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Mudanya, E., Kadima, M. J., Miroga, J.

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[1] Mudanya, E., [2] Kadima, M. J., [3] Miroga, J.

[1] Master Student, Jomo Kenyatta University of Agriculture and Technology [JKUAT], Kenya
[2] Lecturer, Jomo Kenyatta University of Agriculture and Technology [JKUAT], Kenya
[3] Doctor, Lecturer, Jomo Kenyatta University of Agriculture and Technology [JKUAT], Kenya

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ABSTRACT

Business environment is turbulent and characterized by a number of highly mutating factors; hence, both internal and external business environment can potentially affect survival, profitability and growth of enterprises. Existence of risks inflicts the operations of businesses and therefore it is important for risks to be identified and controlled in order to eliminate them or lower their severity. Commercial banks in developing economies especially Kenya has been reporting shrinking profits and a few have been put under receivership. In realization of the fact, this study aimed at assessing risks facing commercial banks in Kenya. The objective of this study was to determine the influence of Credit Risk Management Practices on performance of commercial banks in Kenya. This study adopted a descriptive research design and a panel data analysis. The target population was commercial banks in Vihiga County that are licensed and allowed to carry out business. The study census technique was applied because the target population was small. This study used both primary data and secondary data from the financial statements of the banks. Primary data was collected through issuance of structured questionnaire. Primary data analysis was done using SPSS version 23.0 and the panel data was analyzed using STATA version 12.0. Data was presented in tables and charts. The study revealed that credit risk management practices had a positive and significant influence on financial performance of commercial banks in Vihiga County; Kenya. The study recommended that it is important for banks to have a robust framework that effectively have Credit Risk Management Practices because they affect financial performance of commercial banks.

Key words: *Credit Risk Management Practices, Financial Risks, Financial Performance*

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INTRODUCTION

The Performance of commercial banks is important because of their nature of operations. Banks accepts deposits and in turn offer loans in a country hence acting as savings and investments mobilizes in an economy. Therefore, it is vital that banks' management seek strategic ways of enhancing profitability in order to realize sustained growth and stability of the financial institutions. According to Khan (2014) an effective risk management framework is pertinent in improving the profitability of commercial banks. It is true to suffice that commercial banks operate in a dynamic and volatile environment that is characterized by a number of risks that should be prudently mitigated. Financial institutions cannot thrive well without effective risk management practices that safeguard the entities from collapsing (Malik, Khan & Khan, 2014). This means that without proper risk management framework financial institutions are exposed to negative externalities which may lead to poor performance and collapse of the entities.

Financial performance measures express performance in monetary terms such as increase in revenue, Return on Investment (ROI), Earnings per Share (EPS) and Return on Assets (ROA) while non-financial performance expresses performance in terms of qualitative aspects such as customer satisfaction, improvements in the production processes, existence of a culture of innovation, productivity enhancement, quality improvements and general operational efficiency (Al-Ettayyem & Al-Zu'bi, 2015).Performance of commercial banks is very important because it ensures stability in the sector. Performance takes two dimensions, that is financial performance which entails the measure of how well resources are utilized in generating revenue while non-financial performance measures utilizes such aspects such as customer satisfaction, service delivery and reduction of wastes. Holton (2014) stipulate most banks reports performance in terms of profits and profitability. Profits can be defined as the residual of sales when all expenses are deducted. Profitability is the rate at which resources are used in generating incomes. For instance Return on Assets (ROA) is a measure of returns on use of a firm's assets and is a good measure of profitability (Khan, 2014).

