



**INFLUENCING FACTORS ON CREDIT INFORMATION SHARING IN KENYA**

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### ABSTRACT

*Lending is an important element of financial intermediation, which is itself at the heart of an economy's financial architecture. Research has consistently shown that credit bureaus that share greater amounts and types of information for use by lenders result into increased access to credit, better lending decisions, lower priced credit and fairer distribution of credit. Increases in formal sector lending among the poor have created a need for credit information systems that provide potential lenders both positive and negative data about borrowers. The paper investigates the factors affecting credit information sharing in Kenya. The study evaluated the independent variables of legal and regulatory framework, policy framework, lending policy, information technology/ records management and Governance Structure against credit information sharing as dependent variable. The population under study were the CEOs of licensed Deposit Taking SACCOs within Nairobi County, that were 34 by 31<sup>st</sup> December, 2012. The sample under study was 24 CEOs. The research design for the study was an exploratory research design while the data for the study was analysed using both descriptive and inferential statistics. The data was analysed using both qualitative and quantitative methods and explanation given in prose. The study was conducted during the month of July 2013. The research findings indicated that legal and regulatory framework; lending policy and governance structure were very significant and positively affected credit information sharing. Information and records management affects Credit Information Sharing positively though the effect was not significant. The study recommends for the establishment of a powerful regulatory authority to enforce data protection legislation and monitor credit information – sharing institutions.*

**Key Words:** Credit Information Sharing (CIS), Deposit Taking SACCOs, Asymmetric Information, Moral Hazards, Adverse Selection.

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## Introduction

Kenya is a developing country with a total population of 43 million people and has a relatively well developed financial sector which comprises 43 commercial banks, a mortgage finance company, 7 Deposit Taking Microfinance companies (DTMs), some 3,500 active Savings and Credit Cooperatives (SACCOs), one postal savings bank - Kenya Post Office Savings Bank (KPOSB) 125 foreign exchange bureaus, a host of unlicensed lenders and an Association of Microfinance Institutions (AMFI) with 56 members. Despite the abundance of financial institutions, the financial sector in Kenya is highly concentrated. Four financial institutions, Equity Bank, Cooperative Bank, Kenya Post Office Savings Bank and Kenya Commercial Bank, account for two thirds of all bank accounts which numbered 14 million by mid-2012 (Central Bank of Kenya, 2012). In the traditional microfinance sector, more than 70% of the market is made up of Kenya Women Finance, Faulu Kenya and Jamii Bora. In addition, similar high levels of concentration are seen with SACCOs (FSD-Kenya, 2010).

The most basic consideration a credit provider has to determine when deciding on a loan application is the estimated chances of recovery. According to Saunders (2007) to arrive at this, various elements come into play and these are often summarized into 5 Cs of credit, namely character (integrity), capacity (sufficient cash flow to service the obligation), capital (net worth), collateral (assets to secure the debt) and conditions (of the borrower and the overall economy). Assessment of character often proves a nightmare in the absence of a formal, independent source of information on a borrowers' management of past loans (Saunders, 2007). The information asymmetry therefore makes it difficult to conduct credit risk management and results in delayed or expensive decisions. Lack of credit report makes it hard for good borrowers to easily distinguish themselves from persistent defaulters.

Centralization of records enables ease of reference from all players of the market.

The linkage between access to credit and economic development of a country is clear due to improved access to affordable credit to the citizenry. By reducing collateral requirements, a credit provider will reach more SMEs who have a track record. The SME sector is an important driver to the industrial development of the country (Kenya Vision 2030). Credit information sharing has gained momentum in emerging economies over the past few years, as demonstrated by increasing number of private credit bureaus operating in these markets (CBK, 2011). Credit bureaus have a significant impact on the development of the credit market in a country. They are important elements in educating borrowers about the impact of their behaviour on their personal financial future (Barron, 2003). Credit information sharing system in Kenya compiles and maintains an individual's credit history and aims at evaluating the ability of that individual borrower to repay a loan. It is a recognized evaluation of an individual's repayment ability based on financial transactions carried on in the past, that is, credit worthiness of an individual. This credit worthiness is essentially determined through statistical analysis of the available credit data (Frame *et al.*, 2001).

