

DEBT MANAGEMENT AND LOAN PERFORMANCE OF COMMERCIAL BANKS IN KENYA

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ABSTRACT

This analysis examined debt management and performance of loan of the commercial banks in Kenya. The analysis anchored on the fact that loan performance linked to economic performance. Economies tend to be unstable especially in financial crises when non-performing loans increase. The key objective of the study was to evaluate the effect of debt management on loan performance of commercial banks. The specific objectives of the study included, establishing the effect of credit risk assessment on performance of commercial banks' loans, to determine the significance of periodic loan review on loan performance of commercial banks in Kenya, to identify the extent to which loan collateral help to achieve loan performance of commercial banks in Kenya, and to evaluate how early warning signs of loan delinquency affect loan performance of commercial banks in Kenya. Most reviews have examined credit performance, commercial banks performance and many more but there has not been much research on debt management and loan performance of commercial banks in Kenya. The significance of the study was to answer the question of how debt management affects the performance of loans of commercial banks. The research anchored on debt management, information asymmetry and moral hazard theories. The research design applied was causal research design. The target population of the research project was 108 managers from banks in tier II, and tier III. The research embraced purposive sampling to come up with a sample size of 85 respondents. The data was collected

using questionnaires. The data collected from the questionnaire was analyzed using IBM SPSS version 21.0 software. The findings were then classified, tabulated and summarized using figures. Therefore, the analysis identified that commercial banks loan performance aligns with the effectiveness of credit management practices evident in the banks. The credit management practices that entail character, capacity, capital, conditions, and collateral were less effective to loan performance than third party security. Periodic loan review tends to be effective in loan performance as determined in the study with a positive significance level as well as the extent of loan collateral presence on loan performance. The analysis recommended that the commercial banks and the government to evaluate and formulate policies that regulate exercises on credit risk management of loan delinquency.

Key Words: **Credit Risk Assessment, Debt Management, Loan Collateral, Loan Performance, Periodic Loan Review.**

INTRODUCTION

The entire world considers the financial system an important component of every nation's financial sector. These banks play important function in a country's economy. These roles not limited to directing money from several economic entities with surplus funds to those units with deficit funds, financial linkage, monetizing the economy and provision of seed capital (Al-Qudah, 2013). This therefore suggests that the safety of a nation's economy rests on the reliability of its banking system and financial system at large. According to Ndugbu and Okere (2015), a well-developed financial sector with effective financial systems is connected to the country's economic growth and development. Most importantly commercial banks serve as a core to the structure of a nation's economy where funds provided by the banks is the blood which if kept in flow the structures will stay sound and fit (MacCarthy, 2016).without capital financing to firms in diverse units of the economy, there will be stagnation in development in the economies (Meshak, 2016).

Most of the companies adopt debt as the technique to finance its activities. There are different types of debts that include private and public debt, secured and unsecured debt as well as syndicated and bilateral loans. Syndicated loans are business loans amid the creditor and an association of lenders while bilateral loans are debt amid the creditor and one lender (FinancialWeb, 2018). Private debt is the loan accrued by a person or private business while public debt is the debt acquired by the state (Meakin, 2018) Secured loan is the debt obtained by an asset such as investments or land while unsecured debt is the debt that lenders cannot demand assets for the payment of debt (Latoya, 2019).

Globally over a thousand financial institutions lose at least \$2 billion per year due to poor debt management. The currently witnessed economic crisis has proven the significance of institutions (both financial and non-financial) to maintain a healthy financial position. The risk of financial institutions failing to meet their financial obligations traditionally as witnessed has been increasing when debtors fail to honor their debt obligations.

For centuries, the quality of credit loan portfolios globally had been steady up until the crisis that hit the global economy in the years 2007 and 2008. It is well known that there is a connection between the economic cycle and loan performance. However, the decline in the performance of the loan has been consistently uneven across countries. Taking for instance, looking at the nations in the Baltic region that stood out in the comparison of the cross-country performance of Gross Domestic Product (GDP) throughout the crisis, there was a great swell in NPLs even in a controlled severity of the recession. For instance, the Latvia Economy had a shrunk totaling to 18% in 2009 in terms of the GDP. Yet during this Period, instead of doubling, the NPLs more than tripled this as per a simple cross-country regression of NPL growth compared to real GDP growth Rates (Roland, Petr & Anamaria, 2013).

Kenya Commercial Bank (KCB) is one of the immense banks in East Africa since it has subsidiaries in Uganda, Rwanda, Tanzania and Southern Sudan. It is said that the bank has

the bulkiest asset base and lends money to its subsidiaries. In 2016, the total amount of non-performing loans increased from Kshs.23.5 billion to Kshs.30.44 billion. From their statistics, this was a soaring record of Kshs.7 billion. In spite of the fact that there was a rise in profit gain by 1.6%, the NPL proved to stand a threat to its growth (KCB Group Plc, 2018). Nevertheless, non- performing loans could be curtailed through debt management techniques. Most banks use both an in- house debt management system or deploy debt management services (Fay, 2018). Debt management involves a system used by agencies or financial institutions to obtain unpaid debt (Irby, 2019). The achievement of reclaiming the debts will be identified by the chosen system's efficiency.

An effective debt management system seeks to improve the operating performance of an institution and it helps to meet both the short- and long-term goals. Hence, a research on debt management on loan performance is not only a vital aspect to the creditor but also to the overall management of a business concern both financial and non-financial.

Statement of the Problem

For a long period, financial institutions have been key players in both the financial sector and the general economy. They have a responsibility in financial linkage between the savers and borrowers that cannot be over looked. Consequently, the overall performance of financial institution is equally significant to the nation's economy (Ongore & Kusa, 2013).

As indicated in the bank annual supervision report (2017), the efficiency in the financing sector was low since there was a drop of 9.6 % in 2017 of pre- tax profits. There was also a slump in asset quality registration. The non- performing loans rate rose from 8.59 % in 2016 to 9.95% in 2017. An analysis done by Kenya Bankers association depicted a growth in the non- performing loans rate. The debt market has experienced explosiveness in the degree of NPLs that has risen to Ksh.292 billion. While implementing the banking amendment Act 2016, it was necessary for the defaulters to absolve the arrears before assimilation to the curtailed rates. This was straining to most of them due to the demanding business activities that was experienced in 2017 and early 2018.

The government has substantially invested in an enabling environment for the financial institutions to conduct business. Some companies however, have performed remarkably well while others continue to struggle. It is for this reason that some of these struggling institutions had to be delisted from NSE. Crucial efforts aimed at reviving the ailing and liquidating companies focused on corporate reform. Managers and practitioners however still lack the necessary guidance to attaining optimum funding decisions (Kibet, Kibet, and Tenai. & Mutwol, 2011) yet various challenges experienced by these institutions placed under statutory management were mainly accredited to poor debt collection policies (Chebii, Kipchumba and Wasike, 2011). This situation has led to loss of shareholder's wealth.

KBA cites growth of a credit less society. It implies real economic output experiencing an increase yet the commercial banks encounter adverse bank credit to the private sector hence

influencing the banks' financial performance and then affect the economic growth. From the statistics done by KBA, one can understand that the banks experienced much increase in lending from 2009 to 2011 but had a sharp decline from 2012 to 2018. In 2009, the loans rate was at 20%, 42% and 31% in 2010 and 2011 respectively. In 2018, the banks recorded a 2% loan ratio.

