

**INFLUENCE OF POSITIVE CREDIT INFORMATION SHARING  
DETERMINANTS ON THE FINANCIAL PERFORMANCE  
OF COMMERCIAL BANKS IN KENYA  
A SURVEY OF COMMERCIAL BANKS IN KISII TOWN**

**Evelyne Kiage** 

Jomo Kenyatta University of Agriculture and Technology, Kenya  
evelyne.kiage@yahoo.com

**Festus Muema Musyoka**

Jomo Kenyatta University of Agriculture and Technology, Kenya  
festusmuema.m@gmail.com

**Muturi Willy**

School of Business Administration, Jomo Kenyatta University of Agriculture and Technology, Kenya

**Abstract**

*This study was designed to investigate the influence of positive credit information sharing determinants among commercial banks in Kenya. It assessed the influence of privacy protection of positive information sharing, influence of cost of sharing positive information, influence of level of technology and also established the influence of competition on financial performance of commercial banks in Kisii town, Kenya. The target population was 34 credit managers and branch managers working in the 17 commercial banks in Kisii town. A survey questionnaire was developed and employed to collect data. The data was presented in descriptive form supported by frequency counts and percentages. The study established that competition had a positive influence on financial performance of Commercial Banks. Privacy protection had a negative influence on financial performance of commercial banks. Further, costs of information sharing had a negative influence on financial performance of commercial banks. The study recommends that it is important for regulations to emphasis on confidentiality between financial institutions and credit bureaus, collaboration/ free sharing of information between financial institutions and credit reference bureaus.*

*Keywords: Banks, financial performance, credit information sharing, nonperforming loans, competition*

## INTRODUCTION

Credit reference bureau (CRB) allows for credit information sharing among the financial institutions. Credit information sharing undoubtedly plays a pivotal role in reducing the information asymmetry that exists between banks and borrowers. Millor and Thakor (1985) find that issuers with lower credit ratings pay higher interest rates embodying larger risk premiums than higher rated issuers. Prospective lenders access the information only when they have permissible reason as defined in law, to determine the borrower's creditworthiness (Sullivan & Sheffrin 2003). The individual information collected by CRBs is made available on request to customers of the credit bureau for the purposes of credit risk assessment, credit scoring or for other purposes such as employment consideration or leasing an apartment. Lending is one of the main activities of banks in the world. This is evidenced by the volume of loans that constitute banks assets and the annual substantial increase in the amount of credit granted to borrowers in the private and public sectors of the economy. Lending is the principal business for most commercial banks. Loan portfolio is therefore typically the largest asset and the largest source of revenue for banks.

Banks in Kenya have been lending funds to serial defaulters, this is as a result of banks having different credit information regarding the borrowers and these borrowers have exploited the information asymmetry to borrow several loans from the Kenyan banks and defaulting in the long run thus increasing the level of non-performing assets (NPAs) in the banking sector. Banks are confronted to asymmetric information problems because of borrowers' informational opacity. When banks evaluate a request for credit, they can either collect information on the applicant first-hand or source this information from other lenders who already dealt with the applicant. Information exchange between lenders, can occur voluntarily via "private credit bureaus" or be enforced by regulation via "public credit registries", and is arguably an important determinant of credit market performance. Information sharing should be particularly relevant for credit market performance in countries with weak company law and creditor rights. Lack of transparency in corporate reporting, due to weak company law, increases information asymmetries in the borrower-lender relationship, reducing incentives for banks to lend (Jappelli, Brown, & Pagano, 2007).

CIS since the inception of Kenya Credit Information Sharing Initiative (KCSI), all the lenders who had subscribed to the credit reference bureau were all providing negative credit information about their borrowers, reporting cases of nonperforming loans. In November 2012 the Central Bank of Kenya (CBK) revised the Banking (Credit Reference Bureau) Regulations under the Banking Act and the Microfinance Act. These new regulations require banks to share full-file credit information (both negative and positive credit information).

