# CREDIT INFORMATION SHARING AND FINANCIAL PERFORMANCE OF COMMERCIAL BANKS IN KENYA

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## Abstract

*Despite of implementing a number of determinants to improve financial performance of Commercial Banks, Banks still declare deficit on the outcome of operation in Kenya today hence need for further study. The study therefore examines the influence of credit information sharing and financial performance Commercial Banks. Mixed method which comprised of quantitative and qualitative designs was applied in this study. Target population was 43 licensed Commercial Banks in Kenya from which one hundred and seventeen (117) managers were purposely selected to form sample size. Cronbach Alpha test of 0.961 was obtained indicating the reliability of the research instrument. Content and criterion validity were ensured through incorporating the experts' suggestions in the final document. Data was analyzed using descriptive statistics and inferential statistics which included correlation analysis and bivariate regression analysis and multiple regression analysis after testing for normality, multicollinearity and performing factor analysis. The study findings established a strong positive correlation between credit information sharing and financial performance. I recommend the commercial banks to scrutinize information through Credit reference Bureaus in order to avoid multiple loaning and reduce non-performing loans. Further study should be conducted to establish whether managers tenure of office effects the relationship between credit information sharing and commercial banks financial performance in Kenya.*

**Keywords**: *credit information sharing, commercial banks, financial performance*

## 1. Introduction

Commercial banks transfers' resources from unproductive to productive users/uses hence need for information flow. Okelo, Namusonge and Iravo (2015) observed that borrowers have more information than lenders therefore may use for their personal advantage. In Kenya, Central Bank gazette and operationalized Credit Refence Bureau Regulations in 2009 to govern the licensing, operation and supervision of Credit reference Bureau as a medium for exchange of credit information (Kerage & Ndede, 2013). Kerage and Jagongo (2014) measured credit information sharing using non-performing loans, operational cost, level of interest and volume of lending. Banks are at the centre of credit intermediation process between borrowers and lenders. They facilitate the transfer of resources from unproductive to productive users. To undertake these function commercial banks need efficient information flow from lenders to borrowers (Kerage & Adede, 2013). Brown, Jappelli and Pagano,
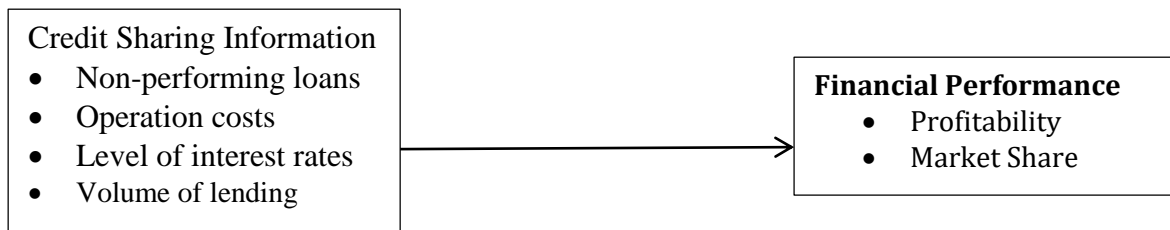
(2006) observed that collection and maintaining of current credit information about the customers is the work of credit reference bureaus. Information asymmetry theory stated that borrowers have more information than lenders and may use to their advantage Okelo, Namusonge and Iravo (2015). Matthews and Thompson, (2008) observed that information sharing is the best predictor of future and past behaviour of the customers.

Information sharing enables the credit markets to make lending and borrowing decisions from an informed point of view. This creates an imbalance of power in transactions, which can sometimes cause the transactions to go awry (Yun, 2009). Kerage and Jagongo (2014), studied on how credit information sharing affected performance of commercial banks in Kenya and he adopted census survey of all commercial banks licenced under the Banking Act (Cap 488 laws of Kenya). The variables under study were as follows; independent variable; Non performing loans portfolio, level of interest rates, volume of lending, operating cost and the dependent variable was Return of Assets (ROA). The results indicated that independent variables were significant and the model revealed a negative association between banking performance and Non-performing Loans, interest rate and operating cost.

Jappeli and Pagano (2005) in their working paper No. 136, captured four effects of information sharing on credit market performance as improvement in the banks' knowledge of applicants' characteristics and permit a more accurate prediction of their repayment probabilities. Reduces the informational rents that banks could otherwise extract from their customers, operate as a borrower discipline device and eliminates borrowers' incentive to become over-indebted by drawing credit simultaneously from many banks without any of them realizing.