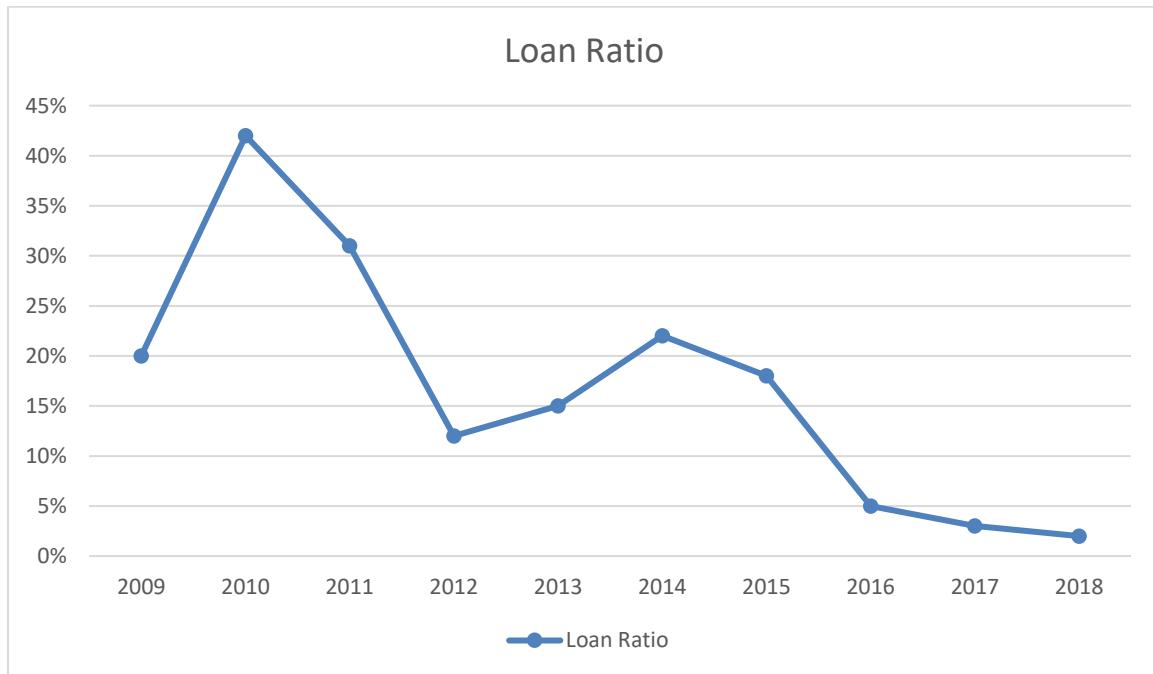


Figure 1: NPL Ratios 2014 -2018

Source: KBA (2019)

To maintain giving credit to its consumers, banks should consider exercising recommended debt management techniques as mentioned. The assumption is that most commercial banks lack prudent monitoring and assessment methods that help the bank to avoid credit less evidence. In addition, while applying the debt management techniques, the complexities encountered ignite the rise of non-performing loans (KBA, 2019). Studies done on the correlation between various debt collection management and loan performance yield mixed results. Various researchers have done Research and studies including; Gezu, (2014) on Determinants of Nonperforming Loans for Ethiopian banks, Gourgoura and Nikolaïdou, (2017) Credit risk determinants in the vulnerable economies of Europe focusing on the Spanish banking system, Calice (2012) on Tunisian Banking sector, Kolapo (2012) for the Nigerian Banks and Cucinelli (2015) on Italian Banks. The major finding is that the major determinants of loan performance relate to the banks debt management policies.

Locally, few studies on the management of credit risks in Kenyan commercial banks established that as much as the commercial banks place stringent measures on credit risk management, loan recovery was still an issue to numerous banks. Ombaba, (2013), Ngugi, (2001), Kithinji & Waweru, (2007), Bosire and Gathogo (2012) did research to determine the causes and impacts of NPL on the commercial banks in Kenya performance. One mutual findings of their studies were that NPLs have an undesirable consequence on the operating

competence of the financial institutions as well as on the entire economy explaining why debt management is necessary to enable financial institutions mitigate the impacts of NPLs.

Past global research and studies centered on other countries representing a different scenario from the Kenyan banking industry. This is because it is a representation of distinct characteristics of varying economic conditions such as economic size and market concentration. This may not apply to the Kenyan banks. Whereas the variables in the local studies are diverse therefore do not clearly explain the relationship between the major variable (debt management) and its effects on loan performance of commercial banks creating contextual, conceptual and methodological gaps. Other analyses have targeted the general capital structure financial institutions other than the relationship of debt management and debt performance. These gaps form the basis of the researcher's study, which seeks to determine the effect of debt management on loan performance of the Kenya commercial banks.

Objective of the study

The main objective of this study was to evaluate the effect of debt management on loan performance of commercial banks in Kenya

Specific Objectives

- i. To determine the effect of credit risk assessment on loan performance of commercial banks in Kenya.
- ii. To establish the effect of periodic loan review on loan performance of commercial banks in Kenya.
- iii. To determine the effect of loan collateral on loan performance of commercial banks in Kenya.
- iv. To examine the effect of Early Warning Signs of Loan Delinquency on loan performance of commercial banks in Kenya.

THEORETICAL REVIEW

Moral hazard Theory

Was brought forth by Kenneth Arrow (1963). The assertions of this theory can be traced to the insurance literature. Moral hazard denotes rise in the expected loss (probability of loss due to an event happening) due to individuals and firms behaving in a careless manner because of purchasing insurance. An insured firm may alter its behavior in a manner that increase the expected loss compared to what it would have been without coverage. Its current applications in economics are that “it’s a behavior that increases loss as a result of insurance” Rowell & Connelly (2012)

Moral hazard concept has been broadly used and is intensely rooted in economics practice thus small attention has been given to the underlying moralistic and ethical notions as suggested by this particular expression or its use (Dembe and Boden, 2000). what should be clear about the term “moral hazard” is that a normative notion arises out of the language Suggesting the presence of a moral danger because of too much insurance provision (Hale, 2009).

In the similar way, the study acknowledges the fact that the financial institutions strive to reduce the risk of having non-performing loans. Moral hazard theory supports this study by bringing in the idea that commercial banks through proper debt management techniques (as the insurance) have a responsibility to ensure that all the debtors have the capability of repaying their debts as well as the institution meeting their obligations to their lenders. The notion and expectation that another party would likely bear the risk of default creates a moral hazard and eventually will contribute to crisis.

Further the study acknowledges the good efforts to share in the challenges in people's lives. However, these efforts are accompanied by non-anticipated impacts. Additionally, the term moral hazard is suggestive that there is an ethical problem, as a result of too much insurance provision (Hale, 2009). There is a risk that the debtor would indulge in undesirable activities as per the creditor's point of view since it reduces his possibility of paying back a loan. This is so likely because, the borrower knows that someone else will pay for the mistake he makes (Down, 2012). Certainly, applying the economics of moral hazard commercial banks in their efforts to share in these challenges overprovide loan service (debt) without considering the fact that actually there are harmful consequences for over provision as much as they want to help people. Therefore, without effective debt management system in place it confirms the assumption of moral danger as most of these loans will not be performing.