Overall, the country's NPLs stand at five per cent of the Ksh1.6 trillion (\$18.3 billion) lent by its banking institutions (CBK, 2013). Over the years, however, it has become increasingly apparent that credit information sharing indeed enhances bank's credit performance and overall profitability. Nevertheless, the significant information shared among lenders is negative credit information. In other words, CIS is very beneficial to both the lenders and borrowers. The idea of positive credit information sharing is a recent phenomenon in Kenya. Little is known about positive information sharing both in practice and research, since most research has focused on negative information sharing 'blacklist'.

The sharing of positive information allows for the debtor to create "reputation collateral" often in the form of a credit score, which can provide valuable information to the credit market, and signal a borrower's individual credit worthiness to a large pool of lenders. Lack of accurate information on the credit history and current financial ability of prospective borrowers makes it extremely difficult for lenders to assess their credit worthiness and likelihood to repay the loan. Credit bureaus are an institutional solution to the problems of information asymmetries and moral hazard in credit markets. Shared information allows a lender to better assess the risk profile of a potential borrower and introduce incentives to have a borrower pay on time in the form of limiting a borrower's future ability to access credit from other credit suppliers. To take appropriate measures for these problems, knowing the factors associated with the problems is a precondition for a well stated problem is half solved. Therefore; the aim of the research is to investigate the influence of the positive information sharing determinants on financial performance of commercial banks in Kenya and recommend the appropriate measures to be taken.

### **Statement of the Problem**

The KBA also encouraged positive data sharing by drafting a Code of Conduct for full-file sharing as a Closed User Group in 2012. The sharing of data on performing loans was voluntary and required banks to obtain permission from their customers. This took a long time to become institutionalised, and would delay the realisation of the full benefits of the mechanism.

Despite, the enormous benefits banks have realized with the negative credit information sharing there seems to be factors behind their hesitation to submit the positive credit information to CRB. Hahn and Lee (2008) say that convincing others of the success of the voluntary information sharing scheme is still difficult and at a premature stage. Kenya Credit Information Sharing Initiative (KCISI) Project Manager Jared Getenga says that so, as long as positive information is not shared, this segment will remain unable to provide a credit report to prove their credit worthiness. Banks in Kenya are submitting positive credit information as a matter of compliance and to avoid penalties as stipulated in the act since it is now obligatory. In this

research, we intend to find out the determinants influencing positive credit information sharing among commercial banks.

### **Objectives of the Study**

The study was designed to investigate the influence positive credit information sharing determinants on financial performance of commercial banks in Kisii town, Kenya. Study has following specific objectives;

1. To establish the influence of cost of sharing positive credit information on financial performance of commercial banks in Kisii town
2. To assess the influence of privacy protection of positive credit information sharing on financial performance of commercial banks in Kisii town.
3. To establish the influence of competition among commercial banks on sharing positive information sharing in Kisii town affects their financial performance.

## **THEORETICAL REVIEW**

### **Adverse selection model**

Pagano and Jappelli (1993) investigate the role of credit information sharing on reducing adverse selection in credit markets. They build a model where information asymmetries between lenders and borrowers lead to credit rationing. In their mode of doing business, each banking institution has private information about local credit applicants, but has no information about non local applicants. If banks exchange information about their clients' credit worth, they can assess also the quality of foreign credit applicants and lend to them as carefully as they lend to local customers. By reducing information asymmetry between lenders and borrowers, credit registries allow loans to be extended to safe borrowers who had previously been priced out of the market, resulting in higher aggregate lending. The impact of information sharing on aggregate lending in this model is vague. When banks exchange credit information about borrowers' kinds, the increase in lending to good credit borrowers may fail to compensate for an eventual reduction in lending to risky types.

### **Moral hazard**

Information sharing can also create incentives for borrowers to perform in line with banks' interests. Klein (1992) shows that information sharing can motivate borrowers to repay loans, when the legal environment makes it difficult for banks to enforce credit contracts. In this model borrowers repay their loans because they know that defaulters will be blacklisted, reducing external finance in future. In both models default is a signal of bad quality for outside banks and

carries the penalty of higher interest rates, or no future access to credit. Information sharing improves borrowers' incentives to repay the loans and helps overcome moral hazard of borrowers (Padilla & Pagano, 2000).

