

Influence of Financial Information Sharing Systems Integrity on Non-Performing Loans among Commercial Banks in Nairobi, Kenya

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Abstract: The Banking industry is one of the key industries which support infrastructure and economic development of a Country. The main aim of the study was to find out the influence of financial information sharing systems integrity on non-performing loans among commercial banks in Nairobi, Kenya. The quantitative data collected was analyzed by using Statistical Package for Social Sciences (SPSS version 22). Correlation analysis and multiple linear regression models were used in measuring the variable in this model. The findings showed that, financial information sharing integrity reduced non-performing loans. The study therefore recommends that bank credit information accessed should contain all the Credit information.

Keywords: Financial information sharing systems integrity, Non-performing loans.

1. INTRODUCTION

The major function of commercial banks in the economy is financial intermediation. To overcome the challenge of NPLs, institutions are required to monitor the behavior of credit consumers (Gaitho, 2013). Credit information about prospective borrowers can help curb the occurrences of bad and doubtful debts. Nonetheless, this information is not readily available hence banks have to establish long standing relationships with their borrowers in order to evaluate their creditworthiness (Kovenock, 2015). Monitoring of borrowers is very costly to the financial institutions and therefore the information gathered from the long term relationship with their borrowers provides competitive advantage to the financial institution (Karapetyan & Stacescu, 2009). When financial institutions compete for customers, multiple borrowing increases which leads to rise of over indebtedness and loan default unless the financial institutions have access to databases that capture borrowing behavior of the clients (Gaitho, 2013). The absence of information can be misused by bad loan borrowers who know banks operate in isolation and hence exploit the information asymmetry to create multiple bad debts (Kipyego & Wandera, 2013).

Therefore, banks are encouraged to share credit information amongst them. Competition between lenders reduces information sharing but the impact of competition seems to be only of second order importance (Brown & Zehnder, 2007).

1.1 Statement of the Problem:

There are numerous problems in the financial sector despite significant amount of research undertaken so far on credit information sharing (Gaitho, 2013). Cases of bank collapse due to non-performing loans in different parts of the world are common (Grajzl & Laptieva, 2011). Non-performing loans occur due to lack of sufficient credit information by the lenders at the time of advancing loans to borrowers making them unable to make informed decisions (Mumi, 2011).

In Kenya for instance the collapse of Imperial bank and Dubai bank signaled that there are still problems in the banking sector despite the numerous benefits gained so far by credit information sharing (shisia *et al.*, 2014). Baah- Kusi & Adu (2015) focused on access to bank credit before and after information sharing. Mugwe & Olweny (2015) focused on the

profitability of the financial institutions before and after introduction of CRBs. Gaitho (2013) looked at the role of credit reference bureaus on credit access in Kenyan banks majorly looking if credit has been readily availed due to the prior information obtained by the banks through CRBs. Nyangweso (2013) looked at the relationship between credit information sharing and loan performance. However, they did not focus on financial systems integrity. With this background the study sought to fill the existing research gap by establishing financial systems integrity as a factor affecting non-performing loans among commercial banks licensed in Nairobi, Kenya.

1.2 Research Objective:

1. To assess the influence of financial information sharing system integrity on non-performing loans among commercial banks

1.3 Research Question:

1. What is the influence of financial information sharing system integrity on non-performing loans among commercial banks?

2. LITERATURE REVIEW

2.1 Conceptual Framework:

A Conceptual frame work is a hypothesized model identifying the concepts under study and their relationships. The purpose of a conceptual framework is to help the reader to quickly see the proposed relationship between the independent and dependent variables (Mathieson, 2011).

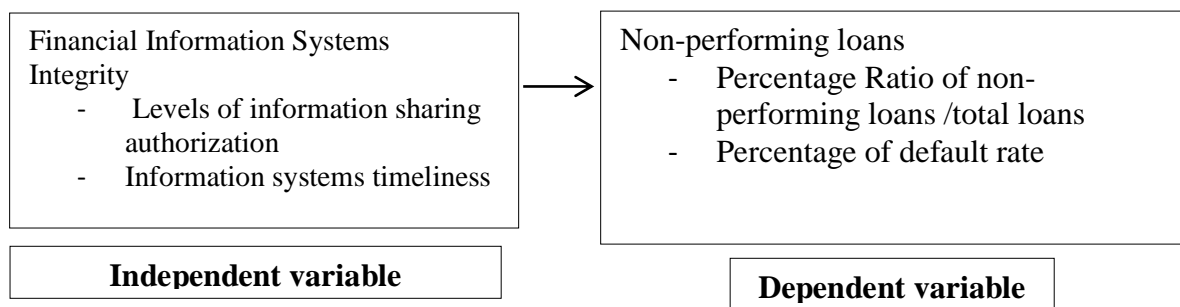


Figure 2.1: Conceptual Framework.

