

Credit Risk Management and Salary Loan Performance in Commercial Banks in Uganda A Case Study of Stanbic Bank Uganda Limited

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Abstract:

The study examined the effect of credit risk management on salary loan performance in stanbic bank uganda limited (sbul). The study was guided by the following objectives: to investigate the effect of credit risk identification on performance of salary loans; to investigate the effect of credit risk assessment on performance of salary loans; and to investigate the effect of credit risk monitoring and control on performance of salary loans at sbul. The study adopted a case study design with a population of 60 respondents from which purposive sampling and simple random sampling methods were used to select a sample of 51. Data was collected from staff and providers using self-administered questionnaires and an interview guide. The study findings indicated that; there were positive significant relationships between credit risk identification, credit risk assessment, credit risk monitoring & control and salary loan performance. The correlation results were supported by the results from regression analysis which revealed that credit risk identification, credit risk assessment and credit risk monitoring & control were strong predictors of salary loan performance. The study concluded that improvement in credit risk identification, credit risk assessment and credit risk monitoring & control enhances salary loan performance at stanbic bank. The study recommends that management at stanbic bank offer specialized training to staff and clients in the area of credit risk management and put in place a customized credit management system to coordinate the credit risk management process.

Key Words: Credit Risk Management, Salary Loan, Commercial Banks, Stanbic Bank.

Jel Codes: G2, G21

Article Type: Research Study.

Introduction:

This study sought to examine the effect of credit risk management on salary loan performance in commercial banks in Uganda. The Bank of Uganda (BOU) report of 2012 attributes bank performance problems to risk management challenges. The study objectives were: to investigate the effect of credit risk identification on performance of salary loans; to investigate the effect of credit risk measurement on performance of salary loans; and to investigate the effect of credit risk monitoring and control on performance of salary loans at sbul. Attempts to risk management are thought to have begun from the ancient Mesopotamia, Greece and Rome where basic rules of borrowing were provided and failure to pay a debt was highly punishable (Colquitt, 2007). Several banks experienced banking crises during the 1980s and early 1990 (Work Bank, 2010). Several international banks such as Marilyn Lynch, Chase Bank and JP Morgan collapsed due to the credit crunch (IMF, 2011). In Uganda, several banks like: Greenland Bank, Cooperative Bank, Uganda Commercial Bank, International Credit Bank and Sembule Investment Bank were closed (Ravi and Poudel, 2012) and the cause of closure was attributed to the failure of banks to put in place clear risk management policies (Hosna, Manzura and Juajuan, 2009). This study was guided by Basel I, II and III accord. The Basel Committee formed the Basel Accord for banks to promote soundness and stability of banking systems. The Basel Accord are international principles and regulations guiding the operations of banks to ensure soundness and stability and lays emphasis on the banks ability to identify, generate, track and report on risk-related data in an integrated manner that ensures transparency. In Basel-1 credit approval process

