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**FACTORS INFLUENCING DISSEMINATION OF CREDIT INFORMATION BY CREDIT
REFERENCE BUREAUS IN KENYA**

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FACTORS INFLUENCING DISSEMINATION OF CREDIT INFORMATION BY CREDIT REFERENCE BUREAUS IN KENYA

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ABSTARCT

Purpose: The purpose of this study was to analyze the factors influencing dissemination of credit information by credit reference bureaus in Kenya.

Methodology: The study used descriptive survey research design. This study used primary data which was collected through use of Questionnaires. The target populations of the study were all licensed Credit Reference Bureaus in Kenya. Data from the questionnaires were analyzed using Statistical Packages for Social Sciences (SPSS) to derive descriptive results. The results found were then presented in frequency tables, bar graphs and pie charts.

Results: The findings implied that macro-economic factors affect credit dissemination. Results indicated that privacy protection of credit information was one of the factors emphasized by credit bureaus. Results indicated that competition also led to low dissemination of information. The findings agreed that business ethics was one of the factor emphasize by credit bureaus. The findings also indicated there was a need by credit bureaus to appraise borrowers.

Unique contribution to theory, practice and policy: The study recommended management of credit bureaus to be on the outlook and follow the trends in the technology and demand in the market so as to improve on credit dissemination and by extension that of the overall company. The study also recommended that the Government institute adequate legal and institutional measures to protect consumer information, the government should also set rules on stiff competition in the financial sectors in Kenya, the study also recommended that banks should use CRB reports to appraise borrowers and to enhance business ethics.

Keywords: *Privacy Protection, Credit Reference, Business Ethics, Credit information*

1.1 INTRODUCTION,

In credit markets, borrowers typically have more information about their investment opportunities, their own character and their prior indebtedness than lenders. This asymmetry of information gives rise to selection problems for lenders and potential moral hazard of borrowers, which may lead to

a rationing of credit. In many countries problems of asymmetric information are aggravated by the fact that loan contracts are costly to enforce (Jappelli, Brown and Pagano, 2005). A Credit Reference Agency or Credit Bureau (Credit Reporting Agency in the US) is an organization that collects and collates personal financial data on individuals, from financial institutions with which they have a relationship (Barron and Staten, 2003; Powell, *et al.* 2004). The data is aggregated and the resulting information (in the form of credit reports) is made available on request to contributing companies for the purposes of credit assessment and credit scoring. A credit report is an accumulation of information about how you pay your bills and repays loans, how much credit you have available, what your monthly debts are, and other types of information that can help a potential lender decide whether you are a good credit risk or a bad credit risk (Acharya & Saunders, 2004). Credit reference bureaus are a typical response to information asymmetry problems between lenders and borrowers. A credit registry is either a publically or privately owned entity that consolidates information on borrowers from lenders. Many studies have illustrated how comprehensive information helps lenders better predict borrower default. Kallberg and Udell (2003) found that historical information collected by a credit bureau had powerful default predictive power. A study by Barron and Staten (2003) showed that lenders could significantly reduce their default rate by including more comprehensive borrower information in their default prediction models. An analogous study – specific to Brazil and Argentina – found similar default rate decreases when more information was available to lenders on borrowers (Powell, *et al.* 2004).

1.2 Problem Statement

Previous studies in India show that these information sharing institutions help the development of private credit markets. They contribute to less severe financial constraints faced by firms in developing countries, better access to credit and better firm performance. In addition, the literature finds that information sharing is still hampered by some factors, such as lack of clear laws and regulations set out procedures for settling disputes and for this reason and others the full benefits of information sharing have still not been fully realized (Barth, James and Frank, 2007). Despite the gains and benefits made in Kenya since the inception of credit information sharing, there are some factors that still hinder the smooth running of credit information sharing in banks, therefore there is a need to study and have a clear understanding of these factors; such as the fact that only negative information is being shared and that non-banks do not participate in information sharing, limit the potential role that credit bureau information could play in preventing escalating defaults as result of debt stress and the fact that only negative information is currently being shared further implies that consumers' engagement with credit bureau records would nearly always be negative; together with the influence with a view to improve further credit information sharing (World Bank, 2005). Given the strong growth of credit reporting worldwide and the high hopes which policy makers place in such institutions, there is a need for empirical evidence which closely examines challenges of disseminating credit information by credit reference bureaus in Kenya as eventually credit reporting affects the performance of the financial sector. Credit Reference Bureaus complement the central role played by banks and other financial institutions in extending financial services within an economy. CRBs help lenders make faster and more accurate credit decisions.