2.2 Review of Variables:

2.2.1 Financial Information Sharing Systems Integrity:

Financial information system integrity denotes to the value of human, practical and scientific systems laid in place for the protection of the integrity of businesses amongst parties (Rennie, 2010). Basically information systems integrity administers facts flow in and out of a business and hence information can be attained (Rotke & Gentgen, 2011). Financial information System integrity incorporates the organization approach to safeguarding customers credit information, workforces facts security management, ICT skill in place utilized for data processing and distribution therefore CRB has the roles of facts sharing, supervision roles of the board and additional authorities in guaranteeing the credit facts of customers is not ill-treated and that risk managing measures are suitably observed (Oyendukon, 2015).

Commercial banks must be certain that their organizational facts are reserved securely and accessed solitary by authorized staffs. Guarding information from prohibited and incorrect use is critical for a business to create and uphold a competitive advantage. Therefore banks should own a security database as per their actual size and complexity and scope of its events (Farquhar, 2010). It's an obligation that the board of managements approves the commercial bank's information security database and supervises the program's growth and enactment (Lenzer, 2013). This is taken to be an important attainment, processing and distribution of the customer's credit information background. Obviously, for the system to reveal high trustworthiness there ought to be a system procedure in place to facilitate information flow is sufficiently observed. Procedures are the guidelines determining the organization and transmission of facts.

Procedures in an organization can be influential in generating an information ladder where facts can merely be retrieved upon approval (Kemris, 2012). Asset managing procedures is typically helpful in executing commercial bank's information security database, predominantly with respect to individual's aspects. Asset controlling operations must

certify that those characteristics of the bank's loaning atmosphere it controls, whichever directly or by oversight of a third-party worker, fit in to the bank's guidelines, values, measures, and to appropriate banking rules and guidance (Mark & Micheal, 2010).

In several instances automatic interfaces together with file allocations modules and the credit information systems are essential assets of organization accounting system. The information and reports given by the systems are appropriate, clear, timely, continuous, Resourceful and relevant (Frey, 2010). Commercial bank's customer information must be sufficiently protected from unlawful disclosure, modification and accessibility by unauthorized users. Financial institutions have employed numerous approaches in client appraisal process. The processes range from subjective ones to fairly complex ones like computerized simulation models (Mathews & Thompson, 2008).

Credit advancement decisions made by financial institutions are based on subjective feelings about the risk in relation to expected repayment by the borrower as per the customer's information. This approach is commonly used by banks and other financial institutions since it is both simple and inexpensive. The method of determining risk and quality of its clients varies from one financial institution to another depending on the target group and client evaluation report (Glennon & Nigro, 2011). The report consists of elements such as Character, Capacity to pay, Collateral produced, Business Capital and other Conditions. A study by Mulumba (2011) concluded that the collapse of most of the banks in Uganda in the 90s was caused by either ignoring the lending procedures in favor of some personalities or compromising the system the study supported the enhancement and safeguard of system integrity.

Most bank failures have been associated with insider dealings touching majorly on the directors and employees (Berry, 2010). A study by Rasoulinezhad (2013) on information sharing in Iranian banks identified restricting information access as a method of guarding important information. The study emphasized on the use of information technology to protect information although a protocol based approach to restrict the knowledge was required. This approach required the formation of information access ladder with restrictions at every stage by requesting for authentication and permission by use of passwords. Sharing of control may have adverse effects on the quality of loans advanced up to a certain level but in cases of a strong controlling owner bank's management becomes more efficient leading to lower non- performing loans.

These findings were also supported by Azofra and Santamaria (2011) who on their study on the impact of bank ownership concentration on non-performing loans and capital adequacy found that high levels of ownership concentration may benefit both the bank's profitability and efficiency for commercial banks. This shows that the integrity of the banks internal credit control systems improved with increase owner's control. Though this was mainly observed in private banks and banks where the government had very little stake. The findings of Lenzer (2013) who analyzed 50,000 financial institutions with different ownership types covering 119 countries concluded that non- performing loans tend to be higher for banks with state ownership than for other groups.