**Multiple-bank lending model**

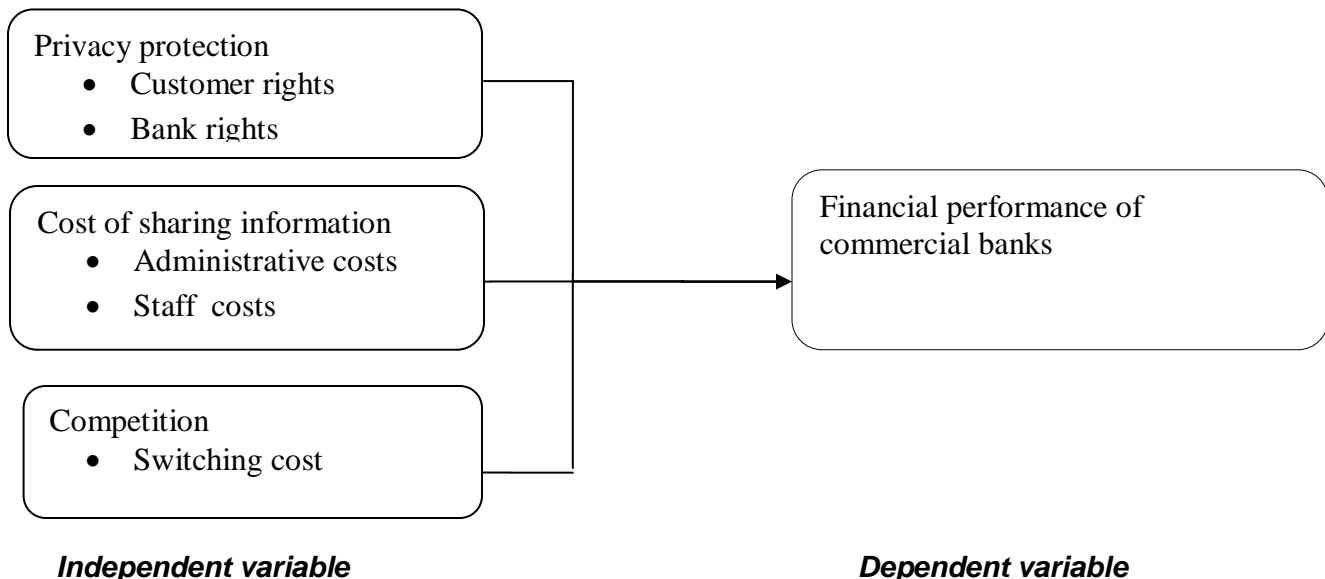
By exchanging information about their customers, banks can improve their knowledge of applicants' characteristics, past behavior and current debt exposure. It can also reduce each bank's uncertainty about the total exposure of the borrower, in the context of multiple-bank lending. The implied effects on lending, interest rates and default rates have been modeled in several ways. When a customer can borrow from several banks, each of these may be uncertain about the customer's total exposure, and therefore about his ability to repay.

Bennardo et al. (2008) argue that credit information sharing reduces the risk of over-borrowing as individual lenders can access information on the overall indebtedness of borrowers from all lending sources. Bennardo et al. (2009) show that when information is shared over-indebtedness is reduced, the ability of borrowers to repay is reduced, and by cutting this form of uncertainty about the ability of borrowers to repay, a positive effect on the size of credit markets is obtained.

**Conceptual Framework**

Conceptual framework is a scheme of concept (variables) which the researcher operationalizes in order to achieve the set objectives, Mugenda & Mugenda, (2003).