They collect, manage and disseminate customer information to lenders within a provided regulatory framework. In Kenya, the Banking (Credit Reference Bureau) Regulations, 2008 came in to operation effective 2nd February 2009. Despite these positive development and attributes, CRBs still remain a mystery to many and are still faced with some challenges, which have inhibited their performance.

1.3 Study Objectives

- I. To examine the influence of privacy protection on disseminating credit information by credit reference bureaus in Kenya
- ii. To determine the influence of business ethics on disseminating credit information by credit reference bureaus in Kenya
- iii. To examine the influence of competition on disseminating credit information by credit reference bureaus in Kenya

2.0 LITERATURE REVIEW

2.1 Theoretical Literature Review

2.1.1 Adverse Selection Theory

In the adverse selection model theory developed by Pagano and Jappelli (1993), information sharing improves the pool of borrowers, decreases defaults and reduces interest rates. It can also lead to an expansion of lending. When banks are local monopolists, however, in some cases lending diminishes, because the exchange of information increases the banks' possibility of price discrimination between safe and risky borrowers and the increase in lending to safe borrowers does not fully compensate for the reduction in lending to the risky types. When credit markets are contestable, lending activity is more likely to increase: competition limits the banks' ability to extract rents from their customers, and information sharing increases banking competition (Jappelli and Pagano, 2002).

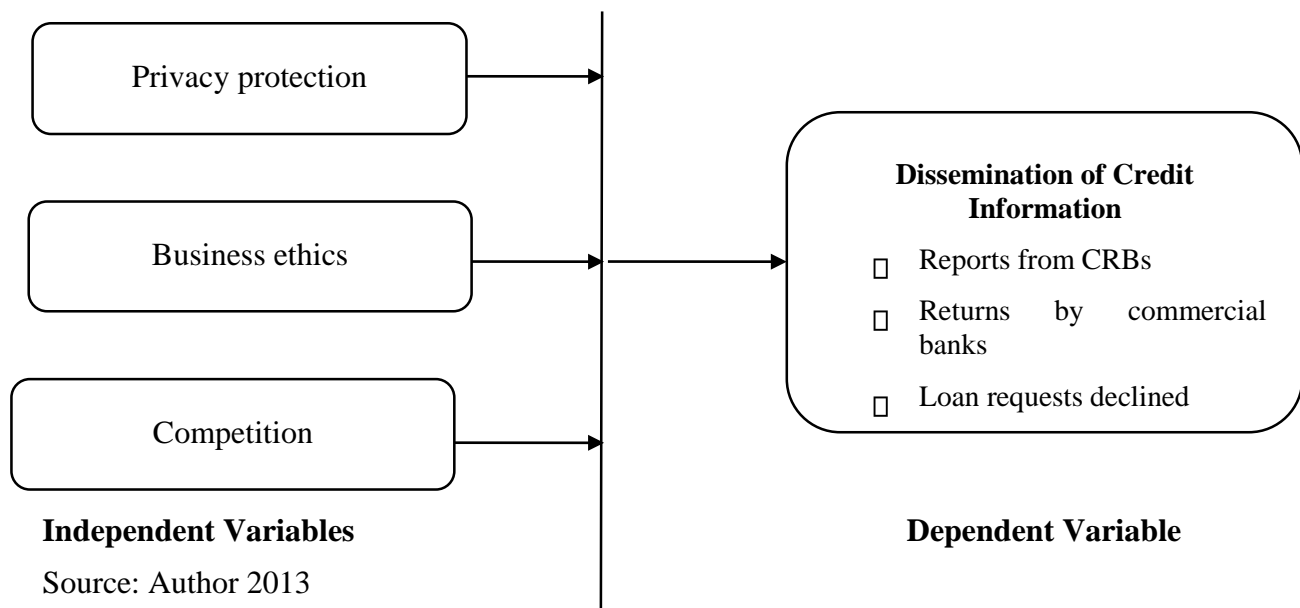
2.2.2 Disciplinary Effect Theory

Pagano and Jappelli (1997) point out that the disciplinary effect of credit bureaus arises only from the exchange of black information. Information about past defaults generates fear of social stigma. Sharing white information, i.e. data on borrowers' characteristics, while attenuating adverse selection effects, may actually reduce the disciplinary effect of information sharing. Therefore, the comparative benefit of sharing black and white information depends on the relative importance of moral hazard and adverse selection problems in the market. Countering adverse selection 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 (Love and Mylenko, 2003).