According to Arrafin *et al.* (2014) risk affects performance of banks in Malaysia. This was attributed to the observation that banks main income earner project was issuance of loans and thus making credit risk inherent. As a result, credit risk was a risk that faced most banks in the country. In addition, Conti and Mauri (2016) indicated that financial risks such as interest risks, exchanges risks, liquidity risks, capital management risks and asset quality risk affected performance of Islamic banks in Jordan. In Pakistan, Abbas, Zaidi, Ahmad and Ashraf (2014) noted that risks had a significant effect on the performance of banks. In particular, they revealed that credit risk was the most significant determinant of performance of banks. This was because a higher exposure to credit risks would result into an increase in non-performing loans which negatively impacted on performance of banks. It is important to note that interest on loan is the main income source of most banks.Khan (2014) embraced risks had an impact on performance of commercial banks in the country, in particular, it was noted that liquidity risks, interest risks and credit risks had a negative and significant impact on Return on Investments on commercial banks. According to Boahene, Dasah and Agyei (2018) a high credit risk did not have any effect on performance of banks in Ghana where the banks relied on non-interest sources of income. This indicates that a high credit risk exposure does not necessarily lead to low profitability. However, the study revealed that the inability to pay debts and increase in non-performing rate had a negative and significant impact on profitability of banks in Ghana. As noted by Saira, Khalid and Abdul (2011) risks compromises on the sustainability of performance of all organizations.

According to Abbas (2014) risk management is the process of ensuring that that risks do not substantially affect the profitability of entities when

they do materialize. Risk management is a conscious and deliberate step by step process whose aim is to reduce the loss exposure or where possible eliminate the risk in totality. Risk management entails the analysis of the internal and business environment and identification of such risks that may be present, analysis of the risks and mitigating the risks (Al-Tamimi *et al*., 2015). This means that risk management starts at scanning the environment critically in order to discern potential threats and outlining steps that reduce the frequency and severity of the threats from occurring. Al Shakrchy (2017) note that risk management is a step by step process whose overall goal is to safeguard the organization from losses.

The modern financial sector is composed of various financial institutions with commercial banks being the most common. In Kenya, Commercial banks are entities that are regulated by the Central Bank of Kenya and are involved in business of taking deposits and issuing of credit facilities to customers. According to CBK (2015) the Kenyan banking sector is huge and more than KShs. 2.2 trillion worth of assets with loans and advances being to the tune of more than KShs. 1 trillion. It can therefore be noted that the banking sector is large in terms of assets possessions. Basically, commercial banks are the link between savers and borrowers through their action of taking deposits from those with surpluses and lending the same to borrowers. The CBK (2018) indicates that there are 43 commercial banks that are regulated the combination of the three Acts; Companies Act 487, Central Bank of Kenya Act 491 and the banking Act 488. In Kenya, commercial banks are categorized in terms of tiers depending on their asset bases. Those Banks that fall under tier category have assets worth over Kenya shillings forty billion, tier two banks have assets worth between ten billion and forty billion while the third tier banks have assets that are worth less than ten billion(CBK, 2018).

Statement of the Problem

Banks operate in an environment that is characterized by a lot of risks and this exposes them to losses in the event that those risks materialize. It is thus of paramount importance that risks are controlled with the intention of ensuring that risks are identified and mitigating measures set up. Central Bank of Kenya through its Bank Supervision Report indicated that non-performing loans among commercial banks had increased by 2. 4 % in year 2016 from a 6.9 % (CBK, 2015); hence, indicates that credit risk management was a challenge among commercial banks in Kenya. Saunders and Cornett (2015) stipulate banks' main liabilities are informed of deposits made by the customers. This means that banks should offer assurance that they are in a position of paying the deposits as and when called upon to so. As a result, liquidity of a bank is a vital ingredient towards sustainability of the financial institutions. The CBK (2017) notes that there are various risks that face the financial sector in Kenya and the most common and threatening is the credit risk management practices. A number of studies have been done in Kenya. Studies done by (Conti and Mauri, 2016: Baoahene, Deah and Agyei, 2018) dealt with credit risk management and revealed that credit risk management if done effectively improved performance of banks. On the other hand, some other scholars among them; (Gatsi, 2013; Said, 2014; Agyei, 2018) argued and stipulated and conformed to other risks with less support of credit risk management being the most influential; hence giving a researchable gap that could allow the study of credit risk management practice on financial performance in Vihiga County; Kenya.