Figure 1: Conceptual Framework



## Research Gap

A number of studies have been carried out about many aspects of credit information sharing in Kenya. None of them addresses the factors affecting positive credit information sharing on commercial banks head-on and comprehensively. This study has the following objectives: to assess the effect of privacy protection on positive information sharing, to determine the effect cost of sharing information on positive information sharing , to evaluate the effect of efficiency of technology on positive information sharing and also to establish the effect of fear of competition on positive information sharing among commercial banks in Kenya. This study therefore sought to confront the influence of positive credit information sharing determinants on financial performance of commercial banks.

## RESEARCH METHODOLOGY

Descriptive research design was applied during this research study which involved giving questionnaires to branch managers and credit managers of Commercial Banks in Kisii town. The research focused on the influence of positive credit information sharing determination on financial performance of commercial banks in Kisii town, Kenya. The target population was 17 registered Commercial banks in Kisii town.

The study selected branch managers and credit managers from each commercial bank since they are the ones conversant with the influence of positive credit information sharing on commercial in Kisii town using a census survey of the branch managers and credit managers of the commercial banks. The sample size of the study was 34 respondents representing entire population.

This study collected both primary and secondary data. The study used a survey questionnaire administered to each member of the population. The questionnaire had both open and close-ended questions. The study administered the questionnaire individually to all respondents of the study. The studies carried out a pilot study to pretest and validate the questionnaire. The study selected a pilot group of 10 individuals from the target population to test the reliability of the research instrument.

Quantitative data collected was analyzed by the use of descriptive statistics and presented through percentages, means, standard deviations and frequencies. The information was displayed by use of tables and graphs.

## EMPIRICAL RESULTS AND DISCUSSION

Descriptive statistics have been used to discuss the findings of the study. The study targeted 34 respondents from which 27 filled in and returned the questionnaires making a response rate of 79.4 % this response rate was satisfactory to make conclusions for the study as Cooper and Schindler (2003), states that a response rate of between 30 to 80% of the total sample size can be used to represent the opinion of the entire population.

### Competition

Table 1: Statements relating to influence of competition on performance  
among commercial bank

Statement	Mean	Std. Deviation
Competition affecting the performance of commercial banks	1	0
With CIS borrowers are approached by competitors for financing	0.63	0.492
Clients incurring a switching cost to migrate to another bank	0.93	0.267
Effect of positive CIS on the bank's net interest income	0.93	0.267

The study sought to establish the influence of competition on financial performance used. The results of the study are presented in table 1. From the table, respondents all agreed that other banks are likely to take away their good borrowers due to positive credit information sharing as shown by mean of 1 and standard deviation of 0. This concurs with Vives (1990) who says that information sharing may increase the degree of competition within credit markets. Jappelli and Pagano also argue that better information may lead banks to shift from collateral-based lending policies to more information based.

Positive credit information sharing has brought about clients of one bank being approached by the competitors with the need to finance the 'good' borrower as shown by a mean of 0.63 and a standard deviation of 0.492. As demonstrated in McIntosh and Wydick (2005), the sharing of positive information helps to mitigate borrower over-indebtedness, lower default rates in the overall credit market, and (in competition) to reduce equilibrium interest rates.

In the same view, there is no switching cost incurred by clients to shift from one bank to another shown by mean of 0.93 and standard deviation of 0.267. There is no cost charged for clients to move from one bank to another making poaching of clients easy and hard for the banks to retain their clients. In agreement with the findings, Gehrig and Stenbacka (2005) argue

that borrowers with high switching costs prefer to remain loyal to their former bank, while more “footloose” customers are more easily lured away by sufficiently attractive poaching offers of competing banks. Jeong (2006) theoretically explores whether banks have an incentive to share credit information voluntarily in a duopoly model. He finds that two banks have an incentive to share negative information only even though it is socially desirable for two banks to share both positive and negative information.

Majority of the respondents held the view that positive credit information sharing will eventually increase the net interest income of the bank whereas of the respondents indicated that this exercise of positive credit information sharing will have no effect on the net interest income hence the banks’ net interest income will be maintained. Lin et al., (2012) carried out a survey on bank competition, credit information sharing and bank efficiency in USA and found a negative relationship between credit information sharing, competition and banking efficiency which contradicts the findings of increase in net interest income.