Kiage, Willy and Musyoka (2015) studied on influence of positive credit information sharing determinants on the financial performance of commercial Banks in Kenya; a survey of commercial banks in Kisii Town. They examined the following variables to be cost of sharing, privacy protection of positive credit information on financial performance and influence of competition among commercial banks. They established that no switching cost from one bank to the other are involved and therefore people could move from one bank to another (Gehrig & Stenbacka, 2005). Kiage *et al*., (2015) in his study on positive information sharing established an increase on net interest income of the banks. These findings contradicted with those of lin *et.al* (2012) who noted that there was no effect on the net interest income of the banks. Concerning the privacy protection he established that the rights of customers should be protected which was consistent with the findings of Villar and Alejandro (2003).

On the other hand, the operating costs negatively affected profitability and this was consistent with (Kerage & Jagongo, 2014). To alleviate the problems of information asymmetry the central bank of Kenya gazetted and operationalized Credit Reference Bureau Regulations in 2009 to govern the licensing, operation and supervision of Credit Reference Bureaus by the Central Bank of Kenya to act as a medium for exchange of credit information (Kerage & Ndede, 2013). The banks currently request for a clearance certificate from CRB before advancing any credit facility to their clients.

| Credit Sharing Information |
| --- |
| • Non-performing loans |
| • Operation costs |
| • Level of interest rates |
| • Volume of lending |

| Financial Performance |
| --- |
| • Profitability |
| • Market Share |

**Figure 1** Conceptual Framework

## 2. Methodology

Mixed method of research design consisting both qualitative and quantitative approaches guided the study and based on logical inductive positivism that deals with what is measurable to reach conclusions about the hypothesis and address the research objectives and the research problem of this study. Njeru, (2012) asserted that mixed method of research design is appropriate for collecting descriptive data where the researcher wants to know about people or attitudes consisting one or more variable through direct inquiry. Kariuki, Namusonge and Orwa (2015) applied this research design in their study on the determinants of corporate cash holdings among private manufacturing firms in Kenya. Namusonge (2010) explained that approach of mixed method was most suitable because it involves collecting information from the people on their habits, opinions, attitudes and any other educational or social issues. The study targeted a population of 43 commercial banks licensed by Central Bank of Kenya since they are major financial institutions that save and lend money for investment by investors (CBK 2014). Purposive sampling was applied on these banks to identify the respondents who have knowledge on the subject matter under study. These included Chief Executive Officer, Risk Manager and Credit Control Manager. primary data was applied in the collection of data

## 3. Findings

The findings has been explained under twofold: descriptive statistics and inferential statistics

### 3.1 Descriptive statistics

Sampling adequacy test, factor analysis and descriptive statistic were performed to determine the influence of credit information sharing on commercial banks financial performance in Kenya.

### a). Sampling Adequacy

The researcher performed two tests namely Kaiser-Meyer-Olkin Measure of sampling adequacy and Bartlett's Sphericity to examine whether data collected was adequate and appropriate for inferential and other statistical tests. The data was regarded appropriate for statistical analysis if the value of KMO is greater than 0.5 (Field, 2000). Table 1 findings indicated that KMO test was 0.922 which

was significant since it is greater than the critical level of significance of the test which was set at 0.5 (field, 2000). Besides to the KMO test, the Battler's test of sphericity was also highly significant with 394.650 with 21 degree of freedom at P<0.05. The findings were in agreement with Linyiru *et al*., (2015) who explained that the critical level of significance of the Battlers test of sphericity is significant at 0.5.

**Table 1: Credit Information sharing KMO sampling adequacy Bartlett's**

| Statements | Coefficient |
|---|---|
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy | 0.922 |
| Bartlett's Test Chi-Square | 394.650 |
| Bartlett's Test df | 21 |
| Bartlett's Test Sig | 0 |

**b). Factor Analysis**

The extraction of the factors followed the Kaiser criterion where an Eigen value of 1 or more indicates a unique factor (Linyiru *et al.,* 2015). Total variance analysis indicates that the seven (7) statements on Credit Information sharing and financial performance can be factored into one (1) factor. Total variance explained by the extracted factor is 65.63% as shown in Table 2.

**Table 2: Credit Information Sharing Total Variance Explained**

| | Initial Eigenvalues | | | Extraction Sums of Squared Loadings | | |
|---|---|---|---|---|---|---|
| Items CIS | of Total | % Variance | ofCumulative % | Total | % Variance | ofCumulative % |
| 1 | 4.594 | 65.632 | 65.632 | 4.594 | 65.632 | 65.632 |
| 2 | 0.563 | 8.041 | 73.673 | | | |
| 3 | 0.464 | 6.629 | 80.302 | | | |
| 4 | 0.398 | 5.692 | 85.994 | | | |
| 5 | 0.376 | 5.375 | 91.369 | | | |
| 6 | 0.330 | 4.715 | 96.083 | | | |
| 7 | 0.274 | 3.917 | 100.000 | | | |

Extraction Method: Principal Component Analysis. CIS (credit information sharing)

Table 3 findings indicate that the statements/ questions on credit information sharing attracted coefficients of more than 0.5. This was to establish whether the individual questions under the credit information were strong enough to collect the required information under study. Rahn (2010)

explained that a factor loading equal to or greater than 0.5 has good stability and leads to desirable solutions. Kothari (2014) explained that factor analysis through principal component analysis, the value obtained should be closer to 1 to indicate acceptability or above 0.5 at a significance level of less than 0.05. Therefore, these results provide a justification for further statistical analysis to be conducted hence the seven (7) statements were retained for analysis.