Objective of the Study

The objective of this study was to establish the effect of credit risk management practices on performance of commercial banks in Kenya. The study was guided by the following research hypothesis.

- **H_{01}**: Credit risk management practices has no significant effect performance of commercial banks in Kenya

LITERATURE REVIEW

Theoretical review;

Financial Distress theory

The theory of financial distress was coined by Baldwin and Scott (1983) who aimed at explaining the predictors of financial wellness of firms. The authors noted that in the event that firms could not fulfill their financial obligations, they were said to be in financial distress. The theory notes that financial distress is predicted by some signs such as non-payment of dividends and failure to honor financial obligations as and when they fall due. The theory notes that the firm may be paying the creditors' normally but the crisis results when contractual liabilities of long term nature that falls due are not serviced. In this respect, the theory indicates that not being able to honor debts is a serious indicator of financial distress.

According to Wruck (1990), prior to default in financial obligations, evidence of distress is revealed by low performance and ineffective risk monitoring by the management of firms. This means that default of obligations does not just happen but is preceded by a situations that depict a failing firm in terms of risk management and overall financial performance. For instance, it would be a financial distress indicator if commercial banks do not have funds to honor depositors' withdrawals.

This theory is crucial to this study because it provides information on risk management particularly credit and liquidity risk management. The model indicates that there are predictors of financial distress which faces firms. On citing these predictors, the management of firms should work proactively in order to correct the anomaly before the situation escalates and leads to collapse of firms. Credit risk in banks implies a situation where banks are exposed to the risk of nonperforming loans due to default by borrowers. Liquidity is important because it indicates the position of the banks in terms of its paying ability. Thus this theory is related to credit risk and liquidity risks which are predictors of financial distress among banks in Kenya.

The theory of Efficient Structure was developed by Demsetz (1973) and posits that some firms exhibit better performance due to having more efficient methods than others. In this respect, the theory notes that some firms have internal capabilities that improve their profitability while some are not efficient. The theory notes that those banks that are more efficient tends to save on time for processes which saves costs. The ES theory advocates for firms to improve their levels of efficiencies in order to outdo their competitors. This theory takes two dimensions, that is, X-efficiency and Scale efficiency. According to Athanasoglou *et al*. (2008), X-efficiency notes that some firms are more efficient than others due to cost advantages. For this reason, firms with X efficiency gains a larger market share and this has the tendency of increasing their profitability due to market concentration.

As noted by Athanasoglou *et al.* (2008), the scale efficiency idealizes on improving performance of firms due to having economies of scale as opposed to having managerial efficiencies. Berger (1997) indicates that the costs incurred by banks with efficient management are lower thus improving profitability. However, the scale efficiency indicates that economies of scale play a role on performance of entities. In this respect, firms may reduce their unit costs through mass production which in turn would result into more market concentration. The theory of ES indicates that both internal and external factors affect performance of banks. As noted by Nzongang and Atemnkeng (2006), some banks may use their skilled management to enhance efficiency of processes while others improve profitability by increasing the scale of operations. The theory notes that both costs and scale of operational have the potential of influencing profitability of banks.

This theory is relevant to this study because it provides insights on what causes difference in performance among firms. The theory notes that management quality is an important ingredient of financial performance. This means that the management would be in a position to make proper accurate decisions with respect to liquidity, credit risk management and investing decisions. The theory has also noted that economies of scale have an effect on performance of firms. Further, the theory of ES has been established to pertinent to explaining performance of banks (Shepherd, 1986).