2.2 Conceptual Framework

A conceptual framework helps simplify the proposed relationships between the variables in the study and show the same graphically or diagrammatically (Mugenda and Mugenda, 2003).

Figure 1: Conceptual Framework



3.0 RESEARCH METHODOLOGY

The study used explanatory survey research design. This study used primary data which was collected through use of structured questionnaires. The target population of this study was all officers found in the credit department of the Credit Reference Bureaus licensed by Central Bank of Kenya i.e., Credit Reference Bureau Africa Limited and Metropol Credit Reference Bureau Limited. Data from the questionnaires were analyzed using Statistical Packages for Social Sciences (SPSS) to derive descriptive results.

4.0 RESULTS AND DISCUSSIONS

4.1 Credit Information Sharing by Credit Reference Bureaus

The study sought to determine the factors influencing dissemination of credit information by credit reference bureaus in Kenya. Table 4.1 indicates the results.

Results in Table 4.1 revealed that 60% agreed and 18% strongly agreed bringing to a total of 78% of the respondents who agreed with the statement that Credit Information sharing by Credit Reference Bureaus has led to increase market share of the financial industry as a whole. Meanwhile, 16% disagreed and 6% strongly disagreed with the statement. The findings agree with

those in (Brown, Jappelli and Pagano 2006) who found that credit information sharing between lenders is associated with increased and cheaper credit in transition countries in Eastern Europe. Results revealed that 62% agreed and 26% strongly agreed bringing to a total of 88% of respondents who agreed with the statement that Credit Information sharing by Credit Reference Bureaus has led to growth in profitability in the financial sectors. Results also reveal that 4% disagreed and 8% strongly disagreed with the statement. The findings agree with those of Berger, Frame and Miller (2005) who demonstrate how such institutions increased the quantity of small business loans in the United States, and, more importantly, served to expand credit to riskier, marginal borrowers i.e. firms that, in the absence of credit information sharing institutions would probably not receive credit. The findings agree with those in (Joseph 2003) which argues that changes in the credit markets create an incentive for banks to acquire private information to gain market share and maintain profitability. The study findings also indicated that 64% agreed and 22% strongly agreed bringing to a total of 86% respondents who agreed with the statement that Credit Information sharing by Credit Reference Bureaus has helped shape the lending policy. Results also reveal that 14% strongly disagreed with the statement. The findings concur with those of Brown and Zehnder (2007) who found empirical evidence that the lending market would collapse in the absence of information sharing institutions and reputational banking. The findings also agree with those in (Doblas Madrid and Minetti 2009) which found out that if lenders enter credit information sharing institution, their borrowers improve their repayment performance – delinquent payments on leases and loans decrease.

Furthermore, results revealed that 58% agreed and 20% strongly agreed bringing to a total of 78% respondents agreed with the statement that Credit Information sharing by Credit Reference Bureaus has helped the financial sector to positively shape its business model. Results also reveal that 14% strongly disagreed and 6% disagreed bringing to a total of 20% respondents who disagreed with the statement and 2% neither agreed nor disagreed with the statement. The results agree with those in (Doblas Madrid and Minetti 2009) which found out that if lenders enter credit information sharing institution, their borrowers improve their repayment performance – delinquent payments on leases and loans decrease. In addition, the study findings indicated that 34% agreed and 26% strongly agreed bringing to a total of 60% respondents agreed with the statement that Credit Information sharing by Credit Reference Bureaus has helped the financial sector to shape its competitive structure in the credit market. Results also reveal that 18% strongly disagreed and 14% disagreed bringing to a total of 32% respondents who disagreed with the statement and 8% neither agreed nor disagreed with the statement. The results agree with those in KBA (2010) which found out that CRBs help lenders make faster and more accurate credit decisions. Since they collect, manage and disseminate customer information to lenders within a provided regulatory framework, credit histories not only provide necessary input for credit underwriting, but also allow borrowers to take their credit history from one financial institution to another, thereby making lending markets more competitive and, in the end, more affordable. Results further revealed that 40% agreed and 16% strongly agreed bringing to total 56% respondents agreed with the statement that they have seen a CRB report in more than one instance. Results also reveal that 20% strongly disagreed and 20% disagreed bringing to a total of 40% respondents who disagreed with the

