# Effect of Credit Risk Management Practices on Profitability of Listed Commercial Banks at Nairobi Securities Exchange in Kenya

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Abstract: The study sought to analyze the effect of credit risk management practices on profitability of listed commercial banks at Nairobi Security Exchange in Kenya. A descriptive research design was adopted. The population comprised of listed commercial banks where a sample of 55 employees was purposively sampled. It was established that credit appraisal practices had a significant positive effect on profitability and that it explained 14.4% of the variations in profitability. The results also found that credit monitoring had a significative positive effect on profitability and that 47.8% of the variance in profitability. The findings further, indicated that debt collection practices had a positive and significant relationship and explained 17.4% of the variations in profitability. Lastly, the results indicated that credit risk governance had a positive and significant effect on profitability. Based on the study findings the study concluded that credit appraisal, debt collection and credit risk governance have a significant positive effect on profitability. It is thus recommended that commercial banks should have stringent credit appraisal and debt collection policies, credit personnel at all levels must work in co-ordination in order to ensure that credit is collected in a timely manner and banks should also adopt credit risk governance frameworks which can be attained by making the process of interaction between senior management and the Board more effective.

Key Words: Credit Appraisal and Monitoring, Risk Governance, Profitability, Debt Collection

#### I. Introduction

Banks are important to economic development through the financial services they provide. Their intermediation role can be said to be a catalyst for economic growth. The efficient and effective performance of the banking industry over time is an index of financial stability in any nation. The extent to which a bank extends credit to the public for productive activities accelerates the pace of a nation's economic growth and its long-term sustainability. Further, credit extension enhances the ability of investors to exploit desired profitable ventures and is an avenue through which banks create credit (Kargi, 2011). However, this exposes banks to credit risk which in turn could eventually lead to a financial crisis .

Credit extended to borrowers may be at the risk of default such that whereas banks extend credit on the understanding that borrowers will repay their loans, some borrowers usually default and as a result, banks income decrease due to the need to provision for the loans. Where commercial banks do not have an indication of what proportion of their borrowers will default, earnings will vary thus exposing the banks to an additional risk of variability of their profits. Every financial institution bears a degree of risk when the institution lends to business and consumers and hence experiences some loan losses when certain borrowers fail to repay their loans as agreed. Principally, the credit risk of a bank is the possibility of loss arising from non-repayment of interest and the principle, or both, or non-realization of securities on the loans (Kithinji, 2010).

# 1.2 Problem Statement

Financial institutions have faced difficulties over the years for a multitude of reasons, the major cause of serious banking problems continues to be directly related to lax credit standards for borrowers and counterparties, poor portfolio risk management, or lack of attention to changes in economic or other circumstances that can lead to a deterioration in the credit standing of a bank's counterparties (Gil & Diaz, 1994). In unstable economic environments, interest rates charged by banks are fast over taken by inflation and borrowers find it difficult to repay loans as real incomes fall, insider loans increase and over concentration in certain portfolios increases giving a rise to credit risk.

The problem that this study wishes to address is that credit risk management is a pertinent managerial decision that if not well addressed would lead to lower profitability and in extreme cases lead to bank failure. Does credit risk management practices really matter to commercial banks? If they do, then they should significantly contribute to profits as high profits are expected to enhance shareholder value.

DOI: 10.9790/5933-06529296 www.iosrjournals.org 92 | Page

According to Central Bank of Kenya (2015) monthly economic review report, the value of gross non-performing loans (NPLs) increased by 32.7% from Ksh 81.4 billion in November 2013 to Ksh 108.0 billion in November 2014. Correspondingly, the ratio of gross loans increased from 51% in November 2013 to 5.5% in November 2014. The report further indicate the quality of the industry's loan book measured by the ratio of the net non-performing loans to gross loans deteriorated from 2.3% in November 2013 to 2.7% in November 2014. Most of banking crises emanate from consistent accumulation of non-performing loans. This is the reason the regulatory authorities are usually very stringent on the type and nature of loans granted by banks and the level of loan reserves maintained. The loan provisions generally act as a cushion to customer's deposits and shareholders' funds in case of defaults. Under provisioning can lead to overstatement of profits while over provisioning can lead to understatement of the profits, which will affect other issues among them taxation, level of dividends (CBK, 2015).

Several studies have analysed the effect of credit risk management practices on profitability. Gizycki (2001) Kithinji (2010) and Musyoki and Kadubo (2011) analyzed the impact of credit risk management on the financial performance of Banks in Kenya for the period 2000-2006 however, these studies failed to address the effect of credit risk management practices on profitability and it is for these reasons that this study wishes to establish the effect of credit risk management practices on performance of listed commercial banks at NSE in Kenya.