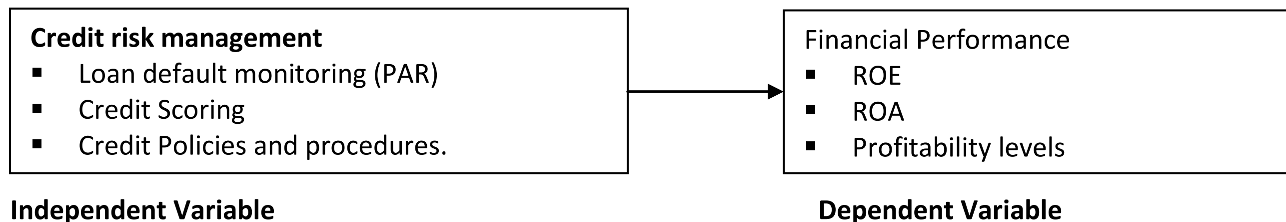

Figure 1: Conceptual Framework

Review of study variables

Credit Risk Management and Finance Performance

The core business for Commercial Banks is to mobilize deposits from the public and then lend to various sectors of the economy at a premium. Variability in returns may arise if several customers default on loan repayments thereby creating Credit risk. A study undertaken in Pakistan by Shahid et al., (2019) revealed that Credit risk is one of the main elements that in a big way influences how commercial banks performs financially; hence, it cannot be ignored when establishing if, in any way, there exists any correlation between good credit risk management and how commercial banks performs, if the risk owners could effectively employ good techniques in credit risk management, positive shareholders returns would be achieved.

Credit risk happens when the counterparty fails to meet its obligations timely and fully in accordance with the agreed terms. It is the risk of loss due to the other party defaulting on contracts or obligations. This can lead not only to an increase in the liquidity crises but also declines the quality of the bank assets. This problem may arise for Banks when there is a problem of asymmetry of information (Alshatti, 2015).

Rasika and Sampath (2015) carried out a study to investigate in to the effect of Credit Risk on the Financial Performance of Commercial Banks in Sri Lanka with special reference to Systemically Important Banks from 2011 to 2015 using quarterly financial reports. The secondary data collected from the bank's annual reports was analyzed using multiple regression analysis. In the model Return on Equity was used as the financial performance indicator while Non-Performing Loan Ratio and Capital Adequacy Ratio as credit risk indicators. Results of the analysis states that both NPLR and CAR have negative and relatively significant effect on ROE, with NPLR having higher significant effect on ROE in comparison to CAR, Credit risk still remains a major concern for the commercial banks in Sri Lanka because and it is an important predictor of bank financial performance.

Alshatti (2015) did a research aiming at examining the effect of credit risk management on financial performance of the Jordanian commercial banks from 2005 to 2013, thirteen commercial banks were chosen to express on the whole Jordanian commercial banks. The study revealed that the credit risk indicators have significant negative effects on banks' financial performance as measured by ROA. The study recommends banks.

Abas, Zaidi, Ahmad and Ashraf (2014) did a study on the effects of credit risk on the performance of Islamic banks in Pakistan. The study sought to investigate the effects of credit risk, market risks, liquidity risks and interest risk on the financial

performance of banks in Pakistan. The study adopted a regression model in data analysis and a sample of data was collected for a period of six years between 2006 and 2011. The study expressed financial performance in terms of Return on Equity and Return on Assets. It was revealed that credit risk weighed by ratio of Non-performing loans together with total loan adversely affected performance of ROA and ROE. This means that failure to manage credit risks leads to poor financial performance among commercial banks.

Siriba (2020) sought to find out if credit risk affected the level of financial performance of commercial banks in Kenya. Secondary data from year 2014 to 2018 was obtained from annual reports and descriptive statistics and multiple linear regression methods were used in the study. The notion that both delinquent loans and impairment of loans have a negative effect on returns of a bank was confirmed to be true. It was also confirmed that the level of loans and advances in a bank positively influences its profitability. Banks should therefore embark on growing a quality loan book while addressing on how clients are on boarded by profiling them to curb the credit risk.