## Privacy protection

Table 2: Statements relating to influence of privacy protection on performance among commercial bank

Statements	Mean	Std. Deviation
Consent from clients to check status before loan award	0.07	0.267
Verification of information on CRB database	0.89	0.32
Complaints from clients regarding sharing their information	0.19	0.396
Right of appeal to clients to allow correction of factual errors	1	0
CRB regulations enough to protect bank from litigation	0.07	0.267

The study sought to establish the influence of privacy protection on the financial performance of commercial banks. The results of the study are presented in table 2 above. From the findings, very few of the respondents agreed to seeking consent of the clients before carrying out credit worthiness check in the credit reference bureau database with third parties while majority of the respondents agreed that they do not seek consent of the clients before sharing the information with third parties as depicted with a mean 0.7 and standard deviation of 0.267. Findings also



indicate that majority of the respondents agreed that they do not carry out verification of data availed by the credit reference bureaus as shown by a mean of 0.89 and standard deviation of 0.32.

In the same view, few respondents reported having either registered complaints on non factual data about them supplied to CRB or sued giving a mean of 0.19 and standard deviation of 0.396. Further findings suggest that all of the respondents agreed of the right of a client to appeal on her status to CRB. Majority of the respondents feel that the CRB regulations are not enough to protect banks from litigation as shown by a mean of 0.7 and standard deviation of 0.267. In line with the findings, Villar & Alejandro, (2003) argues that a country with strong legal and regulatory frameworks is able to more successfully enforce information-sharing rules, and deal appropriately with concerns over issues such as consumer protection rights and individual privacy. Additionally Jappelli and Pagano (2000) show that an important element that has historically affected the development of credit bureaus in Europe and elsewhere is the degree of privacy protection accorded to prospective borrowers. How lawmakers balance consumer demands for privacy and for leniency relating to negative and positive data with the needs of the economy for information and transparency will be a major factor in determining the future direction of the industry (Millers & Guadamillas, 2006).

### Cost of information

Table 3: Statements relating to influence of cost of information sharing performance among commercial bank

Statement	Mean	Std. Deviation
CRBs increases information search costs	1	0
Complying with the CRB memo	0.89	0.396
Resources towards data clean up	0.93	0.267
New employees on board	0.89	0.32

The study sought to establish the influence of cost of information sharing on the financial performance of commercial banks. The results of the study are presented in table 3. From findings, all of the respondents all agreed that positive credit information sharing increases information search costs for all the commercial banks with mean of 1 and standard deviation of 0. As a result, the commercial banks need to make a bigger effort to complete the information they require in order to make decisions over the credit requests they receive, incrementing their

operational costs, which are generally transferred to their customers directly or indirectly and with more informational advantage, will safeguard it from competition allowing earning rents.

The research further depicts that majority of the respondents have had at least employed in the bank since inception of positive credit information sharing to assist in the extra workload giving a mean of 0.89 and standard deviation of 0.32. In the same view, majority of the respondents agree that their bank has dedicated resources towards data clean up so as to comply with the regulations with a mean of 0.93 and standard deviation of 0.267. This is in line with a pilot scheme done by KCSI in 2013 showed that most commercial banks had expressed their concern that they had a few issues cleaning up their data. Clean up of data requires human resources and improved technology which entails costs to the bank.

There is a negative correlation between operating cost and performance of commercial banks. Results show that a unit increase in operating cost will lead to decrease in profitability. The negative relationship between operating cost and profitability is an indication that the resources used by the credit department calls for an extra expense in the firm which negatively affects profitability (Kerage & Jagongo, 2014).