Credit rating systems help to build an effective financial system by promoting transparency in lending. They are effective tools towards mitigation of adverse selection and moral hazard in credit market, and have been ground to lower overall default and interest rate and improve the pool of borrowers in formal credit markets. Individuals with good credit rating stand to gain more in terms of access to credit facilities (FSD Kenya, 2008). Credit information sharing was primarily introduced to reduce information asymmetry within the financial sector. Through Section 55(1) of the Banking Act, the Central Bank of Kenya has the mandate to license and supervise credit reference

bureaus (CRB). The mandate of CRBs is to collect, collate and disseminate credit information to lenders to aid them in their credit decisions. Sections 34(4) and 34(5) of the Microfinance Act, 2006 provides for sharing of information by DTMs under arrangements similar to those available to commercial banks. The Finance Act, 2011 amended the Banking Act and Microfinance Act to allow for the sharing of credit information between DTMs and institutions licensed under the Banking Act. The Banking Act, the Microfinance Act and The Banking (Credit Reference Bureau) Regulations, 2008 provide for mandatory sharing of credit information of Non-Performing Loans and voluntary sharing of positive information.

Research from the IMF (Hesse & Cihak, 2007) indicate that cooperative financial institutions tend to be more stable in times of crisis, as their investment patterns use the capital of members in ways that best serve their long term needs and interests. They have a lesser tendency to invest in high risk financial markets compared to commercial banks. It is therefore thought that their comparative stability under both average and extraordinary conditions can help to mitigate crisis impact for members and clientele, especially in the short-term. However, since most Saccos draw their membership from the formal sector, in times of economic downturn, the functioning of the SACCO can be undermined if member's incomes are destabilized by volatility in the economy. This may lead to reduction of members' savings and an increased demand for loans. SACCOs have reported increase in demand for loans, but have exercised caution in responding to requests.

Deposit Taking SACCOs are licensed in pursuant to Section 28 of the Sacco Societies Act, 2008, the Sacco Societies Regulatory Authority (SASRA) to carry out deposit –taking Sacco business in Kenya. As at 31st December 2012, the total number of Deposit Taking Saccos was 215 of which 123 had been licensed. In addition, 92 Saccos were at various stages of

analysis and processing. It should be noted that these Deposit Taking Saccos were in operation prior to establishment of SASRA in 2009 and have applied to be considered for licensing as Deposit Taking Sacco business (Sacco Societies Regulatory Authority, 2012). According to SASRA (2013), among the licensed deposit taking SACCOs, 51 have asset in excess of Kshs. 1 billion.

Lenders providing credit in Kenya need to remain sustainable in a very competitive environment. Having access to comprehensive information allows them to make informed credit risk assessment. The Sacco industry in Kenya, the largest in Africa, with over 3.5 million members and a \$2 billion loan portfolio, is one of the most obvious non-bank targets for information sharing (Kenya Bankers Association, 2012). However, default on loans poses the greatest risk to the stability of the multi-billion shilling Savings and Credit Co-operative (SACCO) movement. According to World Bank (2007), lending technology, risk management and MIS are not well developed in most SACCOs in Kenya. This becomes a major constraint in efficient operations of the credit information system, in its absence, it is very difficult to track loan-delinquencies, aging, provisioning and loan write offs to ensure that accountants and financial managers apply business rules consistently. Collection of information should be standardized across financial and non-financial institutions such that all information is collected and processed without prejudice of its source.

