively, were all equally robust compared to supporting borrowers when in problems and dealing with situations as they arise (W=1480 p=0.0194).

#### Factors Affecting the Choice Credit Control Strategies

Ordinal logistic regression models were ran to determine factors that influenced banks in Kilifi to adopt a particular credit control strategy. Successful models were identified based on the significance of factors to the model (p-value), significance of the overall model (p-value), ability to fit the data (Pearson's p-value) and predictive capability (Somers' D). The following general ordinal logistic regression model was adopted (Bender and Grouven, 1997).

$$Y_i = \alpha_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4$$

Where,

Y is the dependent variable

$\alpha$  is the constant (Y intercepts)

$\beta$  is the coefficient

X is the independent variable (predictor variable)

The findings are explained for each strategy as follows:

#### Credit Protection

Although the relationship between factors analyzed was significant (p=0.041), relatively robust (p=0.69) and with a reasonable predictive capability (Somers' D=0.57), none of the factors had a significant influence (p>0.05). The model gained significance (p=0.015) when it was regressed against Evaluation frequency (p=0.022) but with declines in robustness (Pearson p=0.47) and predictive capability (Somers' D=0.39) see table 3. It follows, therefore, that the factor "Frequency of evaluating loan contracts" provided bank managers an opportunity to understand borrowers' challenges and vice-versa and perhaps strengthened commitment from the two parties to identify and overcome credit repayment challenges. With a greater sample size was credit protection was expected to enhance the predictive capacity of the model. In the model the variable are as follows: CreditProt = 10.977 ( $\alpha_1$ ) + 14.507 ( $\alpha_2$ ) - 1.59299 (CRM) - 1.15443 ( $X_1$ ) - 0.325 ( $X_2$ ) - 0.38 ( $X_3$ )

Where,

Y is the credit protection, (Dependent variable)

$X_1$  is the frequency of evaluating collateral

$X_2$  is the repayment period

$X_3$  is the credit risk strategy

(Evaluating collateral, repayment period and credit risk strategy are independent variables)

From the findings it could be plausibly concluded that credit protection as a strategy, to a great part contemplated as collateral by the bank, provided the most appropriate measure for handling multidimensional risks to credit for a diverse clientele operating in diverse client risk scenarios. Frequency of evaluating collateral, therefore, became a rational means for constantly assessing the credit risks and in the process provided a means for enhancing decision-making for the client either through provision of technical support or extension services to the investment projects. The resulting customer experience is thought to have strengthened loyalty and satisfaction to the bank. This study demonstrates that the motivation behind Banks in Kilifi choosing collateral as a credit risk management strategy derives from its robustness to fit diverse credit scenarios but importantly as a critical component for enhancing customer experience. The findings of this study supported by Berger and Udell (2002) who pointed out that agreements, collaterals, credit protection, credit rationing and loan securitization have been used in developing countries in controlling credit losses.

### 3.2 Summary of Findings

1. All commercial banks have credit manual documents which elaborate well the strategies for managing credit risk. This is indicated by respondents who agreed (100%) that their respective banks had the credit manual to manage credit risk. The study confirmed that there are several factors that prompt commercial banks to change their policies in managing risks these factors include Central bank, technology advancement, environmental change and prevailing competition in the market.
2. Land is the most common and preferred assets to secure loan from commercial banks as collateral as indicated by majority of the respondents. Many commercial banks prefer interest rates of between 16% and 19%.
3. The study shows that commercial banks use numerous tools for controlling credit losses. The tools used are agreements, collaterals, credit rationing, loan securitization, evaluating contracts and credit protection. Collaterals, credit rationing and loan securitization have been used by banks in developing the world in controlling credit losses (Berger and Udell, 2002). Commercial banks carry out various activities as a measure of credit loss control. These are: supporting borrowers when in problem dealing with situations as they arise, creating an atmosphere that encourages problem solving, monitoring the borrowers' business progress, regular review of borrowers' report and updating borrowers' credit files regularly. From the findings it could be plausibly concluded that credit protection as a strategy, to a great part contemplated as collateral by the bank, provided the most appropriate measure for handling multidimensional risks to credit for a diverse clientele operating in diverse client risk scenarios.

### 3.3 Conclusion

It is paramount for all commercial banks to have comprehensive credit control measures in place; Effective credit control is a key to sustaining a fast-growth business especially in the lending institutions. Non-payment of loans can create major cash flow problems for commercial banks. As the banks increase their customer-base, managing credit inevitably becomes more time-consuming and complex issue.

### 3.4 Recommendations

1. Commercial banks should develop risk management strategies that are consistent with their credit risk tolerance and their business goals. The management should periodically review the credit risk strategies and any changes and concerns should be effectively communicated to all relevant staffs.
2. Commercial banks should also accept other items such as stocks of the businesses as collaterals so as to open credit availability to those who do not own a piece of land or motor vehicles.
3. Interest rate charged by the commercial banks should be reduced so as to benefits many citizens and make it easier for them to repay their loans.

### 3.5 Acknowledgement

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