Theory of Debt Management:

The debt management theory was pioneered by Faraglia, Marcket and Scott (2008). The theory of debt management asserts that the debt structure of the government should be selected in such a manner that an anticipated movement in the debt market value set off the expected fluctuations in the upcoming deficits. This approach to debt management is valid even when the government only issues convertible bonds Faraglia et al (2008). Further, they heeded that the governments in consideration to the theory, should instead issue long-term debt while investing in short-term assets.

Moreover, this theory holds that in line with debt management, debt structure and fiscal policy should be determined jointly, disassociating from the assumption that one of the main aspects affecting the fiscal policy is the government's position to Balance off the unforeseen changes in government expense or income through determining the debt value and composition as well as the management size (Faraglia, 2008).

Blommestein and Turner (2012) opined that there was a positive yield in alienating debt management from monetary policy and for the longest time was not challenged until the global financial crisis. During this time fiscal dominance was experienced. As a result, they emphasized the essence of looking into the harmony between the monetary policy and debt management. Further it can be claimed that actually debt management is vital in minimizing risks attributed to fiscal vulnerability by providing cover against shocks beyond a government or institutions control and that affects the budget.

In cognizance with these observations, Borenzstein, Chamon, Jeanne, Mauro & Zettelmeyer, (2004)) observed that so as to manage fiscal vulnerability may result into cutting down of expenditure, it's prudent that debt instruments whose returns effectively address government Spending should be issued by the government.

The theory therefore is instrumental in explaining to the commercial banks the significance of Sound debt management practices in minimizing the risks attributed to loan default as it is essential given that an institution's debtor's portfolio is the largest comprising of risky loans with the potential of non-performance thus generating substantial loss to the financial institution and its financial stability.

Empirical literature Review

Credit Risk Assessment and Loan Performance

Moti, Masinde, Mugenda, & Sindani (2012) did an empirical study of the micro finance sector in Kenya. Their aimed at assessing the usefulness of credit risk systems of management on the loans performance basing on the 5C's appraisal model of credit. They established that the 5'cs model of client assessment was significant when evaluating customers, hence microfinance institutions should take more thought on the client character, capacity to repay, Security inform of a collateral, repayment history, need assessment and size of the business before issuing loans and also that the microfinance institutions credit terms affected loan performance. However, the study focus was on the microfinance institutions based in Meru Town, Eastern Province, Kenya unlike the current study which focused on the financial institutions in Kenya addressing the contextual gap in literature.

Mendoza and Rivera (2017) researched on credit risk effect and capital adequacy on the Philippines rural banks profitability. They held that effective management of credit risk Should be considered a crucial element in an all-inclusive risk management approach which Must shield the individual loans as well as the whole loan portfolio. Moreover, they advised that the financial institutions ought to contemplate the connections between other forms of diversifiable and non-diversifiable risks and credit risk. In their study, they used Return on Asset and Equity (ROA & ROE) the banks measure performance. According to Their findings, credit risk had a negative influence on both ROA and ROE which was statistically irrelevant. Nevertheless, there was negative but statistically important effect on net profit after taxes. Since this study was based on Philippines, it cannot be generalized for the

financial institutions in other countries, especially in Kenya thus it formed a basis of this study.

Chen and Pan (2012) studied the efficiency of 34 Taiwan commercial banks credit risk looking at the period 2005 to 2008. Their study was based on financial ratios and Data Envelopment Analysis (DEA) to assess and analyze the credit risk respectively. Credit risk efficiency elements such as allocative efficiency (CR-AE), technical efficiency (CR-TE), and cost efficiency (CR-CE) were the key parameters of the study. However, in all the three types of efficiencies only one bank met the three types of efficiency. Data Envelopment Analysis model was used in this study unlike the current study which was based on regression model analysis addressing the methodological gap in literature.

Periodic loan review and loan performance

Haile (2015) did a study on loan repayment performance Determinants of Microfinance institutions in Harari, Ethiopia. They employed the use of Participatory tools like direct observation, focused group discussions, case studies and key informant interview to collect qualitative data. In addition to secondary sources, household survey was also used to draw quantitative data. Profitability level was used as a measure of loan repayment performance. The study showed that lack of training, follow up and loan review programs were an obstacle to the performance of institutions thus the debtors felt that no one had the interest whether they did not pay hence they did not repay. The study also showed that out of the sample respondents 51(42.5%) opined non-suitability of the repayment period whereas 69(57.5%) recommended a much longer than one year repayment period as suitable. This study looked at Microfinance institutions in Ethiopian whereas the researcher's study was addressing the commercial banks in Kenyan, thus addressing the contextual gap in literature.

Kwakwa (2014), he focused on bank loan portfolio (portfolio quality indicator) while conducting a study on the commercial banks' performance determinants in Ghana. He relied on ROE and ROA as banks' performance measure. Findings of the study showed that loan loss provision shown a statistically significant and a negative relationship with profitability before taxation. Provision for doubtful debts also had an effect on profits of banks after taxation as compared to profits before tax. This loss was caused by lack of MFI managers conducting routine monitoring of the portfolio quality ratios thus they were unaware of the amount and total loans rescheduled. The study however could not be generalized for other countries, especially the financial institutions in Kenya since it was based on Ghana and therefore it formed a basis of this study.

Loan collateral and loan performance

Acquah and Addo (2011) did an empirical study in Ghana, to identify the Determinants of loan repayment performance of fishermen in the country. For the independent variables, they measured the effects of the socioeconomic Characteristics of fishermen, the loan processing and disbursement Procedures and the socioeconomic elements of loan payment performance

of fishermen as in order to analyze the socio-economic factors, they relied on multiple regression analysis. Out of the interviewed fishermen 40.3% had to provide collateral substitutes before loans were given out whereas 59.7% did not provide collateral security before loans were given out to them. The study identified Fishing income and collateral issued as security as major determinants of the size of loan issued whereas the amount borrowed, floating charge on collateral issued as security and size of loan invested into fishing as significant predictors of loan repayment. However, the focus of the study was on loan repayment performance of fishermen in Ghana unlike the current study which was focusing on banks in Kenya thereby, addressing the contextual gap in literature.

Kinyondo & Okurut (2009) did a study on microcredit institutions from Tanzania looking at the Determining factors of loan repayment performance. This was judged on the basis of collected interest revenues and reduced loan losses showing the internal strength of the institutions. The logit model adopted for analysis of the elements of loan repayment performance among Micro Finance Institutions. The findings of the study show that insurance especially third part loan collateral in case of group borrowing had a major effect on loan repayment performance of MFI in Tanzania as measured by Interest Revenue collected.

Okoth & Gemechu (2013) did a study on factors affecting the loan performance of commercial banks in Kenya. The study used panel data dating for periods between 2001 and 2010. The findings showed that loan collateral as indicated by cash flow and collateral loans had a significant effect on the commercial banks' financial performance. However, this study relied on panel data analysis unlike the current research which used multiple regression analysis. According to Schmidt-Mohr (1997), a collateral pledge allows the creditors to observationally sort equivalent loan candidates and moderate these inefficiencies. The creditors may propose an agreement listing the terms such that candidates with a superior quality ventures select secured loans with lower payments rates, whereas those with projects of lower quality select unsecured debt at higher premiums.

Early Warning Signs to Loan Delinquency and loan performance.