# 1.3 Research Objectives

- i) To establish the influence of credit appraisal practices on the profitability of listed commercial banks.
- ii) To determine whether credit monitoring practices affect profitability of listed commercial banks
- iii) To evaluate the influence of debt collection practices on the profitability of listed commercial banks.
- iv) To establish whether credit risk governance practices has an influence on the profitability of listed commercial banks.

## II. Research Methodology

This study adopted a descriptive design. This descriptive research design is preferred because the study needed to establish the effect of credit risk management practices on the profitability of commercial banks. The study targeted a population of 11 listed commercial banks in Kenya.

For the purpose of the study the sampling frame consisted of 11 listed commercial and the sample was purposively sampled and as a result 55 employees of from the 11 listed commercial banks was sampled. According to Mugenda and Mugenda (2003) purposive sampling is a sampling technique that allows a researcher to use cases that have required information with respect to the objectives of the study.

The study utilised primary data that was collected through administration of structured questionnaires to the 55 employees. The collected data was then analysed using a multiple linear regression model that linked the independent and dependent variables as indicated in the model specification illustrated below;

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \mu$$

Where:

- Y Represents prrofitability of Commercial Banks,
- $X_1$  Represents credit Appraisal Practices,
- X<sub>2</sub> Represents credit monitoring practices,
- $X_3$  Represents debt collection practices,
- X<sub>4</sub> Represents credit risk governance,
- Represents the constant term of regression while  $\beta_i = 1...4$  measure of the sensitivity of the dependent variable (Y) to unit change in the predictor variables
- $\mu$  Represents the error term.

#### III. Results and Discussions

#### 3.1 Reliability and Validity

Construct reliability was determined using Cronbach alpha coefficients that test internal consistency of items on a scale. A measurement scale was considered reliable if its Cronbach's alpha was  $\alpha \geq .70$ . Table 4.1 below presents Cronbach's alpha coefficients for the main study. Results show that the reliability of the instrument was satisfactory since all constructs had an Alpha coefficients exceeding .70 (Nunnally, 1978).

**Table 1:Reliability of Measurement Scales** 

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-	Cronbach's Alpha	No. Items		
Credit Appraisal Practices	.828	5		
Credit Monitoring Practices	.892	7		
Debt Collection Practices	.882	8		
Credit Risk Governance	.765	6		
Credit Appraisal Practices	.852	5		

## 3.2 Effect of Credit Risk Management Practices on Profitability

The results presented in the Table 2 below shows the amount of variance in profitability of commercial banks as jointly explained by the variance in the set of independent variables used in the study (i.e. credit appraisal practices, credit monitoring practices, debt collection practices and the credit risk governance adopted by commercial banks). The R-square indicates that 74.44 percent of the variance in profitability is jointly accounted for by the variations in credit appraisal practices, credit monitoring practices, debt collection practices as well as the credit risk governance. From this it can thus be asserted that the variables adopted in the study jointly explained a greater proportion of the variation in profitability and that the unexplained variation is small.

Table 2:Credit Risk Management and Bank's Profitability Model Fit

R	R Square	Std. Error of the Estimate
0.863	0.744	0.002525

Prior to estimation of the regression model the goodness of fit was performed and the results are presented in the Table 3 below where the results indicated that the overall model was significant, i.e. credit appraisal, credit monitoring, debt collection practices and credit risk governance are good joint explanatory variables for profitability of commercial banks (F = 27.661, p-value<0.05).

Table 3:Credit Risk Management and Bank's Profitability Model Fit

	Sum of Squares	df	Mean Square	F	Sig.
Regression	0.001	4	0.00	27.661	0.00
Residual	0.00	38	0.00		
Total	0.001	42			

The results in Table 4 show the multiple regression analysis of the effect of credit risk management practices on profitability of listed commercial banks.

Table 4:Effect of Credit Risk Management on Profitability

	Unstandard	Unstandardized Coefficients		p-values	R-Squared
	β	Std. Error			
(Constant)	-0.037	0.008	-4.526	0.000	
Credit Appraisal Practices	0.001	0.002	0.355	0.725	0.144
Credit Monitoring Practices	0.01	0.001	9.105	0.000	0.478
Debt Collection Practices	0.006	0.003	2.201	0.034	0.174
Credit Risk Governance	0.004	0.002	2.3	0.027	0.104

The results indicate that credit appraisal has a positive ( $\beta$ =0.001) effect on profitability and that it explains 14.4 percent of the variations in profitability of commercial banks as indicated by an R-Square of 0.144. the positive relationship implies that a one unit change in credit appraisal practices by commercial banks would be associated with a 0.001 unit increase in profitability.