statement and 4% neither agreed nor disagreed with the statement. The study findings indicated that 50% agreed and 24% strongly agreed bringing to total 74% respondents agreed with the statement that they have been subjected to CRB evaluation when they wanted to borrow from their bankers. Results also reveal that 12% strongly disagreed and 10% disagreed bringing to a total of 22% respondents who disagreed with the statement and 4% neither agreed nor disagreed with the statement. More so, results indicated that 36% agreed and 34% strongly agreed bringing to total 70% respondents agreed with the statement that Neither the CRB companies nor the banks inform the customers when exchanging information about customers. Results also reveal that 18% disagreed and 8% strongly disagreed bringing to a total of 26% respondents who disagreed with the statement and 4% neither agreed nor disagreed with the statement. The study findings also revealed that 66% agreed and 14% strongly agreed bringing to total 80% respondents agreed with the statement that CRB companies and banks only share adverse customer's reports. . Results also reveal that 10% strongly disagreed and 6% disagreed bringing to a total of 16% respondents who disagreed with the statement and 4% neither agreed nor disagreed with the statement. Finally the study findings revealed that 44% strongly disagreed and 22% disagreed bringing to a total of 66% of the respondents who disagreed with the statement that their employer requests employee CRB reports on an annual basis as a way of evaluating employee integrity and level of financial commitment. Results also reveal that 18% neither agreed nor disagreed and 16% agreed with the statement.

Table 1:Credit Information Sharing By Credit Reference Bureaus

	strongly disagree %	Disagree %	Neutral %	Agree %	Strongly Agree %
Credit Information sharing by Credit Reference Bureaus has led to increase market share of the financial industry as a whole	3, (6%)	8, (16%)	0, (0%)	30, (60%)	9, (18%)
Credit Information sharing by Credit Reference Bureaus led to growth in profitability in the financial sectors	4, (8%)	2, (4%)	0, (0%)	31, (62%)	13, (26%)
Credit Information sharing by Credit Reference Bureaus has helped shape the lending policy	7, (14%)	0, (0%)	0, (0%)	32, (64%)	11, (22%)
Credit Information sharing by Credit Reference Bureaus has helped the financial sector to positively shape its business model	7, (14%)	3, (6%)	1, (2%)	29, (58%)	10, (20%)
Credit Information sharing by Credit Reference Bureaus has helped the financial sector to shape its competitive structure in the credit market	9, (18%)	7, (14%)	4, (8%)	17, (34%)	13, (26%)

I have seen a CRB report in more than one instance	10, (20%)	10, (20%)	2, (4%)	20, (40%)	8, (16%)
I have been subjected to CRB evaluation when I wanted to borrow from my bankers	6, (12%)	5, (10%)	2, (4%)	25, (50%)	12, (24%)

4.2 Influence of Privacy Protection on Disseminating Credit Information by Credit Reference Bureaus in Kenya

The study sought to determine the factors influencing dissemination of credit information by credit reference bureaus in Kenya. Table 4.2 indicates the results. Results in Table 4.2 revealed that 48% strongly agreed and 32% agreed bringing to a total of 80% of the respondents who agreed with the statement that there are adequate legal and institutional measures to protect consumer information in Kenya. Meanwhile, 12% disagreed and 6% strongly disagreed bringing to a total of 18% who disagreed with the statement and 2% neither agreed nor disagreed with the statement. The findings agree with those of Solove (2007) who found out that the courts have begun to recognize that all companies have a responsibility under common law to protect the personal information in their custody including both preventing unauthorized access and sharing information with third parties when there is a foreseeable risk of harm. Results revealed that 74% agreed and 14% strongly agreed bringing to a total of 88% of respondents who agreed with the statement that Kenyan consumers are quite sensitive with their personal information and hence they can easily use legal means if they become aggrieved from any exposure. Results also reveal that 10% strongly disagreed while 2% neither agreed nor disagreed with the statement. The results agree with those in Solove (2007) who found out that courts have begun to recognize that all companies have a responsibility under common law to protect the personal information in their custody including both preventing unauthorized access and sharing information with third parties when there is a foreseeable risk of harm. Results also revealed that 64% agreed and 22% strongly agreed bringing to a total of 86% respondents who agreed with the statement that the information should be coded to ensure high level privacy. Results also reveal that 8% strongly disagreed and 2% disagreed bringing to a total of 10% of respondents who disagreed with the statement while another 4% neither agreed nor disagreed. The study findings indicated that 60% agreed and 30% strongly agreed bringing to a total of 90% of respondents who agreed with the statement that lack of customer privacy reduces the development of intimacy and trust in Credit Reference Bureaus reducing the effectiveness of credit information sharing. Results also reveal that 8% disagreed with the statement while another 2% neither agreed nor disagreed with the statement. The results agree with those in (Jappelli and Pagano, 2002) who found out that the degree of privacy protection accorded to prospective borrowers has historically affected the development of credit bureaus.