This calls for improved accessibility, use, control and stern obedience to rules and procedures when tasked with credit appraisal. Nevertheless, actual credit risk supervision is determined by on observance to commercial banks best loaning practices whereby system integrity in obtaining borrower's facts is important (Kwambai, 2015). Preceding researches have abided much on the performance of commercial banks and external influences for instance interest rates, price rises and progression of economy but then have not clearly associated it to system integrity such as credit information distribution through commercial banks. Consequently, this inspired the necessity for the current research which sought to analyze the influence of financial information systems integrity on Non-performing loans among commercial banks in Nairobi, Kenya, Kenya.

2.2.2 Non-Performing Loans (NPL):

Non-performing loans are loans which are held by banks and whose owners are not able to pay satisfactory. According to Bennardoet *al.*, (2010) if credit progression to indebted individuals or organisations is reduced then the level of non-performing loans will greatly be reduced. Therefore as firms and entities default on loan resulting to increased nonperforming loans, commercial banks reduce or stop loan advance to defaulting firms or persons. A negative impression of nonperforming loans on access to credit is realized (Gaitho, 2013). Non-performing loans are measured as a ratio of total non-performing loans to gross loans advanced.

A non-performing loan occurs when all agreed payments are not being made on time, are not expected to continue to be paid and the value of any assets backing up the loan remain does not adequately cover the loan (Bholat, 2016). Non-performing loans can also be stated as the total sum of loaned amount which the debtor has not made planned payments as

per agreement. Non-performing loan can also be explained as a loan on which the debtor is not making both interest and principal repayments on the required time. Banks due to the existence of bad creditors usually set aside money to cater for probable losses on loans which are utilized to write off bad debt in their profit and loss account or pay insurance premium in instances where the loans are insured (Nguyen, 2014). In certain economies, financial institutions numerous accrued NPLs are capable of selling them at a fee or at a discount to specifically reputable asset management companies which will try to recover some of the money owed. Khemraj (2015) found out that banks with high level of NPLs incur carrying costs on non-income generating assets that reduces profitability and adequacy of the bank's capital. They also stated that quality assets are dependent on credit information utilization in loan making decisions.

Commercial banks in Kenya form the majority of the top ten most profitable companies in Kenya. If the banks are not keen to ensure that their loans do not go into default then these blue chip companies will go tumbling down and the entire economy will be threatened (Adem, 2012). Portfolio management strategies are key objectives observed by banks so as to reduce NPLs hence important objectives of the banks. Since unsecured personal loan policies change rapidly, stringent measures such as adherence to credit information sharing have to be enhanced to curb this dynamism.

A non-performing loan can either be in default or close to being in default. When a loan is dormant, the likelihoods that it will get repaid in full are considered to be substantially lower. In this case the banks no longer receive interest and/or installment payments as scheduled (Monokroussos, 2016). Nonperforming loans are so crucial to the bank because they can be used to determine the banking industries stability and permanency as well the profitability of the bank (Fofack, 2015). This is because non-performing loans can reduce a bank's capital resource making the bank unable to grow its business and the result is the insolvency or liquidation of the bank. Commercial banks are assessed on an annual profit basis.

Maintaining asset value and net income is critical for the survival and continuous growth of banks. Kaushik and Lopez (2011) found that growth of the loan book relative to income gained tends to reduce profitability since loan margins are greater than those on investments. Berger and Deyoung (2014) suggest a possible positive relationship between assets and high cost efficiency. The findings of Bofondi and Ropele (2016) that looked at a sample of 278 banks from nine countries in the period 2010 to 2014 concluded that there is reduced cost efficiency from a financial perspective which reduces profitability because of the foregone asset investment opportunity.

3. RESEARCH METHODOLOGY

This study utilized a descriptive survey design which involves giving questionnaires to credit managers of Commercial Banks in Nairobi, Kenya. A descriptive research design entails finding out when, what, where and how of the firm characteristics (Kariuki, *et al.*, 2015). The use of descriptive research design allows the researcher to better understand and explore issues at deeper level since it is made of different framework. Any approach used in research depends on the question it is intended to answer in this case a qualitative approach produces results that are credible for over 50 years (Kaczynski *et al.*, 2014). The study viewed each individual characteristic in the theoretical population. According to Lavrakas (2008), any finite or infinite collection of individual items or elements is a population. A population is all the elements in any field under study (Carr & Griffin 2010). There are 43 registered Commercial banks in Nairobi, Kenya (Kenya Bankers Association Kenya, 2016). The study population consisted of credit managers of the 40 registered banks in Nairobi Kenya since 3 banks are under receivership and statutory management forming a population of 40.