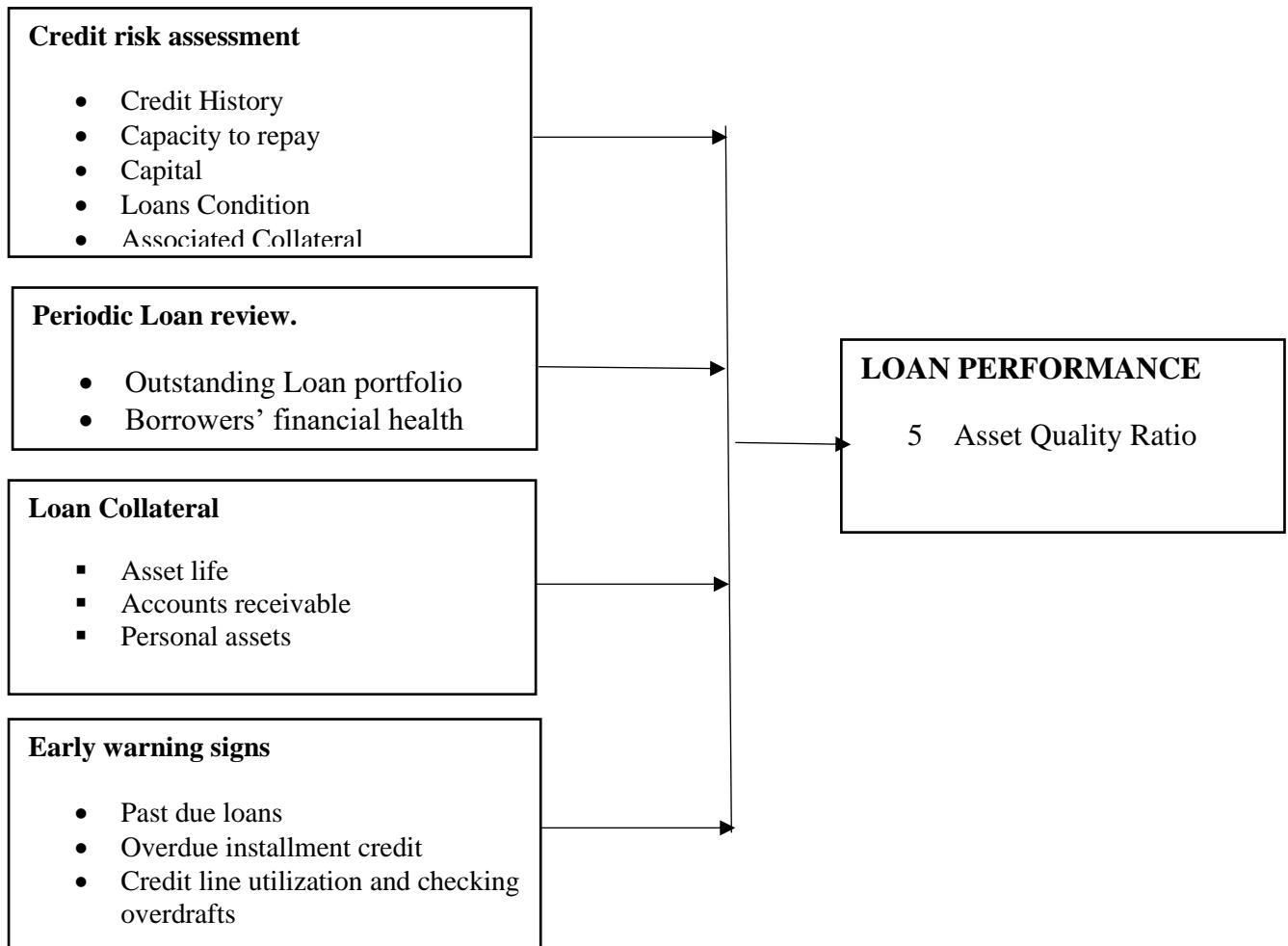
Addae-Korankye, (2014) researched on loan default/delinquency Causes and control focusing on MFIs in Ghana. They studied looked the twenty-five MFI's in Accra. Multiple regression model was used to analyze the study. From the results, causes of loan default by clients of MFIs differed. Clients assigned different factors, while loan officers who were on the field also assigned different factors. The factors indicated by clients as causes for payment default were not clearly the main reasons thereby much consideration ought to have been given to those factors of loan officers in order to reduce loan default. However, the study looked at causes and control of delinquency whereas the current study was on early warning signs to delinquency and loan performance addressing the conceptual gap.

Warue (2012) did a research looking at the Factors affecting credit delinquency in MFIs in Kenya. Multiple regression model was used to establish the loan delinquency indicators and

microfinance institutions. Irregular loan repayment, group conflicts, refusal to participate poor record keeping, overdue amounts were highlighted as early indicators of loan delinquency.

Figure 2: Conceptual framework

Debt management



Research Design

Research design according to Trochim (2006) is a structure of all the main components of the research project such as collection, measurement and data analysis. This current study adopted a causal research design. It was considered suitable since it helped to show the kind of the cause- and -effect relationship (Brains, Willnat, Manheim, & Rich, 2011). Causal research design was also considered suitable for the study since it indicated how an adjustment in one variable of the study (the independent variable) affected the dependent variable and explained the patterns of the relationship between variables.

Target Population was thirty-six (36) commercial banks listed in the lower tiers (tier 2 and tier 3) since most of these are the banks struggling with the buildup as well as liquidity problem (Kenya Bankers Association, 2019). The research targeted three respondents in each

bank namely: the bank managers, finance managers and credit managers drawn from the Head office of every bank listed in tier II, and III. The choice of these respondents was guided by their involvement in risk appraisal and management, cash flow management including collection, disbursement and production of financial reports and overall financial and business management of the financial institution. Therefore, the target population was a total of 108 (3*36) members from these banks. The criteria applied here entailed the purposeful sampling which describes the type of participants or respondents that satisfy the research's objectives (Morgan, 2019). As Morgan asserts, this criteria of selecting respondents are a technique in qualitative sampling.

Sampling Design

A sample of 85 members was drawn from a total of 108 bank managers, finance managers, and credit officers. So as to determine the sample of credit officers, the research used the Yamane's formula (Yamane 1967) as follows

$$n = \frac{N}{1+N(e)^2}$$

$$n = \frac{108}{1+108(0.05)^2}$$

$$n = 85.$$

Data Collection Instruments.

In order to collect data, the researcher employed the use of questionnaires. Questionnaires were used since it permits measurements against or for a precise point of view. It was also capable of collecting a great quantity of information in a short period. Also, through its use, the questions were easily analyzed and it also gave the respondents sufficient time to respond, (Orodho, 2009). Similarly, this method of data collection is considered appropriate since it is versatile; it saves time to distribute the questionnaires and is cost effective. The questionnaires were administered to the respondents in each institution. These were the bank manager, credit manager and finance manager. This was done using a drop and pick later method.

Data Analysis and presentation

Quantitative data was fed in an SPSS programme where it was analyzed using descriptive and inferential statistics. Descriptive analyses provide the basis upon which correlational studies emerge. They also provide clues regarding the issues that should be focused on leading to further studies (Kothari, 2011). Descriptive statistics assisted in calculating measures of central tendencies and measures of variability in order to determine how independent variables affect the dependent variables.