The Banking Act and the CRB Regulations provide for Credit Information Sharing among licensed institutions through licensed CRBs where sharing of Non-Performing Loan data is compulsory. Saccos serve largely personal loans market lending on a guarantee system, with credit risk perceived to remain high, hence posing the greatest risk to the industry. This is

largely manifested in high external borrowing, which has resulted in low liquidity and solvency margins in many Sacco Societies. The practice of SACCOs to push guarantors to settle loans in default pose a challenge in the implementation of the Banking Act (Credit Reference Bureau Regulations,2008) resulting into the CIS system from failing to capture some serial defaulters. At the same time most SACCOs give loans to members of a group who co-guarantee each other. In case of defaults, other group members are expected to settle the loan balance.

The general objective of the study was to investigate the influencing factors on credit information sharing in Kenya.

Specifically, the research aimed to fulfil the following specific objectives;

- i. To determine the extent to which the legal framework affects credit information sharing among Deposit Taking SACCOs;
- ii. To establish the effects of lending policy on credit information sharing among Deposit Taking SACCOs;
- iii. To assess the extent of information technology and records management in credit information sharing among Deposit Taking SACCOs;
- iv. To determine the influence of governance structure in credit information sharing among Deposit Taking SACCOs.

## **Literature Review**

### **Theoretical Review**

The theoretical framework introduces and describes the theory which explains why research problem under study exists. A theoretical framework consists of concepts, together with their definitions, and existing

theory/theories that are used for the particular study.

### **Information Asymmetry Theory**

Information Asymmetry describes the condition in which relevant information is not known to all parties involved in an undertaking (Ekumah, *et al* 2003). It has been used extensively to explain a diversity of concept, including those different market conditions (Misukin, 1991).While there are several notable studies in economic theory examining the implications of asymmetric information for financial markets, George Akerlof's work is among the earliest and best known ( Turner, *at al* 2009). According to Akerlof, (1993), when only the average quality of the good can be assumed in markets with a good of indeterminate quality, over time goods of above-average quality will be driven out and will threaten the viability of the market for the good. In the case of consumer credit markets, the riskiness of a borrower can be thought of as the "good" that the lender "purchases." Joseph Stiglitz and Andrew Weiss extended these insights in their examination of the consequences of information asymmetries in lending. They suggested that even in a competitive equilibrium, credit markets can witness rationing owing to insufficient information. Given information asymmetries, banks rely on a combination of pricing (interest rates) and rationing to maximize returns.

### **Adverse Selection Theory**

Adverse selection arises because in the absence of perfect information about the borrower, an increase in interest rates encourages borrowers with the most risky projects, and hence least likely to repay, to borrow, while those with the least risky projects cease to borrow ( Pagano & Japelli, 1993) . Interest rates will thus play the allocation role of equating demand and supply for loan funds, and will also affect the average quality of lenders' loan portfolios. Lenders will

fix the interest rates at a lower level and ration access to credit. However, higher interest rates, while covering the risk of borrower default, are also likely to result in *adverse selection*. That is, higher interest rates attract borrowers seeking to make risky investments with the potential for high rates of return.

Stiglitz and Weiss, (1981) further argue that the price mechanism alone might not clear loan markets because as interest rates increase to compensate for rising risk, riskier applicants are attracted. Moreover, some borrowers will have an incentive to make riskier investments to cover the price of credit. Furthermore, once a loan is made, some borrowers may have incentives not to pay because without information sharing, they can still obtain loans from other lenders (collection on loans involves costs that may vary with the rights of creditors in a given economy). However, where borrowers are more aware of their true capacity and willingness to repay than lenders (Miller *et al*, 2003) , in the absence of information about the borrower except what the borrower provides, lenders face the problem of accurately judging the quality or credit-worthiness of a borrower when the loan is made and will only discover it over time after credit is extended (higher interest rates attract riskier borrowers, or make borrowers take more risks) that stem from asymmetric information, lenders will ration credit. That is, given two individuals with identical risk profiles and preferences, one will receive a loan and another will not.