The study selected credit managers from all commercial bank because they are the ones knowledgeable with the influence of Financial Information Systems Integrity on non-performing loans among commercial banks in Nairobi, Kenya, and data was collected by means of a census survey of the credit managers of the commercial banks. 37 questionnaires were filled and returned. Questionnaires were used in the study as a research instrument. A questionnaire is a tool of measure that requires respondents to answer a set of questions formulated by the researcher (Denzin & Lincoln, 2005). According to Dawson (2002) questionnaires can be classified into three sections; open ended questionnaire, closed ended questionnaire and a combination of both. Both open ended questionnaires and closed ended questionnaire were used to identify the research problem and collect sufficient data to answer the research question of the study. The open ended questionnaires probed for more information from respondents (on Five point Likert scale of 1 –Strongly Agree, 2-Agree, 3- Sometimes Agree/ sometimes disagree 4 – Disagree, 5 –strongly Disagree) and closed ended questionnaires facilitated easy statistical data entry into (SPSS) and analysis.

A pilot test was carried out to validate and evaluate the reliability of data collecting instruments in carrying out the purpose of the study. Drop and pick method was used to administer at most fifteen questionnaires to commercial banks in Machakos town to measure the variability of the questionnaires and the response of the respondents in the study. Multiple linear regression models was used in measuring each variable and this model was of great importance in bringing out the influence of Financial Information Systems Integrity on non-performing loans in commercial banks Correlation was used to obtain the relationship between variables under study.

The regression model was;

$$Y = \beta_0 + \beta_1 X_1 + \varepsilon$$

Where,

Y = Non-performing loans as measured by non-performing loan ratio; ratio of the amount of non-performing in a bank's portfolio to the total amount of outstanding loans.

β_0 = Constant Term

β_i =Regression coefficients, for $i = 1,2,3,4$

X_1 = Financial information sharing system integrity.

ε = Error term

Reliability in content analysis was ensured by analyzing the amount of agreement or correspondence among the key informants

Assuming that;

Linear relationship exist, there is multivariate Normality, there is little or no multi-collinearity and there is Homoscedasticity

4. RESEARCH FINDINGS AND DISCUSSION

The study was carried out with a total of 40 questionnaires which were administered to commercial banks in Nairobi, Kenya only 37 questionnaires were successfully completed by the respondents which is a response rate of 93.0% of the total questionnaire. The response rate of 93.0% which was attained during this study is acceptable because it is above the 70%.

4.1 Descriptive Information on Demographics:

This section presents respondents' highest level of education, respondent's highest Level of education and training, seasonal trainings regarding credit information management, Sharing of data with credit reference burials and respondents work experience. The results are shown in Tables below.

4.1.1 Respondent's Highest Level of Education and Training:

The researcher sought to establish the respondent's highest level of education and training. Table 4.2 shows the study findings.

Table 4.1: Highest Level of Education and Training.

Education Level	Frequency	Percent
Certificate	1	2.7
Diploma	6	16.2
Degree	27	73.0
Post Degree	3	8.1
Total	37	100.0

Table 4.2 shows that the majority of the (credit managers) respondents (2.7%) were certificate graduates, (16.2%) were diploma graduates, (73.0%) were degree graduates and (8.1%) had post-graduate degrees. This was interpreted to mean that most of the credit managers in the banking sector were literate.

4.1.2: Seasonal trainings regarding credit information management:

The researcher sought to establish if the banks offer training to their credit managers. The findings would assist categorize the respondents based on their training.

Table 4.2: Seasonal trainings regarding credit information management

Seasonal training	Frequency	Percent
Yes	35	94.6
No	2	5.4
Total	37	100.0

Table 4.3 indicates that a majority of the (credit managers) respondents (94.6%) agreed that their banks offer seasonal trainings regarding credit information management, (5.4%) said that their banks don't offer Seasonal trainings regarding credit information management. This was interpreted to mean that most of the banks offer seasonal trainings regarding credit information management.

4.1.3: Sharing of data with Credit Reference burials:

The researcher sought to establish if the banks do share data with Credit Reference burials. The findings would assist categorize the respondents based on the data sharing

Table 4.3: Sharing of data with Credit Reference burials

Seasonal training	Frequency	Percent
Yes	36	97.3
No	1	2.7
Total	37	100.0

Table 4.4 indicates that a majority of the (credit managers) respondents (97.3%) agreed that their banks offer do share data with Credit Reference burials, (2.7%) said that their banks don't share data with Credit Reference burials. This was interpreted to mean that most of the banks do share data with Credit Reference burials.