For the researcher to ascertain the manner in which dependent variables are affected by the independent variables, Inferential statistics through correlation analyses was applied to

establish the nature of the relationship that exists between the variables. In order to quantify the strength of the relationship between the variables, the study employed the use of multiple regression analysis to study the determinants of debt management and their influence on the loan performance of commercial banks. The regression model used was in the form of:

$$Y_{it} = \alpha + B_1 X_1 + B_2 X_2 + B_3 X_3 + B_4 X_4 + \epsilon$$

Where;

Y_{it} =Loan Performance for each commercial bank at year t

X_1 = Credit risk assessment

X_2 = Periodic loan review

X_3 = Loan collateral

X_4 = Early warning signs of Loan delinquency α =constant value

ϵ =error term

B_1-B_4 =coefficients/constants.

Qualitative data was analyzed by summarizing the drawn set of data from the respondents in frequency tables. The data was assigned numerical value and entered into the SPSS computer system. The study findings were be presented in form of frequency tables, pie charts and bar charts.

RESEARCH FINDINGS AND DISCUSSIONS

Descriptive Statistics

Table 1: Descriptive Statistics of Credit Risk Assessment.

Statement	Mean	S.D
The institution has adopted credit management practices	3.5176	1.55542
credit risk management practices affect loan performance	3.4353	1.11747
The institution to evaluate a customer as a potential borrower uses the 5Cs model of credit management.	3.6824	1.19734
The 5Cs help the institution to increase loan performance, as they get to know their customers better.	3.7294	1.44245
Third party insurance affects loan performance	3.5412	1.26823
Credit risk management practices Provide an effective framework to	3.3765	1.40557

measure, monitor, and control credit risk.		
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Source: Study Data (2021)

Comparatively, this study agrees with Mendoza & Rivera (2017) that non-performance of credit risk assessment has a negative influence on both ROE & ROA which are statistically irrelevant. However, it had a statistically significant and negative impact on net profit after taxes. It however contradicts studies by Kolapo, Ayeni and Oke (2012) that the influence of credit risk on institution's performance indicated by the Return on Assets of banks was unimportant. The study reinforces research done by Mwaura (2005), Chen and Pan (2012), Felix and Claudine (2008), and Al-Khoury (2011) which assert that lack of credit analysis, credit follow-ups moreover are the key factors contributing to poor performance in loan performance.

Table 2: Descriptive Statistics of Periodic Loan Review.

Statement	Mean	S.D
Provide an effective framework to measure, monitor, and control loan repayment	3.8941	1.20538
Provide guidance and timely information on emerging issues and concerns that should be incorporated into the customer loan policy and loan portfolio.	3.8706	1.06668
Routine check of clients' financial health is an effective indicator of loan performance.	3.8941	1.14459
Controls pending risk	3.6588	1.45203
Ensures the loan performance stability.	3.5412	1.26823

Source: Study Data (2021)

The research agrees with Haile (2015) study which found that lack of training, follow up and loan review programs were an obstacle to the performance of institutions thus the debtors felt that there was no interest that it did not matter whether they did not pay hence they did not repay. It also agrees with Cortavarria, Dziobek, Kanaya & Song (2000) and Kwakwa (2014) that doubtful debts resulting from lack of periodic loan reviews had a negative effect on profit before tax.

Table 3: Descriptive Statistics of Loan Collateral.

Statement	Mean	S.D
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Aspect of collateral are considered while appraising the client for loan.	2.6235	1.35380
Collateral is a way to guarantee the recovery of loaned money.	2.4118	1.06116
In case of failure to pay the loan, the collateral is used to compensate for the defaulted loan.	2.9176	1.44100
Collateral offered is adequate to secure the loan issued.	2.7765	1.37474
Loan collateral minimizes chances of loan default.	2.8353	1.37015

Source: Study Data (2021)

Unlike Acquah and Addo (2011), findings of this study established that a collateral is not a guarantee of loan repayment. The findings also contradict studies done by Kinyondo and Okurut (2009) and Okoth and Gemechu (2013).

Table 4: Descriptive Statistics of Early Warning Signs of Loan Delinquency.

Statement	Mean	S.D
The institution has put in place mechanisms to detect early warning signs of loan delinquency	2.8353	1.07844
Delinquency warning signs are a clear indication that the client's financial situation is deteriorating which requires immediate action.	3.4353	1.11747
There are mechanisms in place by the institution to protect itself if the debtor's situation continues to deteriorate.	3.4000	1.32017
Controls impending risk	3.7882	1.08116

Source: Study Data (2021)

The study agrees with findings by Addae-Korankye, (2014) Warue (2012) and Wenner (1995) that identifying loan delinquency signs helps prevent non repayment.

Table 5: Descriptive Statistics of Asset Quality

Statistics

N	Valid	36
	Missing	0
Mean		13.2996
Std. Deviation		2.0461
Total		558.59

Source: Study Data (2021)

Loan performance is the sole crucial aspect that affects the stability of banks as well as the entire commercial system. Reason being that lending is the principal factor for banks. According to the study done by the CBK in 2018, the composition of total loans to gross assets for the first quarter of 2018/2019 financial year ending September 30, 2018 was 58.42 % as opposed to 57.27 % reported in the fourth quarter 2017/2018 financial year ending June 30, 2018. This therefore means that the nation's financial sector recorded growth in the 1st quarter of the financial period 2018/2019 in comparison to the previous quarter ending June 30, 2018. This increase in credits by a total of 1.84 % in June 2018 from Ksh.2, 492.69 billion to Ksh.2, 538.68 billion in September 2018 was attributed to the growth in demand for loans in the individual and or Domestic, the Industrial sector, Trade and Real Estate sectors (CBK, 2018).

Correlation Analysis

The study also carried out an analysis to measure the level of correlation between the study variables as presented.

Table 6: Correlation Coefficients

		Loan performance.	Credit risk assessment.	periodic loan review	loan collateral	Early warning signs
Loan performance.	Pearson Correlation	1	-.384**	.153	.120	.153
	Sig. (2-tailed)		.000	.161	.275	.161
	N	85	85	85	85	85
Credit risk assessment.	Pearson Correlation	-.384**	1	.006	-.552**	.006
	Sig. (2-tailed)		.000	.957	.000	.957
	N	85	85	85	85	85
periodic loan review	Pearson Correlation	.153	.006	1	-.198	1.000**
	Sig. (2-tailed)		.161	.957	.069	.000
	N	85	85	85	85	85
loan collateral	Pearson Correlation	.120	-.552**	-.198	1	-.198

	Sig. (2-tailed)	.275	.000	.069		.069
	N	85	85	85	85	85
Early warning signs	Pearson Correlation	.153	.006	1.000**	-.198	1
	Sig. (2-tailed)	.161	.957	.000	.069	
	N	85	85	85	85	85

**. Correlation is significant at the 0.05 level (2-tailed).

Source: Study Data (2021)

The Pearson correlation coefficient exhibits a weak negative linear association ($r=-0.384$) between loan performance and credit risk assessment. Meanwhile, Correlation is statistically significant given that $p<0.050$. However, there exist non-statistically significant linear relationship between periodic loan review and banks' performance ($p>0.05$). A strong positive correlation exists ($r=0.153$) between periodic loan review and loan performance. A correlation of $r=0.120$ attest to a weak and a positive linear association between the performance of loan and collateral. Under 95% level of significance, it shows that there is no statistical significance between loan collateral and loan performance this is based on $p>0.05$. More so, the results under early warning signs and loan performance attest a weak but positive relationship between the variables of the study. A $p>0.05$ indicates non-statistical significance exhibited between the two study variables.