Kajirwa and Katherine (2019) identified a substantial negative relationship between credit risk and banks' ROE in their research on credit risk and financial performance of banks, corroborating the idea. They also pointed out that when the ratio of NPLs to total LA grew, the banks' financial performance deteriorated. Almekhlafi et al., (2016) found that NPL has a considerable negative influence on performance, which is in line with the theory. However, some research contradicts this hypothesis. For example, Ogboi and Unuafe (2013) discovered that LLP improved performance, and Boahene et al., (2012) discovered a positive-significant association between credit risk and bank performance. Financial institutions carefully assess their clients before extending loans to them in order to reduce NPLs. Credit officers use proper risk management measures to improve their recovery efforts on non-performing loans (Siriba, 2020).

A study was conducted in Kampala, Uganda by Kalu (2018) where three licensed Microfinance institutions were analyzed using descriptive statistics. Data was obtained from primary source and from annual reports for year 2011-2015. Relationship between variables was done using Pearson correlation coefficient. According to the researcher, the level of influence of credit risk to the financial performance of an institution is determined by a combination of several techniques in credit risk management ranging from risk identification to risk monitoring and mitigation. The study found out that all these techniques had a positive influence of how a Bank performed financially. The study recommended that a Microfinance institution should emphasize on continuous application of good credit techniques and should be flexible in its application since they keep on advancing. This will help the institutions in measuring the credit risk exposures continuously and mitigate its downside effects towards overall financial performance.

METHODOLOGY

Descriptive research survey design was therefore used to determine an association between the conceptualized independent and dependent variables as shown in the study's conceptual model. This study targeted 9 Commercial Banks in the County Government of Vihiga; Kenya. A sampling frame is a list of all the items in the population (Cooper & Schinder, (2007). That is, it is a complete list of everyone or everything you want to study or a list of things that you draw a sample from. In this study it consisted of 9 Commercial Banks of the County Government of Vihiga; Kenya A sample size is a small portion of the target population that is considered for data collection where a census is not possible. Since the target population of this study is all the 9 commercial banks in Vihiga County, a census was done. Data was collected from the financial statements of the banks for the period of 2016 to 2021. Primary data was collected by means of self-administered questionnaires. The questionnaires had structured questions. These

questionnaires were structured and designed in multiple choice formats.

Data collected from the field was coded, cleaned, tabulated and analyzed using both descriptive and inferential statistics with the aid of specialized Statistical Package for Social Sciences (SPSS). version 24 software. Descriptive statistics such as frequencies and percentages as well as measures of central tendency (means) and dispersion (standard deviation) was used. Data was also organized into graphs and tables for easy reference.

Further, inferential statistics such as regression and correlation analyses was used to determine both the nature and the strength of the relationship between the dependent and independent variables. Correlation analysis is usually used together with regression analysis to measure how well the regression line explains the variation of the dependent variable. The linear and multiple regression plus correlation analyses were based on the association between two (or more) variables. SPSS version 24 is the analysis computer software that was used to compute statistical data.

Study conceptualized Regression Model;

$y = \beta_0+\beta_1X_1 + \varepsilon$

y = Financial Performance

β_0 = Constant

X_1= Credit Risk Management practices

$\{\beta_1\}$ = Beta coefficients

ε = the error term

FINDINGS AND DISCUSSIONS

The researcher distributed 54 questionnaires where 43 were filled and returned for data analysis. This provided a response rate of 80 % which was excellent for data analysis. According to Mugenda and Mugenda (2012) a response of above 50 % is good for data analysis and that of above 70 % is considered as excellent in data analysis.

Descriptive statistics: Credit Risk Management Practice on Financial Performance

These are summarized responses on whether Credit Risk Management Practice has influence on Financial Performance of Commercial Banks in the County Government of Vihiga; Kenya.

A mean of 4.44 with a standard deviation of 0.765 was found on if the bank had a rigorous process of borrowers' assessment which ensures that loan defaults are minimized. This means that the respondents agreed that borrowers' evaluation was effective in reducing loan defaults. On whether the banks had a strict credit limit policy which ensured that borrowers repay their loans thus not hampering banks profitability, a mean of 4.49 with a standard deviation of 0.506 was found. This means that respondents agreed that a credit limit policy was important in fostering loan repayments. A mean of 4.56 with a standard deviation of 0.502 was found on if the banks ask for guarantors and this safeguards it from loss of income due to loan defaults. This reveals that the respondents indicated that guarantors requirement in loan application was a good mitigation against loan defaults.