**Table 3: Factor loading of Credit Information sharing**

|  | Statement | Factor loading |
|---|---|---|
| 1 | Our bank does not offer loans to those who already services loans | 0.845 |
| 2 | Our banks is efficient in collection of debts | 0.801 |
| 3 | Our bank rarely takes defaulting clients to court since establishment of credit information sharing | 0.806 |
| 4 | Our bank takes into consideration collateral security provided by borrower when pricing loans | 0.792 |
| 5 | Credit information sharing has reduced interest charged on consumer loans | 0.831 |
| 6 | Volume of credit facilities lend is increased due to information sharing | 0.785 |
| 7 | Conditions of lending are observed to the latter | 0.809 |

Extraction Method: Principal Component Analysis.

### c). Descriptive Results

Determine the influence of credit information sharing on Commercial Banks financial performance in Kenya. Table 4 shows that 51% of the respondents agreed the bank does not offer loans to those who are already servicing loans. Further 52% of the respondents agreed that banks are efficient in collection of debts, 50% of the respondents agreed that banks rarely take defaulting clients to court since establishment of credit information sharing, 51% of the respondents agreed that banks take into consideration collateral security provided by borrowers when pricing loans, 51% of the respondents agreed that credit information sharing has reduced interest charged on consumer loans, 44% agreed that volume of credit facilities lend has increased due to information sharing and finally, 47% of the respondents agreed that conditions of lending are observed to the latter. The mean score for responses for this section was 3.1300 which indicate that majority of the respondents frequently exhibited credit information sharing as per the below scale, hence making it a key driver of financial performance.

The descriptive results were measured on the scale of 1-5, with 1 indicating strongly disagree, 2-Disagree, 3-Undecided, 4-Agree and 5 indicating strongly agree. The weighted mean was computed and established using the following key. 1 strongly Disagree means the mean value never exhibited was between 1 and 1.80, 2 Disagreed means that the mean value rarely exhibited was between 1.81 and 2.60, 3 Neutral means that the mean value frequently exhibited was 2.61 and 3.40, 4 Agree means

that the mean value always exhibited was between 3.41 and 4.20, 5 Strongly Agree means that the mean value never exhibited was between 4.21 and 5.0.

**Table 4 Descriptive results on Credit Information Sharing**

| | Opinion Statement | SD | D | U | A | SD | Mean |
|---|---|---|---|---|---|---|---|
| 1 | Our bank does not offer loans to those who already servicing the loans | 12% | 23% | 14% | 37% | 14% | 3.1800 |
| 2 | Our banks is efficient in collection of debts | 15% | 12% | 21% | 35% | 17% | 3.270 |
| 3 | Our bank rarely takes defaulting clients court since establishment of credit information sharing | 9% | 29% | 12% | 36% | 14% | 3.1700 |
| 4 | Bank takes into consideration of collateral security provided by borrower when pricing loans | 12% | 23% | 14% | 37% | 14% | 3.1800 |
| 5 | Credit information sharing has reduced interest charged on consumer loans | 13% | 28% | 10% | 32% | 17% | 3.1200 |
| 6 | Volume of credit facilities lend is increased due to information sharing | 14% | 32% | 10% | 34% | 10% | 2.9400 |
| 7 | Conditions of lending are observed | 10% | 31% | 12% | 38% | 9% | 3.0500 |
| | **Average** | | | | | | **3.1300** |

**d). Relationship between credit information Sharing and performance**

Correlation result shows the relationship between variables (Jahangir & Begum, 2008). Table 5 findings showed a strong positive correlation of 0.713 between credit information sharing and financial performance. The P value was 0.000 at 1 % (0.01) level of significance.

This means credit information sharing is a strong determinant of financial performance in Commercial banks in Kenya. This was consistent with the findings of Ngumi *et al.,* (2013) who lauded that when significance level is very small (less than 0.010 them the correlation is significant between the two variables.

**Table 5 Relationship between Credit Information sharing and Financial performance**

| Variable | | Financial Performance (FP) | Credit Information Sharing (CIS) |
|---|---|---|---|
| Financial performance (FP) | Pearson Correlation | 1.000 | |
| | Sig. (2-tailed) | | |
| | Pearson Correlation | 0.713[**] | 1.000 |

| Credit information sharing (CIS) | Sig. (2-tailed) | |
|---|---|---|
| | | 0.000 |

**Correlation is significant at the 0.01 level (2-tailed).

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