starts with the clients submitting a credit request to a credit department officer and the decision on the loan is taken in credit committee or board of directors which is the top level authority. the basel 2 places emphasis on risk mitigation techniques and the need to minimize the risk of non performing loans. the basel 2 came up with the idea of credit rating. the basel accord requires financial institutions to raise their minimum capital requirements, supervision and capacity to monitor the moral hazards existent in the financial sector (musyoki and kadubo, 2011) the bank of uganda (2012) defines credit/default risk as the loss arising from the inability of counter-party to meet its contractual obligations. loan performance refers to the rate of profitability or rate of return of an investment in various credit products. salary loan is meant to refer to credit advanced by employees basing on their being assured of a regular salary and are guaranteed by their employer. salary loan is normally advanced to employees in formal employment. stanbic bank uganda limited (sbul) is a subsidiary of standard bank group limited. stanbic bank uganda limited is uganda's leading commercial bank with a branch network of over 80 branches around the country and controls 27% market share in the banking sector (sbul annual report, 2012). the financial services offered by sbul include savings, credit, funds transfers, financial training, real time money deposits and cheque clearing. the credit risk management policies of the bank lay emphasis on: timely repayments; instant arrears information, delinquency tracking; immediate action to enforce repayment; and rigorous recovery in case of defaulting to achieve timely loan repayment (sbul annual report, 2014). the bank has in place structures to support prudent credit risk management and these include: the risk management committee of the board of directors, credit risk committee, audit committee and internal audit assurance (sbul annual report, 2013). despite the existence of a robust credit risk management framework, the bank has continued to record poor loan performance (sbul annual report, 2013).the bank of uganda on-site examination report (2012) revealed that for the financial year 2008/09, credit risk at the bank increased from ugx. 0.8 billion to ugx.4.8 billion indicating a 600% increase in credit risk within a period of one year which manifested in the reduction in the bank profits by 23%. the reports attributed the decline in the banks profitability to poor credit risk management.the head risk department revealed that the rise in non-performing assets has been recorded for both individual and corporate clients. the head revealed that the bank operates schemes with corporate companies through which credit is extended to their staff. under this scheme, the bank enters into memorandums of understanding (mou) with the management of these companies to extend their staff credit at relatively lower interest rates compared to the running rates in the market. in the mous, the decision to either deduct staff repayments at source or by standing order is agreed upon. however, over the years the loan scheme has proved to be risky due to delays in updating payrolls and negligence on the part of some human resource officers. when it comes to making staff repayment deductions at source, some companies did not remit the money on time hence putting staff in arrears (sbul quarterly review, 2010).similarly, for repayments made by standing order, there was a tendency for staff to draw money off their accounts before deductions are made by the bank. the delays in salary payments also caused staff under standard order loan repayments to go into arrears. according to the data of the bank, aggregate portfolio risk had an annual growth rate of 17%. for the years 2009 and 2010, the bank closed with arrear rates of 3.6% and 5.46% respectively. the bank's lending performance for the last three years revealed that it had continued to record average arrear rates of 3.24% and non-performing assets (npa) rates of individual loans of 1.4% compared to bank of uganda acceptable rate of 1%. it is upon this background that the study sought to examine the management of credit risk at stanbic bank.

Statement Of The Problem:

Risk identification, assessment, monitoring and control have a significant effect on the overall loan performance of a bank (onaolapo, 2012). the management of sbul has made attempts to carry out credit risk management through structure and system integration of the risk management processes. however, much as progression and reform of the risk management structures by sbul is in place, the bank continues to record increases in non performing loans including salary loans which has made the bank's salary loan performance challenged. according to the sbul annual reports (2010, 2011, 2012), the bank registered a 11%, 13% and 15% annual growth rates in credit risk respectively. the report further revealed that the bank's salary loan portfolio for the said period continued to decline with arrear rates averaging 2.14% and non-performing assets (npa) rates of individual loans of 1.3% exceeding the bou acceptable rate of one percent (sbul

quarterly review, 2014).if the bank does not tighten its credit risk management policy, the salary loan performance at the bank will continue to be undermined.

Literature Review

Credit Risk Management:

Geitangi (2015,p1) defines credit risk management as a structured approach to managing uncertainties through risk assessment, developing strategies to manage it and mitigation of risk using managerial resources. financial institutions earn profits and ensure their survival through availing credit to prospective borrowers. this however exposes the financial institutions to credit risk which has to be managed if the institutions are to survive and ensure sustained growth. the basel accord (2006) defines credit /counter party risk as the risk of loss due to an obligator's non payment of an obligation in terms of a loan or other lines of credit. the camels framework provides a guide on good governance of banks that can promote improved financial performance by banks paying attention to: capital adequacy, asset quality, management, earnings, liquidity and sensitivity (madhyam&stichele, 2010)credit risk is the risk that a financial institution will incur losses from the decline or elimination of the value of assets due to deterioration in the financial condition of an entity to which credit is provided.credit risk is the risk related to the possibility of borrowers failing to meet their debt obligations on time or not repay at all (sinkey, 2002; conford, 2000). credit risk in a financial institution may be precipitated by: limited institutional capacity, poor management, foreign exchange risks, inter bank transactions, lack of a sound credit risk management policy, interest rate volatility, government interference and ineffective supervision by the central bank (hassan, 2009). the board is expected to spearhead the development of a sound credit risk management policy of a financial institution which should be regularly reviewed in line with the prevailing conditions (pandey, 2008). kattel(2017) conceptualizes the process of credit risk management to be four fold: 1) the need to understand the risk related to credit 2) identification of the source of credit risk 3) risk assessment and analysis 4) monitoring and credit risk control. credit risk management entails paying attention to identifying risk associated with credit, assessing the risk and monitoring the risk which is essentialfor the sustainability and growth of the banking sector (ahmed& malik, 2015; basel, 2010). credit risk monitoring enables the review of the credit risk management policy in time.