4.1.4 Respondents work experience:

The researcher sought to establish the level of the work experience of the credit managers since the conclusions would assist classify the respondents based on their work experience.

Table 4.4: Respondents work experience

Working Experience	Frequency	Percent
Less than 1 year	6	16.2
1 to 5 years	11	29.7
6 to 10 years	16	43.2
11 Years and above	4	10.9
Total	37	100.0

Table 4.5 shows that a majority of the credit managers (43.2%) had a work experience of between 6 years to 10 years, (29.7%) had a work experience of between 1 year to 5 years, (16.2%) had a work experience of less than 1 while (10.9%) had a work experience of more than 11 years. This was interpreted to mean that most of the credit managers were of work experience of over one year to year.

4.2 Descriptive Analysis:

Table 4.5: Financial information Sharing Integrity

Where 1 - Strongly agree, 2 - Agree, 3 - Somehow agree/Somehow disagree, 4 – Disagree, and 5 - Strongly disagree

Factor	1	2	3	4	5	Std. Dev	Mean
Your bank assigns authority and responsibility on employees handling credit information	19 (51.4)	10 (27.0)	2 (5.4)	1 (2.7)	5 (13.5)	1.30	1.89
There are pre- process checks and verification procedures of financial information in your bank	22 (59.5)	5 (13.5)	5 (13.5)	4 (10.8)	1 (2.7)	1.19	1.83
Periodic testing and checks of the credit information sharing systems are carried out by your bank	15 (40.5)	10 (27.0)	7 (18.9)	3 (8.1)	2 (5.4)	1.19	2.10
Periodic password security check of the credit information sharing systems are carried out by your bank	22 (59.5)	9 (24.3)	4 (10.8)	1 (2.7)	1 (2.7)	0.97	1.64
Your bank analyses errors in the credit sharing system timely and takes remedial actions	22 (55.5)	10 (27.0)	3 (8.1)	1 (2.7)	1 (2.7)	0.95	1.62
Your organisation has method of organizing the users of the credit sharing system on time	25 (67.6)	5 (13.5)	2 (5.4)	2 (5.4)	3 (8.1)	0.90	1.58
Your organisation credit information system provides timely information	21 (56.8)	12 (32.4)	2 (5.4)	1 (2.7)	1 (2.7)	0.92	1.60

The respondents were asked to state the influence of financial information Sharing Integrity on non-performing loans among commercial banks. With regards to its effects, the respondents on average 1.89 agreed that bank assigns authority and responsibility on employees handling credit information 19(51.4%) strongly agreed, 10(27.0%) agreed while 5(13.5%) strongly disagreed. 5(13.5%) respondents agreed that there are pre- process checks and verification procedures of financial information in your bank while 4(10.8%) did not. On whether Periodic testing and checks of the credit information sharing systems are carried out by your bank, 10 respondents (27.0%), agreed while 3(8.1%) disagreed. The respondents were also requested to indicate if periodic password security check of the credit information sharing systems are carried out by your bank, 22(59.5%) strongly agreed while 2(5.4%) disagreed with a mean of 1.6.

Table 4.6: Nonperforming loans

Where 1 - Strongly agree, 2 - Agree, 3 - Somehow agree/somehow disagree, 4 – Disagree, and 5 - Strongly disagree

Factor	1	2	3	4	5	Std. Dev	Mean
The percentage of non-performing loans to total loans has been increasing over the years	10 (14.5)	15 (21.7)	1 (1.4)	7 (10.1)	4 (5.8)	1.36	2.4
The percentage of non-performing loans to total loans is affected by interest rates	4 (5.8)	14 (20.3)	10 (14.5)	4 (5.8)	5 (7.2)	1.20	2.7
The percentage ratio of non-performing loans to total loans is reasonable for your organization and cbk limits	5 (7.2)	5 (7.2)	5 (7.2)	15 (21.7)	7 (10.1)	1.31	3.3
The percentage ratio of non-performing loans to total loans will possibly increase in future	2 (5.9)	5 (7.2)	22 (31.9)	6 (8.7)	2 (5.9)	0.83	3.0