These results indicate that there exists a higher correlation between predictors variables, periodic loan review, loan collateral and early warning signs ($r = 0.198$) regardless for the direction of these relationships that exists.

Inferential Statistics.

A regression analysis sought to ascertain the manner in which the independent variables predict dependent variables. Thus, to quantify the strength amid the study variables, multiple regression was adopted to study the determinants of debt management and their influence on the commercial banks loan performance.

Model Summary

The model summary presents the correlation coefficient (R) and coefficient of determination (adjusted R squared). The correlation coefficient indicates the strength of relationship between the variables. The coefficient of determination presents the extent with which the dependent variable is explained by independent variable as presented in table 7.

Table 7: Model Summary

Model	R	R Square	Adjusted Square	R	Std. Error of the Estimate
1	.849 ^a	.721	.690		.40929

Source: Study Data (2021)

- a). Predictors: (Constant), periodic loan review, early warning signs, credit risk assessment., loan collateral

Results in table 4.8 above, shows that, the correlation coefficient of 0.849 indicates that the relationship between independent variables (Credit risk assessment, periodic loan review, early warning signs and loan collateral) and dependent variable (loan performance) was strong and significant. It is also evident that 69.0% (adjusted R Squared=0.690) changes in loan performance is explained by Credit risk assessment, periodic loan review, early warning signs and loan collateral

Analysis of Variance

The study sought to establish the overall significance of the model. The findings in table 4.9 below present the results.

Table 8: ANOVA^a

Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.931	.977	5.832	^b .001
	Residual	13.569	.168		
	Total	16.500	85		

Source: Study Data (2021)

- a. Dependent Variable: loan performance.

- b. Predictors: (Constant), Periodic loan review, early warning signs, credit risk assessment., loan collateral

The ANOVA Table 4.9 indicates that the F calculated was 5.832 and significant ($P=0.001$). This indicated that the overall regression model was significant in determining the Loan performance. The P-value was 0.001 indicating that at least one of the three independent variables (Periodic loan review, early warning signs, credit risk assessment., loan collateral) considered significantly influences loan performance.

Regression Coefficients

Regression analysis presents the Beta coefficients and the P values which helps in developing the linear relationship between variables. The Beta coefficients indicate the changes in units to the dependent variable as a result of changes in the independent variable. The Beta coefficient also indicates the direction with which the dependent variable changes as a result of changes in the independent variable. If the P values are less than 5% then the specific variable is said to be significant in explaining the changes in the dependent variable (Loan performance). Table 4.10 presents the results.

Table 9: Regression Coefficients

Model	Unstandardized Coefficients			Standardized Coefficients	T	Sig.
	B	Std. Error	Beta			
1	(Constant)	4.315	.544		7.931	.000
	credit risk	-.220	.061	-.437	-3.587	.001
	assessment.	.012	.035	.122	1.333	.192
	periodic loan	.054	.071	-.094	-.758	.451
	review	.115	.087	.137	1.324	.189
a. Dependent Variable: loan performance.						

Source: Study Data (2021)

$$Y = 4.315 - 0.220X_1 + 0.012X_2 + 0.054X_3 + 0.115X_4$$

A regression coefficient indicates how the response variable changes for every one unit change in the predictor variable whereas the other predictors used in the model are held constant. The above model can be explained as follows: 4.315 is the value of loan performance when all other factors are zero.

The study results indicate that a change in credit risk assessment would result to a negative significant change in loan performance by -0.220 units ($B_1=-0.220$). P values ($0.001<0.05$) (Significant values) presented whether the credit risk assessment was significant in explaining the changes in loan performance. The variable was found to be significant since the P value=0.001 was less than 5% ($P<0.05$).

This study agrees with the findings by Mendoza and Rivera (2017) who researched on credit risk effect and capital adequacy on the Philippines rural banks profitability. They held that effective management of credit risk should be considered a crucial element in an all-inclusive risk management approach which. In their study, they used Return on Asset and Equity (ROA & ROE) the banks measure performance. According to their findings, credit risk had a negative but statistically important effect on net profit after taxes.

The study results indicate that a change in periodic loan review would result to a positive insignificant change in loan performance by 0.012 units ($B_1=0.012$). P values ($0.192>0.05$) (insignificant values) presented whether the periodic loan review was significant in explaining the changes in loan performance. The variable was found to be insignificant since the P value=0.192 was greater than 5% ($P>0.05$).

This study contradicts the findings by Cortavarria, Dziobek, Kanaya & Song (2000) who conducted a research on Loan review, provisioning, and macroeconomic linkages in G-10 countries (Group of 10 leading industrial countries). The study found that Loan review and provisioning were important elements of bank-risk management systems considering such

factors as borrower repayment capacity and economic conditions, as well as exposit factors such as interest past due.

The study results indicate that a change in loan collateral would result to a positive insignificant change in loan performance by 0.054 units ($B_1=0.054$). P values ($0.451>0.05$) (insignificant values) presented whether the loan collateral was significant in explaining the changes in loan performance. The variable was found to be insignificant since the P value=0.451 was greater than 5% ($P>0.05$).

This study contradicts the findings by Okoth and Gemechu (2013) who did a research on factors affecting commercial banks loan performance in Kenya. The study used panel data dating for periods between 2001 and 2010. The findings showed that loan collateral as indicated by cash flow and collateral loans significantly affects financial performance of commercial banks in Kenya.

The study results indicate that a change in early warning signs would result to a positive insignificant change in loan performance by 0.115 units ($B_1=0.115$). P values ($0.189>0.05$) (insignificant values) presented whether the loan collateral was significant in explaining the changes in loan performance. The variable was found to be insignificant since the P value=0.189 was greater than 5% ($P>0.05$).

CONCLUSION AND RECOMMENDATIONS

Conclusion

Credit risk assessment had a negative impact on loan performance with a significance level of 0.01. This study reveals essential aspects of debt management practices of banks in Kenya. Though this is crucial in maintaining the loan performance of banks and other financial institutions, the study revealed that this practice was a weakness on debt management exercises on loan performance. Findings reveal that if banks incorporate credit risk management practices, it will help assess the consumers' capability of compensating the loans but with no significant positive impact. The maintained concern on loan performance should prompt most commercial banks to apply character, capacity, capital, collateral, and conditions. One would expect to determine an increase in debt management performance. The negative coefficient could also be attributed to an error on the part of respondents for non-disclosure of information.

Periodic loan review had an insignificant positive influence on loan performance. The significance level assessed was 0.192. Applying the periodic loan review, we can conclude that it does affect loan performance but it is insignificant to its performance thus it does not give guidance and timely data on recent issues and concerns that are reflected in the users' policy and portfolio.

Loan collateral affects loan performance with an insignificance level of 0.451. The uncertainty of the essence of collateral gives restricted outcomes as assimilating it aligns as security or as an approach to appraise the client for a loan. Banks in Kenya regard collateral as security hence have experienced increased loan performance than the financial institutions that regard collateral as a way to measure one while applying for the loan. This trend has been practiced for a while and if maintained will help maintain loan performance levels as expected by the commercial banks. As gained from the analysis, loan collateral curtails the chances of loan default.