Credit Risk Assessment :

Credit risk assessment refers to efforts to judge the probability of the potential client to repay the loan advanced to him/her. the objective of credit risk management is to minimise bad loans by improving the risk profile of the portfolio, price credit risk adequately and maximise the benefits from potential credit opportunities (buttimer, 2008). the type and level of credit risk assessment method of a financial institution is mainly dependent on the institution's strategic objectives, the diversity of its business and the level of complexity of risks it faces. credit risk assessment and measurement is aided by a policy that facilitates the credit rating of prospective borrowers and through credit rating, credit limits may be established for the various categories of borrowers. al-khouri (2011) identifies credit risk management practices used by banks to include: credit limits, taking collateral, diversification, loan selling, consortium loans, credit insurance and securitization. the traditional approach to customer credit risk analysis is the focus on the 6 cs: capacity, capital, collateral, collateral, conditions and control.

Credit Risk Identification :

credit risk identificationinvolves the proper understanding of the borrower financial condition through accurate screening. barton et al, (2002) define risk identification as a procedure to deliberately analyse, review and anticipate possible risks. the main techniques used in risk management include: establishing standards, credit worthiness analysis, risk rating and collateral (al-tamimi and al-mazrooei, 2007). risk is often identified through the analysis of financial statements (kargi, 2011). in credit risk identification, it is important to ascertain the purpose of the loan and the anticipated sources of funds to finance the loan. geitangi(2015)recommends the use of credit identification practices as a measure to reduce on non performing loans and default rates among bank clients. qiasar& malik (2015) in a study on the impact of credit risk management on loan performance in commercial banks in pakistan found a significant positive impact between credit terms and client appraisal on loan performance.

Credit Risk Monitoring :

Monitoring is intended to keep track of the loan performance. It involves tracking whether the client is meeting his financial obligations as agreed and is utilising the loan for the purpose applied for. Credit risk monitoring activities enable a financial institution to timely detect and manage fraud (ravi and poudel, 2012; funso and ayeni, 2012). credit monitoring involves a detailed analysis of the entire loan portfolio to identify cases of possibility of impaired loans (onaolapo, 2012). credit risk monitoring provides relevant information for senior management to make informed judgment about the quality of the loan portfolio (ravi and poudel, 2012).credit monitoring involves a comprehensive analysis of the entire loan portfolio performed on a regular basis (alexander-teseschi&karlan, 2009).

Empirical Studies :

Mutua&gekara(2017) conducted a study that examined the credit risk management strategies and their impact on commercial banks in kenya using a descriptive research design. the data was collected through questionnaires and interviews on a sample population of 62 staff members from the loans departments of selected tier 111 commercial banks in kenya. the study concluded that credit risk management practices including credit risk taking risks, credit approval risks, portfolio management risks and security perfection risks positively affect performance of commercial banks in kenya.ahmed& malik(2015) conducted a study that evaluated the influence of credit risk management practices on loan performance (lp) while taking the credit terms and policy (ctp), client appraisal, collection policy (cp) and credit risk control (crc) as the dimensions of credit risk management practices. the data was collected from 157 managerial level credit risk management staff of the microfinance banking sector. the results revealed that credit terms and client appraisal have positive and significant impact on loan performance, while the collection policy and credit risk control have positive but insignificant impact on loan performance.murigi&thuo(2018) conducted a study on credit risk management and loan performance in microfinance banks in kenya. the study sought to determine the relationship between credit risk management and loan performance in microfinance banks in kenya. the study found a positive and statistically significant relationship between credit risk environment, credit appraisal process, credit administration, measurement and monitoring, internal control over credit risk and loan performance in the microfinance banks.

Methodology :

Materials And Methods :