### **Moral Hazards Theory**

Moral hazard occurs basically because projects have identical mean returns but different degrees of risk, and lenders are unable to discern the borrowers' actions (Stieglitz & Weiss, 1981; Besley, 1994). An increase in interest rates negatively affects the borrowers by reducing their incentive to take actions

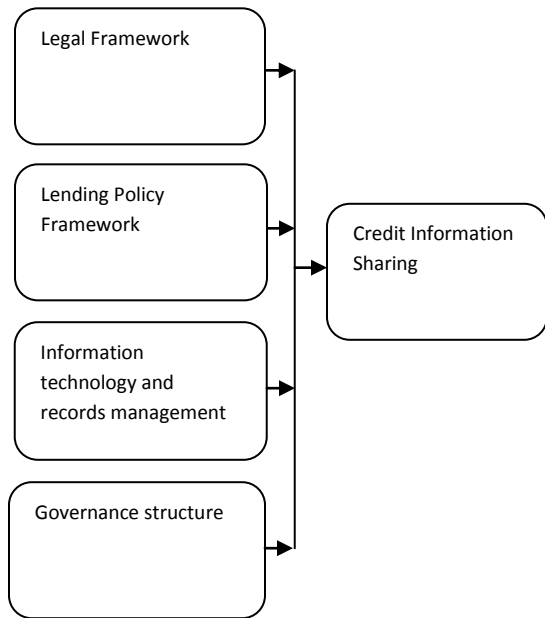
conducive to loan repayment. This will lead to the possibility of credit rationing.

Bell (1990) demonstrates that incomplete information or imperfect contract enforcement generates the possibility of loan default and eventually problems of credit rationing. The result is loan supply and implicit credit demand functions, both of which are simultaneously determined. The role of risk in allocation of credit through its effect on transaction costs, therefore, becomes important in incomplete credit markets. Accordingly, where default risk exists, with an upward sloping supply curve, lenders offer borrowers only a choice of points on the supply curve, and borrowers are restricted to these points. It is impossible to identify the loan demand schedule using the observed loan amounts since these only reflect the existing supply. The credit demand function can only be interpreted from the borrower's participation decision, that is, the decision to borrow or not, and from which sector to borrow. Such a decision will depend on, among other things, the borrower's economic endowment and opportunities. The credit demand schedule identification problem therefore implies the existence of credit rationing (Elhiraika & Ahmed, 1998).

### **Conceptual Framework**

A conceptual framework is a collection of inter related group of ideas that are broad based on theories Smyth, (2004). That is, a set of propositions, which are derived from and supported by data or evidence, taken from fields of inquiry that are relevant Reichel & Ramey, (1987). Based on the reviewed literature, this study proposed a conceptual framework in which the dependent variable was the Credit Information Sharing (CIS) and independent variables were legal framework, information and records management systems, governance framework and credit policy on dormant loan accounts. The conceptual framework as shown below and was presented

in a model form expressing Credit Information Sharing (CIS) as a function of the above independent variables.



**Independent Variables**

**Dependent Variable**

**Research Methodology**

The exploratory research design was relevant to this study because it enabled getting into insights process of obtaining responses from/about each of the members of the population in order to establish as many relationships as possible between the variable of the study as a basis for general findings (Kothari, 2012). The study therefore was able to generalize the findings to a larger population. The population of this study comprised of the Chief Executive Officers of licensed deposit taking savings & credit societies operating in Nairobi County. The target population has been expanded to include one senior officer from both SASRA and the National Treasury. At 31<sup>st</sup> December, 2012 there were 34 licensed deposit taking SACCOs operating in Nairobi County.

A sample frame used for the study was obtained from Sacco Societies Regulatory Authority (SASRA) of Kenya. From the

population of 34(thirty four) institutions, a sample of 24 (twenty four) Saccos was obtained representing 70% of the population. The main data collection instrument developed for this study was questionnaire. The questionnaire for this study was designed to gather information relevant to the research questions and to be administered to the population under study. The summarised data was analysed using descriptive and inferential statistics. Descriptive statistics included the mean, median, standard deviation and frequency distribution while inferential statistics involved use of regression analysis and correlations. In addition, computer application of SPSS was used to analyse data. The applicable regression model that was used was of the generic:  $-Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \pi$

**Results and Discussion**

**Legal framework:** The first objective of this study sought to determine the extent to which the legal framework affects credit information sharing. The objective was addressed through the evaluation of variables by order of their importance, regression analysis and coefficient of correlations. The study findings confirmed that legal & regulatory framework positively affects Credit Information Sharing. The study findings revealed that there is need for harmonisation of legislations on credit information sharing for all the financial market players such as SACCOs.