Early warning signs in commercial banks in Kenya are demonstrated as delinquency warning signs through the declining financial situation of the consumer that ignites prompt action. In this research the insignificance level was 0.189. This implies that detection of early warning signs does not play a crucial role in performance of loans. Methods to determine early warning signs of delinquency as applied by some banks have been exhibited as less efficient than the financial situation of the consumer. Also, approaches created by the bank to shield themselves if the creditor's financial condition continues to decline and the impending risks have proved less efficient. Thus, banks should monitor the financial situation of the consumer to assess the capacity to compensate.

Policy Recommendations

The study recommended that governments, banks and financial institutions should set policies that guide on actions to be taken when credit risk assessment of loan delinquency are detected during loan repayment.

REFERENCES

- Abbring, J., H., Chiappori, P., A., & Zavadil, T. (2008). Better Safe than Sorry? Ex Ante and Post Moral Hazard. *Dynamics of Insurance Data, 2008*(77).
- Acquah, H. D & Addoh, J. (2011). Determinants of Loan Repayments Performance of Fishermen: Empirical Evidence from Ghana. *Cercetari Agronomice in Moldova, 44*(4), 148.
- Addae-Korankye, A. (2014). Causes and Control of Loan Default, Delinquency in Microfinance Institutions in Ghana. *American International Journal of Contemporary Research, 4*(12), 36-45.
- Ahmad, N., H., D and M, Ariff. (2007). Multi Country Study of Banks Credit Risk Determinants. *The International Journal of Banking and Finance, 5*(1), 135-152.
- Al-Khoury, R. (2011). Assessing The Risk and Performance of the GCC Banking Sector. *International Research Journal of Finance and Economics, 65*, 72-81.

- Al-Qudah, A., M., & Jaradat, M. (2013). The Impact of Macroeconomic Variables and Banks Characteristics on Jordanian Islamic Banks Profitability. Empirical Evidence. *International Business Research*, 6(10), 153-154.
- Angela M. Kithinji & Nelson M. Waweru. (2007). Merger Restructuring and Financial Performance of Commercial Banks in Kenya. *Economics, Management, and Financial Markets*.
- Bett, E. (2017). A conceptual Study of Corporate Governance and Firm Financial Performance of Listed Companies. *International Journal of Economics, Commerce and Management*, 11.
- Blommestein, H., J. and Turner, P. (2012). *Interactions Between sovereign Debt Management and Monetary Policy Under Fiscal Dominance and Financial Instability*.OECD Working Papers on Sovereign Borrowing and Public Debt Management,3.
- Boot, A. (2000). Relationship banking: what do we know? *Journal of Financial Intermediation*, 9, 7-25.
- Boot, A. W. (2000). Relationship Banking: What Do We Know? *Journal of Financial Intermediation*, 9, 7-25.
- Borensztein, E., M., Chamon, O., Jeanne, P., Mauro, and Zettelmeyer, J. (2004). *Sovereign Debt Structure for Crisis Prevention*, IMF Occasional Paper 237(Washington: International Monetary Fund).
- Brans, C. L., Willnat, L., Manheim, J. B., & Rich, R. (2011). *Research Methods - Essay Example*. Retrieved August 13, 2020, from <https://studentshare.org/sociology/1488148-research-methods>
- Busch, R., & Kick, T. K. (2009). *Income diversification in the German banking industry*.
- BusinessDictionary. (2018). *Non- Performing Loan*. Retrieved from <http://www.businessdictionary.com/definition/non-performing-loan>.
- Calice, P. (2012). Resolving No-Performing Loans in Tunisia: Coordinated Private Sector Approach. *Journal of African Economics Brief*.
- Central Bank of Kenya. (2018). *Reports and Financial Statements*.
- Chen, K., & Pan, C. (2012). An Empirical Study of Credit Risk Efficiency of Banking Industry in Taiwan. *Web Journal of Chinese Management Review*, 15(1), 1-16.

- Cortavarria, L., Dziobek, C. H., Kanaya, A. & Song, I. (2000). *Loan Review, Provisioning and Macroeconomic linkages*. International monetary Fund.
- Creswell, J. W. (2003). *Research design: Qualitative, quantitative, and mixed methods approaches* (2nd ed.). Thousand Oaks, CA: Sage.
- Cucinelli, D. (2015). The Impact of Non Performing Loans on Bank Lending Behaviour: Evidence from the Italian Banking Sector. *Eurasian Journal of Business and Economics*, 8(16), 59-71.
- Dembe, A., E., & Boden, L., I. (2000). Moral Hazard: A Question of Morality. *New Solution*, 10(3), 257-279.
- E. Gila-Gourgoura and E. Nikolaidou. (2017). Credit Risk Determinants in the Vulnerable Economies of Europe: Evidence from the Spanish Banking System. *International Journal of Business and Economic Sciences Applied Research*, 1.
- Faragalia, E., A.Marcet and Scott, A. (2008). Fiscal Insurance and Debt Management in OECD Economies. *The Economic Journal*, 118(527), 363-380.
- Felix, A., T & Claudine, T., N. (n.d.). *Bank Performance and Credit Risk Management, Unpublished Masters Dissertation in Finance, University of Skovde*.
- FinancialWeb. (2018). *understanding-the-difference-between-syndicated-and-bilateral-business-loans*. (MH Sub I, LLC dba Internet Brands) Retrieved March 31, 2020, from Financial Web: <https://www.finweb.com/loans/understanding-the-difference-between-syndicated-and-bilateral-business-loans>
- George, D., & Mallory, P. (2003). SPSS for Windows Step by Step. *A Simple Guide and Reference 4th Edition*.
- Haile, F. (2015). Determinants of Loan Repayment Performance: Case Study of Harari Microfinance Institutions. *Agricultural Extension and Rural Development*, 7(2), 56-64.
- Hale, b. (2009). What's So Moral about the Moral Hazrd? *Public Affairs Quarterly*, 23(1), 1-25.
- International Monetary Fund. (2005). *The Treatment of Non- Performing Loans*.
- John,K.A., W,Lynch & Puri, M. (2003). Credit Ratings, Collateral and Loan Characteristics: Implication for Yield in the U.S. *Journal of Business*, 76(3).
- KCB Group Plc. (2018). *Integrated Report and Financial Statements*.