the study adopted a case study research design. the study was carried out from the headquarters of sbul located at crested towers, hannington road, plot17, central division, kampala district. the headquarters of sbul were selected as the area of study because they hold all the management offices of the bank and that is where most of the documentation concerning risk management and portfolio performance of the bank are found.the study covered the period between 2011 and 2015 because this is the period during which the bank experienced a tremendous increase in non-performing assets. the study population comprised of the staff at sbul involved in credit risk management at the bank. the total population of the staff working in the credit, risk, legal, recovery and evaluation departments at sbul stood at 100 staff. the target population of the study was 60 staff comprising of 11 senior managers, 13 operations officers, 8 it officers, 9 hr staff, and 19 staff directly involved in the risk management processes at the bank (sbul annual report, 2014).from the target population of 60 staff, 51 staff were selected for the study. the senior managers (10), operations officers (10), it officers (8) and hr staff (9) were purposively selected while risk officers (14) were selected using simple random sampling from staff directly involved in credit risk management at the bank. the study used both primary and secondary sources of data collection. the researcher used a self-administered questionnaire and interview guide to collect primary data from the respondents while the data bank of sbul regarding its salary loan performance was the key source of secondary data data management and quality control .the content validity index (cvi) was obtained by subjecting the study instrument to two experts involved in salary loan management. the computed cvi of the instrument was 0.93 implying that the items in the instrument were valid. to establish the reliability of the study instrument, a pilot study with 10 respondents who were not part of the final respondents was conducted. the reliability coefficient of the administered questionnaire was computed using cronbach alpha coefficient of internal consistency aided by the spss program. the computed results for all items in the questionnaire ranged from .858 to .895 which is above the

acceptable minimum of 0.7 implying that the instrument was reliable. descriptive and inferential statistics were used to analyse the data with the aid of the spss 20 software. the theoretical model that guided the study is given by: $Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon$

Where Y is Salary loan performance; α is the intercept; β_{1-3} are the coefficients; X_1 is credit risk identification; X_2 is credit riskassessment; X_3 is credit risk monitoring and control while ε is the error term

Results :

Characteristics of Respondents

The majority of the respondents were male (58.1%) and 41.9% were female. the majority of the respondents were in the age bracket of 26-40 years 33(77%), 6 (14%) were above 41 years while only 4 (9%) were between 20-25 years. the majority of the respondents had worked for the bank for between 2 -9 years 26 (60%), 14 (33%) had worked with the bank for over 10 years while only 3 (7%) had worked for the bank for less than a year. this implies that our selected respondents were in position to give genuine responses based on their experience with the financial sector in general and salary loan management in particular. the respondents held various positions in the bank. the senior managers were 5 (11.6%), the operations officers were 7 (16.3), credit staff were 13(30.2%), it officers were 4 (9.3%), hr staff were 3 (7%) and risk officers were 11 (25.6%). most of the respondents had a bachelor’s degree 20 (46.5%), 8 (18.6%) had a master’s degree, e (14%) had a diploma qualification, 5 (11.6%) possessed professional qualifications while 4 (9.3%) held several certificates.

Results As Per Study Objectives::

Salary Loan Performance:

The self administered questionnaire on this item were rated on the 5 point Likert scale ranging between strongly agree (5), agree (4), undecided (3), disagree (2) and strongly disagree (1). The results revealed an overall mean on salary loan performance to be 3.38 which tends to 3.5 which is our decision mean implying an improvement in the performance of salary loans at the bank.

Credit Risk Identification And Salary Loans Performance:

The self administered questionnaire on this item were rated on the 5 point Likert scale ranging between strongly agree (5), agree (4), undecided (3), disagree (2) and strongly disagree (1). The results revealed the overall mean to be 3.61 implying the existence of a clear credit risk identification process at the bank which is aiding a positive performance of salary loans.

Pearson’s Correlation Co-Efficient :

Pearson correlation Co-efficient (r) analysis was used to establish the relationship between credit risk identification and salary loan performance and the results are shown in Table 1

Table 1: Credit Risk Identification and Salary Loans Performance

| | | Credit Risk Identification | Salary Loans Performance |
|--|---------------------|----------------------------|--------------------------|
| Credit Risk Identification | Pearson Correlation | 1 | .420** |
| | Sig. (2-tailed) | | .000 |
| Salary Loans Performance | Pearson Correlation | .420** | 1 |
| | Sig. (2-tailed) | .000 | |
| ** <i>. Correlation is significant at the 0.01 level (2-tailed).</i> | | | |

Data source: Primary 2017

There is a significant positive relationship between credit risk identification and salary loan performance (r = 0.420, p = 0.000).

Credit Risk Assessment And Salary Loans Performance:

The item mean analysis revealed an overall mean of 3.67 implying satisfaction with the credit risk assessment processes at the bank. The findings from the interview guide revealed that: “although there was some level of credit risk management in regard to risk transfer, avoidance and mitigation, more effort was needed to integrate and review the risk identification processes supported by the required policy

framework”. The head credit revealed that:“the bank did every thing possible to transfer, avoid and mitigate risk arising from credit so as to reduce, control and eliminate risk”.