On whether the cost and time spent on credit risk management is adequate and this there is no chance of making mistakes, a mean of 4.77 with a standard deviation of 0.427 was established. This is an indication that respondents agreed that time allocated to credit risk management was adequate for the course. On if the bank has adopted a strict loan approval policy and this ensures that all loans are correctly approved; a mean of 4.53 with a standard deviation of 0.505 was established indicating that the respondents agreed with statement. A mean of 4.67 with a standard deviation 0.474 was established on whether filtering loanees reduces non-performing loans and thus enhancing performance of loans which increases profitability. In this respect, the respondents agreed that credit risk management practice was important in reduction of NPLs.

Inferential Statistics

Linear influence of Credit Risk Management practice on Financial Performance

Regression Model Fitting

With regard to the diagnostic test findings (emphasis on heteroscedasticity) and the result of the Hausman Test, the study adopted the Prais Winsten Regression with robust standard errors in modeling a function that explains the influence of financial risk management practice on financial performance of commercial banks in Vihiga County. The findings are presented on Table 1.

Table 1: Prais Winsten Regression

Prais-Winsten regression, heteroskedastic panels corrected standard errors						
Mean dependent var	0.259	SD dependent var				0.225
R-squared	0.729	Number of obs				54.000
Chi-square	37.930	Prob > chi2				0.000
ROA	**Coef.**		**St.Err**	**t-value**	**p-value**	**Sig.**
Credit Risk	1.895		0.572	3.31	0.001	***
_Constant	-0.0173		0.118	-0.15	0.883	

*** p<0.01, ** p<0.05, * p<0.1

According to Table 1, chi square test statistic of 0.0000 which indicates that overall model was statistically significant in explaining the financial performance of commercial banks in Vihiga County. The study found an R^2 of 72.94 % indicating that the variable accounts for 72.94% of variations in Return on Assets of the commercial banks. The other 27.06 % is accounted for by other factors that were not assessed. This means that Credit risk management greatly affects financial performance of commercial banks in Kenya.

The study had developed the following regression model

$ROA_t = \beta_{0t} + \beta_1 x_t$

On fixing the coefficients

$ROA = -0.173 + 1.895 X_1$

Where:

-0.173 is the Return on Assets in absence of the study variables

1.895 is the increase in ROA following an increase in 1 unit of credit risk management

CONCLUSIONS AND RECOMMENDATIONS

The primary data revealed that credit risk management practice affected financial performance of commercial banks in Kenya. This is because, of all the aspects that were asked, the output had statistics that indicated that the respondents' agreement to the statements as per the Likert's Scale. The analysis of secondary data revealed that there is a positive effect of credit risk management on financial performance of banks in Vihiga County. Also, the influence of credit risk management was found to be statistically significant (Credit risk management seeks to reduce the rate of nonperforming loans). As such, if credit risk management is effective, we expect, loan defaults to be minimal and this has a positive influence on interest income for the banks.

The secondary data indicated that credit risk management has a positive effect on financial performance of banks in Kenya. This is because; credit risk management aims at keeping loan defaults at the minimum. Credit risk management seeks to establish effect credit policies whose objective is to reduce the nonperforming loans. Loans are the major income earning assets for commercial banks. Having noted this, a reduction in NPL implies increased income for the commercial banks.

The study recommends that it is important for banks to improve their credit risk management and Operation risk management as it was found to have a positive effect on financial performance. An effective credit risk management framework

reduces the NPL which improve financial performance of the financial institutions. A high operations risk management provides a cushion in case of negative externalities and also provides control funds for more investments.

Areas for further research

Other studies can be done using other measures of financial performance such as Return on Equity in order to provide a holistic conclusion of influence of financial risk management on banks' performance. Still, another study can be done with the target population being the Banks in Kenya.

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