**Lending policy and framework:** The second objective sought to establish the effects of lending policy on credit information sharing. The objective was addressed through evaluation of variables by order of their importance, regression analysis and coefficient of correlations. The results confirmed that lending policy positively affects credit information sharing.

**Information technology and records management:** Thirdly the study aimed to assess the extent of information technology and records management in credit information sharing. The study results confirmed that information technology and records management positively affects CIS though at a very low level among SACCOs as there is need for the institutions to be very efficient in maintaining customers' records, the submitted reports should be reliable, accurate and up to date. However, from the multiple regression model information technology and records management did not contribute significantly in explaining the variation in credit information sharing.

**Governance structure:** Finally the fourth objective of the study sought to determine the influence of governance structure in credit information sharing. The study results confirmed that Governance structure positively affects credit information sharing. The findings of the study revealed a strong relationship between the dependant variable and all the independent variables implying that Credit Information Sharing is positively influenced to a greater extent by Legal Framework, Lending Policy Framework and Governance Structure.

### Discussions

The research findings of this study are consistent across a wide body of research examining credit information sharing and related studies , for example Turner, *et al* (2010) noted that the legal and regulatory framework is a prerequisite for a proper development of credit information sharing. The findings for this study revealed that credit reporting entails two sets of prerequisites, that is, legal and social norms and technical and informational wherewithal. In their report, FSD Kenya (2012) indicated that legal framework was a major constraint in addressing the problems that relate to the legislation which

governs information sharing. Furthermore, the study results in the research of Gardeva & Rhyne (2011) pointed out that there exists limited infrastructure capacity among microfinance institutions and other providers to the poor, political interference, poor business practices and documentation requirements among these institutions for attainment of full financial inclusion. Turner, *et al* (2008) indicated that expansion of information in credit files should not lead to simply to easier credit for consumers but to better credit decisions by lenders. The study indicated that it was the lenders' increased ability to efficiently identify good risks from bad risks that increased the availability of credit.

### Inferential Test

**Table 1 Model summary for Governance Structure**

	R <sup>2</sup>	Constant	β <sub>4</sub>
Coefficient	0.685	2.004	0.773
Statistics	F=15.883	t=3.799	t=3.985
p-value	0.001	0.001	0.001

From the model summary, 68.5% of the variation in credit information sharing responses could be explained by the Governance Structure. The regression model was significant at 5% as proved by a p-value of 0.002. Both the coefficients of the model, the constant and coefficient for Governance Structure, were positive and significant at 5% level of significance.



**Table 2 Multivariate Analysis**

Multiple Regression Analysis was used to determine the strength of the relationship of the combined independent variables and the dependent variable.

		Credit information sharing	Legal Framework	Lending Policy Framework	Information Technology and Records Management	Governance Structure
Credit information sharing	Pearson Correlation	1	.640**	.953**	.751**	.685**
	P-value		0.002	0	0	0.001
Legal Framework	Pearson Correlation	.640**	1	0.26	0.334	0.248
	P-value	0.002		0.243	0.15	0.293
Lending Policy Framework	Pearson Correlation	.953**	0.26	1	0.245	0.217
	P-value	0	0.243		0.272	0.332
Information Technology and Records Management	Pearson Correlation	.751**	0.334	0.245	1	0.345
	P-value	0	0.15	0.272		0.136
Governance Structure	Pearson Correlation	.685**	0.248	0.217	0.345	1
	P-value	0.001	0.293	0.332	0.136	

\*\* . Correlation is significant at the 0.01 level (2-tailed). \* . Correlation is significant at the 0.05 level (2-tailed).