Pearson’s Correlation Co-Efficient :

Table 2: Credit Risk Assessment and Salary Loans Performance:

| | | Credit Risk Assessment | Risk Salary Loans Performance |
|--|---------------------|------------------------|-------------------------------|
| Credit Risk Assessment | Pearson Correlation | 1 | .463** |
| | Sig. (2-tailed) | | .000 |
| Salary Loans Performance | Pearson Correlation | .463** | 1 |
| | Sig. (2-tailed) | .000 | |
| **. Correlation is significant at the 0.01 level (2-tailed). | | | |

Data source: Primary 2017

There exists a significant positive relationship between credit risk assessment and salary loan performance (r = 0.463, p = 0.000).

Credit Risk Monitoring & Control And Salary Loan Performance:

The item mean analysis revealed an overall mean of 3.53 implying satisfaction with the bank’s credit risk monitoring and control processes. from the interviews, it was revealed that: “the bank had put in place the required risk monitoring procedures and systems which were supported by the required policies. among these included internal audit committees, manual and it systems, external auditors among others which had helped the bank to mitigate risk by reducing, controlling and eliminating it”.

Pearson Correlation Co-Efficient :

Table 3: Credit Risk Monitoring & control and Salary Loans Performance

| | | Credit Risk Monitoring & Control | Salary Loan Performance |
|--|---------------------|----------------------------------|-------------------------|
| Credit Risk Monitoring & Control | Pearson Correlation | 1 | .382** |
| | Sig. (2-tailed) | | .000 |
| Salary Loan Performance | Pearson Correlation | .382** | 1 |
| | Sig. (2-tailed) | .000 | |
| **. Correlation is significant at the 0.01 level (2-tailed). | | | |

Data source: Primary 2017

There exists a significant positive relationship between **credit risk monitoring and control** and salary loan performance (r = 0.382, p = 0.000).

Regression Analysis:

A regression analysis was carried out to examine the extent to which study the variables predict salary loan performance at the bank and the results are presented in Table 4

Table 4: Prediction Model

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|--|----------------------------------|-----------------------------|------------|---------------------------|-------|------|
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | .593 | .449 | | 1.321 | .195 |
| | credit risk assessment | .724 | .221 | .539 | 3.275 | .002 |
| | credit risk identification | .416 | .150 | .390 | 2.782 | .008 |
| | credit risk monitoring & control | .187 | .137 | .226 | 1.368 | .010 |
| Dependent Variable:Salary Loan Performance | | | | | | |
| R Square = .474, Adjusted R Square = .466 | | | | | | |

Data Source: Primary 2017

The estimated equation (predicted model) becomes: $\hat{Y} = 0.593 + 0.416X_1 + 0.724X_2 + 0.187X_3$

The model shows that 46.6% of the variation in salary loan performance can be explained by the dimensions of credit risk management used in the study.

Discussion, Conclusions And Recommendations :

Discussion of the Findings

credit risk identification and salary loan performance

the bank carries out a comprehensive and systematic identification of risk. the findings showed that credit risk identification was significant in determining salary loan performance. the correlation results indicated a significant and positive relationship between credit risk identification and salary loan performance and are in line with the findings of ahmed & malik (2015) and murigi & thuo (2018).

Credit Risk Assessment And Salary Loan Performance:

there was a positive and significant relationship between credit risk assessment and salary loan performance. the correlation results are supported by the regression results which revealed that credit risk assessment was a determinant of salary loan performance at the bank. the findings are in line with mutua & gekara (2017) conclusion of the role played by portfolio management risks in improving bank performance. the results are also in agreement with murigi & thuo (2018) on the key role played by credit administration and measurement in improving loan performance. credit risk monitoring & control and salary loan performance

the findings established that credit risk monitoring & control influenced salary loan performance at Stanbic Bank. ravi and poudel (2012) posits that credit risk monitoring services are extremely valuable, because much as they cannot prevent fraud, they can catch it early, before it turns into a major problem which could require months or years to fix. credit monitoring should be based on current and reliable data as stressed in the Basel accords. the key role played by credit risk monitoring & control is also echoed by murigi & thuo (2018).

Conclusions And Recommendations:

Credit risk identification is an integral part of salary loan performance at Stanbic Bank. The process of credit risk identification is key for improving the effectiveness and efficiency of salary loans at a financial institution. There is need for financial institutions to develop risk identification systems with clear credit terms, procedures and policies so as to support the process of credit risk identification.