These results are in tandem with the findings of Sudhir *et al.*, (2010) who noted that credit risk management is of utmost importance to banks, and as such, policies and procedures should be endorsed and strictly enforced.

Results also showed that credit monitoring by commercial banks has a positive ( $\beta$ =0.01) and significant effect (p<0.05) explained 47.8 percent of the variations in profitability of commercial banks as indicated by an R-square of 0.478. the implication of the positive relatinship is that a unit increase in credit monitoring would be associated with a 0.01 unit increase in profitability. This finding is in agreement with that of Mishkin (2004) who also noted that banks need to develop and implement comprehensive procedures and information systems for monitoring the condition of individual counterparties across the bank's various portfolios so as to improve on their profitability and overall efficiency of the bank.

Further, the results indicated that debt collection has a positive ( $\beta$ =0.006) and significant (p<0.05) effect on profitability which implied that a unit increase in debt collection practices by commercial banks would be associated with a 0.006 percentage increase in their profitability. The results also showed that 47.8 percent of the variance in profitability is accounted for by the variance in the credit monitoring practices by commercial banks indicated by an R-Square statistic of 0.478. overall, these findings are consistent with those of Nelson et al (2009) who established that an aggressive debt collection policy is the main bank specific factor, that affects profitability of commercial banks.

Lastly, the results indicate that credit risk governance has positive ( $\beta$ =0.004) and significant (p<0.05) effect on profitability. The results show that 10.4% of the variance in profitability is accounted for by the variance in the credit risk governance by commercial banks as indicated by an R-Square statistic of 0.104. the positive beta for credit risk governance implies that a unit change in credit risk governance among commercial banks would be associated with a 0.004 unit increase in the level of profitability.

Overall, the findings is in line with those of Peter and Sylvia (2008) who indicated that effective and prudent credit risk governance adoption among organizations ensures that the organization is profitable as there is minimal risk that arises due to default in credit repayments.

#### IV. Conclusions

The study concludes that credit appraisal has a significant positive effect on profitability and thus the implication of this is that a more stringent credit appraisal procedure would lead to ensuring that only credit worthy customers get loans. It also concluded that credit monitoring also had a positive and significant effect on the profitability. The implication on this is that credit monitoring ensures that the credit advanced to customers are monitored in terms of repay and thus an effective credit monitoring approach as adopted by commercial banks would therefore ensure that their performance in kept above bar on rather, their profitability is enhanced as credit default is kept low. It also concluded that debt collection has a significant positive effect on profitability of commercial banks. This implies that an aggressive debt collection policy pursued by banks ensures that credit advanced to customers are repaid on time and thus ensuring that profitability is not adversely affected as a result of debt accumulating due to non-repayments. Finally, it concluded that credit risk governance has a positive significant effect on profitability. This therefore implies that credit risk governance is an essential element that commercial banks and other organizations should pursue as it is linked to performance and in particular for this study it is established to have a positive link with profitability of commercial banks.

#### V. Recommendations

It is therefore recommended that commercial banks should have stringent credit appraisal techniques if it is to ensure that their profitability or performance is not adversely affected resulting from poor screening of debtors. Commercial banks should therefore adopt credit policies that would help improve prudential oversight of asset quality and to establish a set of minimum standards that should be applied before credit is advanced to customers. Further, as borrower selection is the key to successful lending, banks should focus on the selection of true borrower.

But at the same time it must be taken into account that right borrower selection does not mean that banks have to adopt conservative lending policy but rather ensure that the seek to adopt knowing the customers so as to ascertain the true purpose of the loan as this would ensure that care is taken so that good borrowers are not discarded due to strict adherence to the lending policy.

It is also recommended that commercial should al banks should adopt credit monitoring as it was established to have a significant impact on profitability. For instance at the branch level credit department must be adequately capable of collecting the correct and relevant information and analyzing the financial statements quickly and precisely. It is also important that credit officers be skilled enough to understand the manipulated and distorted financial statements. To ensure effective monitoring, monitoring of credit should be conducted at regular interval to ensure that the borrower is properly maintaining the credit and utilizing the borrowed money effectively.

It is also recommended that banks and any other credit lending organisation should have a stringent debt collection policy as the findings indicate that debt collection practices have a significant impact on the profitability of commercial banks. Therefore the credit committees at all levels must work in co-ordination in order to ensure that credit is collected in a timely manner. Finally, it is recommended that banks adopts credit risk governance. Appropriate credit risk governance can be attained by making the process of interaction between senior management and the Board more effective and achieving the right balance on the degree and content of intervention of the Board on risk matters. More specifically, building strong risk governance committees would enable firms have an effective credit risk governance framework.

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