The percentage of default rate has been increasing over the years	18 (26.1)	4 (5.8)	4 (5.8)	7 (10.1)	4 (5.8)	1.51	2.3
The percentage of default rate is within the banks operational limit and cbk limits	22 (31.9)	10 (14.5)	1 (1.4)	2 (2.9)	2 (2.9)	0.74	2.5
The percentage of default rate will possibly increase in future	4 (5.8)	2 (2.9)	18 (26.1)	5 (7.2)	7 (10.1)	1.31	2.2
The percentage of default rate is affected by interest charged by the bank	22 (31.9)	10 (14.5)	2 (2.9)	2 (2.9)	1 (1.4)	1.98	3.1

On the percentage of non-performing loans to total loans has been increasing over the years the respondents 10(14.5%) strongly agree, 15(2.7%) agree while 4(5.8%) strongly disagree with standard deviation 1.36 and mean 2.4.14 (20.3%) agreed on the fact that percentage of non-performing loans to total loans is affected by interest rates with standard deviation 1.20 and mean 2.7.

The respondents 5(7.2%) agreed that the percentage ratio of non-performing loans to total loans will possibly increase in future, 6(8.7%) disagreed within mean 3.0 and standard deviation 0.83. The percentage of default rate has been increasing over the years with 18(26.1%) agree, 4(5.8%) disagree with mean 2.3 and standard deviation 1.51.

Finally, on the percentage of default rate affected by interest charged by the bank the respondents strongly agreed 22(31.9%) , 10(14.5%) agreed while 1(1.4%) disagreed on the fact with mean 3.1 and standard deviation 1.98.

4.3: Inferential Statistics:

Inferential statistics were used to determine the relationships between dependent and independent variables. This comprised of correlation analysis, and regressions. Correlation analysis by means of Pearson Product Moment Correlation Coefficient technique was used to determine nature and magnitude of the relationships between the variables.

4.3.1 Correlation Analysis:

Table 4.7: Correlation Matrix

	Financial information sharing integrity	NPL
Financial information sharing integrity		
Pearson Correlation	1	
Sig (2-tailed)		
N	37	
NPL	0.832**	1
Pearson Correlation		
Sig (2-tailed)	.000	
N	37	37
** . Correlation is significant at the 0.01 level (1-tailed).		

Correlation analysis enable researcher to determine the strength and significance of relationship between each individual independent variable and the dependent variable.

The financial information on sharing integrity has a positive correlation of 0.832. The p value (0.000) < 0.01 indicating that banks with high Authority and responsibility on employees handling credit information lead to the low non-performing loans. This result is in line with a study by Rasoulinezhad (2013) on information sharing in Iranian banks identified a positive impact on restricting information access as a method of guarding important information.

Table 4. 8 Model Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients		Collinearity Statistics		Tolerance	VIF
	B	Std. Error	Beta	T	Sig.			
1 (Constant)	.991	.112		17.841	.000			
FISI	.266	.099	.867	2.693	.005	.046		21.893
a. Dependent Variable: NPL								

The results depicts that there is no multicollinearity. the regression equation is $Y_{NPL} = 0.991 + 0.867X_1$.

5. SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction:

This chapter involves the summary of the results collected, the discussions related to those findings and the recommendations this study makes. The chapter present discussions and findings of the study influence of financial information on sharing integrity on non-performing loans among commercial banks in Kenya.

5.2 Summary:

The study investigated whether financial information on sharing integrity influence nonperforming loans and found that it is positively correlated; hence indicate that banks with high Authority and responsibility on employees handling credit information lead to the low non-performing loans. Thus Organization's policies on credit information system security should play a vital role on non-performing loans

5.3 Conclusions:

It is evidenced from the findings that financial information sharing integrity positively affects nonperforming loans. This is taken to be an imperative achievement by the commercial banks by processing and distribution of the client's credit information background. Noticeably, for the system to reveal high reliability there must be a system process in place to facilitate information flow is adequately observed. Commercial banks should give clear guidelines determining the organization and transmission of facts. This study was in hand with that of (Kemris, 2012).

5.4 Recommendations:

Management should ensure authority and responsibility on employees handling credit information within the bank. This is simply because failure to adhere to loan recovery by these employees increases the nonperforming loans. From the study it is recommended that methods can be used on how to organize the users of the credit sharing system as it is a determinant on non-performing loans.

5.5 Areas for Further Research:

The study sought to determine the influence of financial information on sharing integrity on non-performing loans among commercial banks in Kenya. There is need for a study to be conducted to determine the relationship of non-performing loans to the performance of commercial banks. From the findings and conclusions, the study recommends an in depth study be carried on the influence of interest rates be identified by the study as other factors affecting non-performing loans and more so on interest rates capping on the performance of commercial banks been the latest development in the banking industry in Kenya.

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