Credit risk assessment determines the effectiveness and efficiency of salary loan performance at the bank and the need for financial institutions to put in place efficient systems and procedures related to risk assessment. Credit risk monitoring & control influences salary loan performance and thus the need for financial institutions to strengthen credit risk monitoring processes like putting in place a department in charge of credit risk monitoring. The credit control function can also be strengthened through instituting effective and efficient internal controls in the credit processes of the bank as a means of reducing non performing assets.

References :

1. Ahmed, S.F. & Malik, Q.A. (2015). Credit risk magt and loan performance: empirical investigation of micro finance banks of Pakistan. International journal of economics and financial issues. 5 (2), 574-579
2. Alexander-Tedeschi, Gwendolyn and Dean, Karlan. (2009). Microfinance impact: bias from dropouts. Perspectives on technology and development. Washington, D.C.: USAID-AIMS

3. Al-khouri,r. (2011). Assessing the risk and performance of the gcc banking sector, *australian journal of business and management research*, 65 (3),72-80.
4. Al-tamimi, h.a.h. And al-mazrooei, f.m. (2007). Banks' risk management: a comparison study of uae national and foreign banks, *the journal of risk finance*, vol. 8 no. 4, pp. 394-409.
5. Bank of uganda on-site examination report, 2012
6. Bank of uganda sector annual supervision report, 2012
7. Barton,t.l., shenkir,w.g. &walker,p.l. (2002). *Making enterprise risk management pay off*. Usa, prentice hall ptr, financial times
8. Basel 11 (2006). *International convergence of capital measurement and capital standards . A revised framework comprehensive version*
9. Basel, 2010. *Principles for the management of credit risk*, consultative paper issued by the basel committee on banking supervision, basel
10. Colquitt,j (2007). *Credit risk management: how to avoid lending disasters and maximize earning'*.3rd ed. Mercy college. McGraw-hill
11. Conford, a.(2000). *The basel committee's proposals for revised capital standards: rationale, design and possible incidence*.g-24 discussion paper series, united nations,no.3, may
12. Funso, kolapo, t.; kolade, ayeni, r., et al., (2012). *Credit risk and commercial banks' performance in nigeria: a panel model approach*, *australian journal of business and management research*, vol.2, no.02, pp. 31-38.
13. Geitangi, d.m. (2015). *The relationship between credit risk management practices and the performance of loan portfolio of commercial banks in kenya*. A research project submitted to the university of nairobi for the award of master of science in finance
14. Hassan, a. (2009). *Risk management practices of islamic banks of brunei darussalam*. *Journal of risk finance*, 10 (1),23-37
15. Hosna, a., manzura,b. &juanjuan,s. (2009). *Credit risk management and profitability in commercial banks in sweden*. Master's thesis submitted to university of gothenburg, school of business, economics and law
16. International monetary fund (imf) 2011
17. Kargi, h.s. (2011). *Credit risk and the performance of nigerian banks*, ahmadubello university, zaria.
18. Kattel,i.k. (2017). *Study of credit risk identification techniques followed by commercial banks in nepal*. *Journal of advanced academic research*,2 (ii), 1-17
19. Madhyam& stichele,2010. *Banking sector liberalization in uganda* –kavaljit singh
20. Murigi, d.m. &thuo, a. (2018). *Credit risk management and loan performance in microfinance banks in kenya*. *International journal of economics, commerce and management*. Vi, (4), 623-643.
21. Musyoki, d and kadubo, a. S. (2011). *The impact of credit risk management on the financial performance in kenya*. *International journal of business and public management*.
22. Mutua,s.w. &gekara, m. (2017). *Credit risk management strategies and their impact on commercial banks in kenya*. *Imperial journal of interdisciplinary research*, 3 (4), 1896-1904
23. Onaolapo, a. R. (2012). *Analysis of credit risk management efficiency in nigerian commercial banking sector*, *far east journal of marketing and management*.
24. Pandey,i.m. 2008. *Financial management*. New delhi: vikas
25. Qiasar,a. & malik, a. 2015. *Impact of credit risk management on loan performance in commercial banks in pakistan*. *International journal of economics and financial issues*, 5 (2), 574-579.

26. Ravi prakash sharma poudel (2012). The impact of credit risk management on financial performance of commercial banks in nepal, international journal of arts and commerce, vol. 1 no. 5
27. Sbul annual reports (2010, 2011, 2012, 2013, 2014)
28. Sbul quarterly review (2010, 2014)
29. Sinkey,j.f.(2002). Commercial bank and financial in the financial –services industry. Prentice hall