## **CONCLUSION**

Information is the lifeblood of the modern economy. Credit information sharing will aid correct the imbalance in the credit industry by allowing banks and other lending institutions to collect and share data on millions of potential borrowers, thus allowing lenders to gather information on the creditworthiness of each. By the same token, credit information sharing will help banks and other financial institutions reduce non performing loans. That is, when borrowers know that their credit information will be shared, they have an additional incentive to pay. Good borrowers also benefit from lower interest rates, as lenders compete for their business. This has facilitated borrowing of money for business start-up or running which has highly reflected in the financial performance. This concurs with Jappelli and Pagano (2002) findings that bank lending is about twice as large in countries where credit information is shared, irrespective of the type of information exchanged.

In addition, the study also concludes that lenders therefore need to base their decisions on relevant information about their borrowers on automated and sophisticated credit information sharing systems which are essential to managing credit risk. This will result in better risk management for lenders, reduced non performing loans and improved profitability.

The study concludes that Credit Referencing Bureaus in Kenya are key enablers for the growth of a nation's consumer economy and the quality of consumer credit portfolios, whilst protecting the privacy and credit exposure of individual consumers.

## IMPLICATIONS

The study recommends that the Kenya bankers' association, central bank of Kenya and the Kenya government through the ministry of National treasury put measures that ensure compliance adherence to the CRB regulations. This will improve the quality of information supplied to the databases and cut information search costs in the future.

There should be constant collaboration and sharing of information between the financial institutions and the credit reference bureau. This is to improve the reports provided by credit reference bureau to the financial institutions and also to make sure any challenges in accessing the database is reported promptly. Commercial banks should install a customer monitoring system which would reduce credit track records, risk premiums and search costs imposed on customers by the banks. This would increase the customer base which would enhance performance in the banks

Regulations should place emphasis on confidentiality of information handled by CRBs and also places stringent restrictions on the use and application of such information. Banks and CRBs should not share information with unauthorized third parties. The regulations need to provide for stringent penalties for such breaches by CRBs.

The government should also consider allowing credit information systems extended to other non-bank credit providers in order to ensure proper credit information sharing and curb unfair competition since credit worthiness of a larger percentage of the population is shared. This is because a lot of people also get access to credit from a whole host of non-banks including, microfinance institutions, SACCOs, other financial sector regulators and utility companies.

## SCOPE FOR FURTHER RESEARCH

Further research should be carried out on: factors affecting the effectiveness of credit registered bureaus on reducing non performing loans, challenges faced by commercial banks in enforcing the CRB acts, measures taken by the central bank of Kenya and Kenya bankers association to curb non compliance to regulations by commercial banks, factors affecting credit information sharing among SACCOs in Kenya.

## REFERENCES

- Akerlof, George. 1970. "The Market for 'Lemons.'" *Quarterly Journal of Economics* 84 (3): 488-500.
- Berger, A., Scott F., and Miller, N. 2005, Credit Scoring and the Availability, Price and Risk of Small Business Credit. *Journal of Money, Credit, and Banking*, 191-222.
- Bennardo,A.,M.Pagano, and S. Piccolo, 2009, Multiple Bank Lending, Creditor Rights and Information Sharing, Working Paper, CEPR.