Correlation among the independent variables and the dependent variables were evaluated and presented in the matrix in table above. From the matrix all correlations among the independent variables were insignificant. It is also observed that all independent variables were positively and significantly correlated to the dependant variable. From these results there is no evidence of multicollinearity among the predictor variables. Linear regression model was performed between the dependent variable (Credit information sharing) and the independent variables (Information Technology and Records Management, Legal Framework, Governance Structure, Lending Policy Framework).

**Table 3 Model Summary for Regression Model**

Statistic	R <sup>2</sup>	F	P-value
Coefficient	.972	64.866	<.001

From the model summary, 97.2% of the variations in the dependent variable is explained by the predictor variables. The regression model fitted in the data is significant at 5% level of significance.

**Table 4 Regression Model Coefficients**

	Unstandardized Coefficients		Standardized Coefficients	t	p-value
	B	Std. Error	Beta		
(Constant)	1.054	0.512		2.059	0.057
Governance Structure	0.216	0.101	0.192	2.147	0.049
Legal Framework	0.143	0.062	0.187	2.312	0.035
Lending Policy Framework	0.565	0.147	0.713	3.85	0.002
Information Technology and Records Management	0.02	0.141	0.019	0.142	0.889

From the table above both the unstandardized Coefficients and Standardized Coefficients of the regression model are displayed. In addition t test values and the corresponding p-values have been included to show the significance of each of the coefficient to the model. All the coefficients of regression model were positive and significant at 5% level of significance except for Information Technology and Records Management. The established multiple linear regression equation becomes = 0.057 + .143X<sub>1</sub> + 0.565X<sub>2</sub> + 0.020X<sub>3</sub> + 0.216X<sub>4</sub> + 1.054

A Constant of 1.054, shows that if Legal Framework, Lending Policy Framework, Information Technology and Records Management and Governance Structure all

rated as zero, then the effect of Credit Information Sharing would be rated as 1.054.

$X_1 = 0.143$ , shows that one unit increase in Legal Framework results to .143 increases in Credit Information Sharing.

$X_2 = 0.565$ , shows that one unit change in Lending Policy Framework results in .565 increases in Credit Information Sharing.

$X_3 = 0.020$ , shows that one unit change in Information Technology and Records Management results in .020 increases in Credit Information Sharing which is not a significant increase.

$X_4 = 0.216$ , shows that one unit change in Governance Structure results in 0.126 increases in Credit Information Sharing.

The findings of the regression results indicated that the most important factor affecting credit information sharing being Lending Policy Framework with the highest significance as a indicated by a p-value of .002 followed by the Legal Framework with a p-value of .035. The least important factor affecting credit information sharing was Information Technology and Records Management which was not significant to the model.

### **Conclusion**

The study established that Credit Information sharing is affected by lending policy, legal and regulatory framework, Governance Structure and to some extent by Information Technology and Records Management. The study concluded that the legal and regulatory framework, lending policy and governance structure were very significant and positively affected credit information sharing.

Information and records management affects Credit Information Sharing positively though the effect was not significant. Based on the findings it can be concluded that there is “no one size fits all” approach to factors affecting credit

information sharing, factors such as the governance structure in the financial institutions, legal/regulatory framework, information/records management systems and lending policy framework are common concerns for financial institutions such as SACCOS.

While various legislative considerations must be taken into account according to the credit information sharing system in Kenya, certain aspects of regulatory framework are essential, such as provisions for equal treatment of all data providers, as well as stipulations for data expiration. Moreover maintenance of absolute security over sensitive personal information and to treat it appropriately at all times. Failure to maintain this cornerstone function is a major breach of trust.