- Kenya Bankers Association. (2019). *State of the Banking Industry Report*. Kenya Bankers Association Centre for Research on Financial Markets and Policy.
- Kimando, L., Kihoro, J.M. D. & Njogu, G. W. M. (2012). *Factors Influencing the Sustainability of Microfinance Institutions in Murang'a Municipality*.
- Kinyondo, A., & Okurut, N. (2009). *Determinants of Loan Repayment Performance in Microcredit Institutions: Evidence from Tanzania*.
- Kithinji, A. M. (2010). *Credit Risk Management and Profitability of Commercial Banks in Kenya*. School of Business, University of Nairobi. Nairobi.
- Kolapo, T.F., Ayeni, R, K. and Oke, M., O. (2012). Credit Risk and Commercial Bank's Performance in Nigeria: A Panel Model Approach. *Australian Journal of Business and Management Research*, 2(2), 31-38.
- Kothari, C. (2011). *Research Methodology*, 2nd Edition. Methods and Techniques. 1st Edition, Published by ACTS, Nairobi, Kenya.
- Kwakwa, O. M. (2014). *Determinants of performance of Comercial Banks in Ghana*. Kwamu Nkuruma University of Science and Technology.
- Latoya, I. (2019). *The Difference between Secured and Unsecured Debts*. Retrieved from <https://www.thebalance.com/the-difference-between-secured-and-unsecured-debts-960181>
- MacCarthy, J. (2016). *Effect of Cash Reserve Ratio on the Financial Performance of Commercial Banks and their Engagement in CSR in Ghana*. *Economics Report on Ghana*.
- Matu, L. (2001). *The Applicability of Financial Predictive Models to Bank Failure*. Unpublished MBA Project, University of Nairobi.
- Meakin, E. (2018, December 21). *The Difference between Public and Private Debt*. Retrieved March 30, 2020, from Capital Structure: <https://fleximize.com/articles/000543/public-and-private-debt>
- Mendoza, R., & Rivera, J., P., R. (2017). The Effects of Credit Risk and Capital Adequacy on the Profitability of Rural Banks in the Philipines. *Annals of the Alexandru Ioan Cuza University- Economics*, 64(1), 83-96.
- Meshak, K. M. (2016). The Effect of Monetary Policy on Financila Perfomance of Commercial Banks Listed on the Nairobi Securities Exchange. *International Journal of Finance and Accounting* (1), 74-87.

- Morgan, D. L. (2019). *Does purposive sampling technique applicable for both qualitative and quantitative researches?* Retrieved from <https://www.researchgate.net/post>
- Moti, H., O., Masinde, J., S., Mugenda, N., g., & Sindani, M., N. (2012). Effectiveness of Credit Management System on Loan Performance: Empirical Evidence from Micro Finance SEctor in Kenya. *International Journal of Business, Humanities and Technology*, 2(6), 99-108.
- Mucheke, J. (2001). *Determinants of Non Performing Loans in Kenya: The case for Commercial Banks*. University of Nairobi, Department of Accounting.
- Mugenda, O. M. & Mugenda, A, G. (2003). Research Methods, Quantitative and Qualitative Approaches. Nairobi: African Centre for Technology Studies (ACTS).
- Mwangi, L., W., Makau, M., S., & Kosimbei, G. (n.d.). Effects of Working Capital Management on performance of Non Financial Companies Listed in NSE, Kenya. *European Journal of Businessand Management*, 6(11), 195-205.
- Mwanza, K. (2017). Non-performing loans in local banks hit 10-year high. *Business Daily*. Retrieved from Business Daily: <https://www.businessdailyafrica.com/markets/marketnews/Non-performing-loans-in-local-banks-hit-10-year-high/3815534-4234128-gh4re3/index>.
- Mwaura, K. (2005). Relationship between Interest Rates Spread and Financial Performamce of Commercial Banks in KENYA.uNPUBLISHED mba Project, University of Nairobi.
- Ndugbu, M. O. & Okere, P. A. (2015). Monetary Policy and the Performance of Deposit Money Banks –the Nigerian Experience. (www.iiste.org, Ed.). *European Journal of Business and Management*, 7(17), 2222-2839.
- Ngugi, F. (2018). The Distressing Effect of Non-Performing Assets to Asset Quality for Commercial Banks in Kenya. *Loan Loss Provisions*, 3(6), 71-83.
- Ngugi, R.W., Maana, I., Amanja, D.,& Ndung'u,N. (2010). *Capital Market and Economic Growth in Kenya*.
- Obiero, D. (2002). Effect of Financial Sector Policies on Commercial Banks Performance in Kenya: A Critical Review. *Journal of Business and Management*, 20(1), 71-86.
- Ogawa, K. and Suzuki, K. (2000). Demand for bank loans and investment under borrowingconstraints: a panel study of Japanese firm data. *Journal of the Japanese and International Economies*, 14, 1– 21.

- Ogawa, K., & Suzuki, K. (2000). Demand for Bank Loans and Investment under Borrowing Constraints: A Panel Study of Japanese Firm Data. *Journal of the Japanese and International Economies*, 14(1), 1-21.
- Okoth, V. & Gemechu, B. (2013). Determinants of Financial Performance of Commercial Banks in Kenya. *International Journal of Economics and Financial Issues*, 3(1), 237-252.
- Ombaba, K. (2013). Assessing the Factors Contributing to Non-Performamnce Loans in Kenyan Banks in Kenya. *European Journal of Business and Management*, 5(32).
- Ongore, V., O & Kusa, G., B. (2013). Determinanats of Financial Performamnce of Commercial Banks in Kenya. *International Journal of Economics and Financial Issues*, 3(1), 237-252.
- Onyango, S. (2020). *Kenya Faces Massive Rise in Public Debt in Corona Crisis*. Retrieved from <https://www.pd.co.ke/business/economy and policy>
- Orodho, J. A. (2009). Essential of Education and Social Sciences Research Methods. Masola Publishers, Nairobi.
- Orodho, J. A. (2009). Techniques of Writing Research Proposals and REports in Education and Social Sciences.
- Orodho, J. A. (2009). Techniques of Writing Research Proposals and REports in Education and Social Sciences.
- Roland. P., J., & Anamaria, P. (2013). *Non-performing loans What matters in addition to the economic cycle?* Working paper series.
- Ronald, W. & Carverhill, A. (2011). Liquidity and Capital Structure. *Review of Financial Studies*, 25(3), 797-837.
- Rouse, C. (2002). Bankers' Lending Techniques, 2e, Chartered Institute of Bankers. Financial World publishing.
- Rowell, D., & Connelly, L. (2012). A History of the Term "Moral Hazard". *Journal of Risk & Insurance, the American Risk and Insurance Association*, 79(4).
- Ryan, J. (2011). *Personal Financial Literacy*. Cengage Learning. Retrieved December 2019.
- Sarah, W., & Simon, S. (2011). Effect of revenue diversification on bank performance and risk. *Financial Services Research*, 40, 79-101.

- Saunders, A. (2002). Credit Risk Measurement-New Approaches to Value at Risk and other Paradigms.
- Simonson, L. Z., Carmon, R. Dhar & A. Drolet. (2015). Behavioral Finance. *Annual Review of Financial Economics*, 7, 133-159.
- Thomas D. L., & Gabriella R. M. (2001). Comparative political corruption: Issues of operationalization and measurement. *Studies in Comparative International Development volume, 36*, 3–28.
- Trochim, W. M. (2006). *The Qualitative Debate. Research Methods Knowledge Base*. Retrieved January 11, 2020, from <http://www.socialresearchmethods.net/kb/qualmeth.php>
- Wangai, D., Bosire, N., Gathogo, G. (2003). *Impact of Non Performing Loans on Financial*.
- Warue, B. N. (2015). *Factrors Affecting Loan Delinquency in Microfinance Institutions in Kenya*. Kenya Methodist University.
- Weber, M. and Machaur A. (1998). Bank Behaviour Based On Internal Credit Ratings Of Borrowers: CFS Working Paper No 98/08.
- Wenner, M. (1995). Group Credit: A Means to improve Information Transfer and Loan Repayment Performamce. *The Journal of Development Studies*, 32(2), 263-281.
- Winter, A. R. (2000). Optimal Insurance under Moral Hazard. *Handbook of Insurance*, 155-183.
- Yenpao C, Ruey-Ji Guo and Rao-Li Huang. (2009). Two Stages Cerdit Ealuation in Bank Loan Appraisal. *Economic Modelling*, 26(1), 63-70.