- Bennardo, A.,M. Pagano and Piccolo, S. 2007, Information Sharing with Multiple-Bank Lending, Mimeo, University of Salerno.
- Brown, M.and Zehnder, C.( 2007b).The Emergence of Information Sharing in Credit Markets, IEER Working Paper No. 317, University of Zurich.
- Brown, M., Jappelli T., and Pagano, M. 2007, Information Sharing and Credit: Firm Level Evidence from Transition Countries”, *Journal of Financial Intermediation* 18,151-172.
- Brown, M. & C., Zehnder, 2007. Credit reporting, relationship banking, and loan repayment. *Journal of Money, Credit, and Banking*, 39, 1884-1918.
- Bruhn,M.,S.Farazi,and M.Kanz,2013,Bank Competition, Concentration and Credit reporting, World Bank policy research working paper 6442.
- Central Bank of Kenya,(2001). Bank Supervision Annual Report 2000. Nairobi, Kenya.
- Collins, NJ, and Wanjau, K.(2011). The Effects of Interest Rate Spread on the Level of Non Performing Assets: A Case of Commercial Banks in Kenya, *International Journal of Business and Public Management Vol. 1*(1).
- Cooper,F., and Schindler H. (2004). Business Research Methods. New Delhi: Tata McGraw-Hill Publishing Company.
- Djankov, S., McLeish, C., & Shleifer, A.( 2007). "Private credit in 129 countries," *Journal of Financial Economics*, 84(2), 299-329.
- Degryse (2006), “Entry and Strategic Information Display in Credit Markets,” *Economic Journal*, Vol. 116, Issue 513, July, pp. 702-720.
- Degryse, H., Kim, M. and Ongena, S.. 2009. Microeconometrics of Banking: Methods, Applications and Results, Oxford University Press, 234pp.
- Dorbec, A.2006, Credit information systems: theoretical and comparative analysis, Working Paper AED-EAL-2006-2.
- Gaitho, N.W.(2013), Role of Credit Reference Bureaus on Credit Access in Kenya: A survey of Commercial Banks in Kenya, *European Scientific Journal*, Vol.9, No.13, 301-314.
- Gehrig, T., Stenbacka, R.(2007). Information Sharing and Lending Market Competition with Switching Costs and Poaching, *European Economic Review*, 51. 77-99.
- Kothari C.R. (2004). Research Methodology, Methods and Techniques. New Delhi New Age International publishers.
- Kwambai,K.D.,& Wandera,M.(2013).Effects of Credit Information Sharing on Non Performing Loans:The case of Kenya Commercial Bank ,*European Scientific Journal*,Vol.9,No.13,168-193.
- Luoto, J., C. McIntosh, and B. Wydick (2004), “Credit Information Systems in Less-Developed Countries: Recent History and a Test,” Working Paper University of California at San Diego / University of San Francisco.
- Miller,M.(2000),”Credit Reporting Systems Around the Globe:The State of the Art in Public and Private Credit Registries”,World Bank.Presented at the Second Consumer Credit Reporting World Conference,held in San Francisco,California,October.
- Miller, M. J. (2003), “Credit Reporting Systems around the Globe: The State of the Art in Public Credit Registries and Private Credit Reporting Firms,” *Credit Reporting Systems and the International Economy*, Margaret Miler Ed. Cambridge, Massachusetts: MIT Press.
- Negrin,J.L.,(2001).Credit Information Sharing Mechanisms in Mexico:Evaluation,Perspectives and Effects on Firms’ Access to Bank Credit.Working Paper No.114,Center for Research in Economic Development and Public Policy at Stanford Universty.
- Ngechu. M. (2004). Understanding the research process and methods. An introduction to research methods. Acts Press, Nairobi.

Ngugi, R.W., (2001). An Empirical Analysis of Interest Rate Spread in Kenya. *African Economic Research Consortium*, Research Paper 106.

Olegario, Rowena. 2003. "Credit Reporting Agencies: A Historical Perspective." In *Credit Reporting Systems and the International Economy*, ed. Margaret J. Miller. Cambridge, MA: MIT Press.

Padilla J.A. and Pagano M. (2000), "Sharing Default Information as a Borrower Discipline Device", *European Economic Review*, 44(10), p. 1951-1980.

Padilla, A. J., Pagano, M. (1997). Endogenous Communication among Lenders and Entrepreneurial Incentives. *Review of Financial Studies*, 10 (1): 205-36.

Stiglitz, Joseph E. and Weiss ,A.(1981), "Credit Rationing in Markets with Imperfect Information," *American Economic Review*, Vol. 71, No. 3, pp. 393-410.

Villar, R.D., Alejandro D. L., and J.G. Hubert.(2003). Regulation of Personal Data Protection and of Credit Reporting Firms. In *Credit Reporting Systems and the International Economy*, by Margaret J. Miller, 397-431. Cambridge, MA: The MIT Press

World Bank. (2004).Review of Small Business Activities. Wahington DC: World Bank.