### **Policy Recommendations**

Based on the findings of the study, the following policy recommendations were made in order to improve their credit information sharing:

- The government should establish a powerful regulatory authority to enforce data protection legislation and monitor credit information-sharing institutions. The authority should be provided with the appropriate enforcement tools, the ability to collect information and investigate wrong-doing, and resources to publicize consumer rights. The authority should also be held accountable to the public.
- Private credit registries tend to surpass public credit registries in the comprehensiveness of the data and services they provide to lenders. However, public credit registries can be an effective tool to improve the amount and quality of information available on borrowers in emerging economies with non-existent or under-developed information sharing institutions. In order to not choke the creation of private credit bureaus, policy

makers should consider selectively limiting the scope and/or depth of information provided by the public registry.

- Data protection and the right to privacy are fundamental to the establishment of a private credit bureau. Governments should ensure that a legal framework is in place that protects privacy but does not stifle the creation of private credit bureaus. In particular, international standards, such as the OECD Guidelines on the Protection of Privacy and Trans border Flows of Personal Data should be enshrined in legislation, and cost benefit analysis should be conducted to determine whether the marginal benefit

of particular privacy restrictions outweigh any marginal loss in efficiency.

- Before putting in place any regulation or institutions associated with credit information sharing, the policy should elicit comments and expertise not only from their own domestic private sector, but also from large international private credit bureaus. Many of these firms have years of experience in dealing with legal and regulatory environments surrounding credit information sharing, and can provide particularly useful information on potential obstacles or unintended consequences that new laws can pose to sharing information.

## References

- Barron J. et al (2003). The Value of Comprehensive Credit Reports: Lessons from the U.S. Experience, in *Credit Reporting Systems and the International Economy*, 273-310, Cambridge, MA :MIT Press.
- Bell C., Srinivasin T. and C. Udry, (1997). Rationing, Spill Over, and Interlinking in Credit Markets: The Case of Rural Punjab; *Oxford Economic Paper*, 4(49): 557-585.
- Central Bank of Kenya, (2011). Bank Supervision Annual Report, Nairobi, Kenya
- Ekumah E. and Essel T. (2003). Information is Power. The Problem with Credit Accessibility in Rural Banks In Ghana: International Labour Organisation 2002.
- Elhiraika A. and Ahmed S. (1998). Agricultural Credit Under Economic liberalization & Islamization in Sudan , AERC Research Paper No.79
- Frame , W.S.,A.Srinivasan, and L.Woosley(2001), *The effect of Credit Scoring on Small Business Lending* , Journal of Money, Credit and Banking ,33(3) , 813-825
- FSD Kenya, (2008). The Potential For Credit Scoring For SME Lending In Kenya, Nairobi
- FSD Kenya, (2010). *“Annual Report 2009”*, Nairobi, Kenya
- FSD Kenya (2012). Kenya Credit Information Sharing Initiative, A process Report 2008-2011; Challenges and Opportunities, Nairobi, Kenya
- Gardeva A, and Rhyne E( 2011), *Opportunities and Obstacles to Financial Inclusion , Survey Report* , Centre for Financial Inclusion , ACCION International
- Kothari C. (2012). Research Methodology, New Age International Publishers, Nairobi
- Misukin A. (1991). The Economics of Money, Banking and Financial Markets, 5<sup>th</sup> Edition Oxford Advanced Learner’s Dictionary, 7<sup>th</sup> Edition, Oxford University, Oxford Press, Oxford, UK
- Pagano C. Marco W. and Jappelli T. (1993). Information Sharing in Credit Markets, The Journals of Finance 43(5), December, 1693-1718
- Sacco Societies Regulatory Authority, *“Annual Report 2012”*, Nairobi, Kenya
- Saunders A. (2007). Financial Markets and Institutions, Tata McGraw-Hill Publishing Company Limited, New Delhi.
- World Bank Report, Agriculture and Rural Development Report (2007). Washington, DC, USA, World Bank Publications.
- Turner, M. et al. (2008). Roadmap to Reform, Lessons from around the world to guide consumer credit reporting reform in Australia, Asia Pacific Credit Coalition, Citibank, Australia.