In addition, results revealed that 68% agreed and 16% strongly agreed bringing to a total of 84% respondents who agreed with the statement that lack of privacy has led to a reduction in the customer fundamental rights reducing the effectiveness of credit information sharing by Credit Reference Bureaus. Results also reveal that 8% disagreed and 4% strongly disagreed bringing to a total of 12% respondents who disagreed with the statement and 4% neither agreed nor disagreed with the statement. The results agree with those in Jappelli and Pagano, (2002) who found out that

the degree of privacy protection accorded to prospective borrowers has historically affected the development of credit bureaus.

Furthermore, results indicated that 50% agreed and 40% strongly agreed bringing to total 90% respondents agreed with the statement that lack of privacy has led to severed diversity of relationships reducing the effectiveness of credit information sharing. Results also reveal that 10% disagreed with the statement.

Finally the study findings revealed that 66% agreed and 20% strongly agreed bringing to total 86% respondents agreed with the statement that information sharing constitutes a genuine moral violation of privacy reducing the effectiveness of credit information sharing by Credit Reference Bureaus. Results also reveal that 8% disagreed and 4% strongly disagreed bringing to a total of 12% respondents who disagreed with the statement and 2% neither agreed nor disagreed with the statement.

Table 2: Influence of Privacy Protection on Disseminating Credit Information

	disagree	Disagree	Neutral	Agree	Agree	strongly	Strongly
		%	%	%	%		
There are adequate legal and institutional measures to protect consumer information in Kenya		3, (6%)		6, (12%)	1, (2%)	16, (32%)	24, (48%)
Kenyan consumers are quite sensitive with their personal information and hence they can easily use legal means if they become aggrieved from any exposure		5, (10%)		0, (0%)	1, (2%)	37, (74%)	7, (14%)
The information should be coded to ensure high level privacy		4, (8%)		1, (2%)	2, (4%)	32, (64%)	11, (22%)
Lack of customer privacy reduces the development of intimacy and trust in Credit Reference Bureaus reducing the effectiveness of credit information sharing		0, (0%)		4, (8%)	1, (2%)	30, (60%)	15, (30%)

Lack of privacy has led to a reduction in the customer fundamental rights reducing the effectiveness of credit information sharing by Credit Reference Bureaus	2, (4%)	4, (8%)	2, (4%)	34, (68%)	8, (16%)
Lack of privacy has led to severed diversity of relationships reducing the effectiveness of credit information sharing	0, (0%)	5, (10%)	0, (0%)	25, (50%)	20, (40%)
Information sharing constitutes a genuine moral violation of privacy reducing the effectiveness of credit information sharing by Credit Reference Bureaus	2, (4%)	4, (8%)	1, (2%)	33, (66%)	10, (20%)

4.2.1 Regression for Privacy and Dissemination of Information

Regression analysis was conducted to empirically determine whether privacy was a significant determinant of dissemination of credit information in credit reference bureaus in Kenya. Regression results in table 4.3 indicate the goodness of fit for the regression between privacy and dissemination of information is satisfactory. An R squared of 0.544 indicates that 54.4% of the variances in dissemination information are explained by the variances in the privacy.

Table . 3: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.738 ^a	.544	.535	.78673

a. Predictors: (Constant), privacy

Anova statistics in table 4.4 indicate that the overall model was significant. This was supported by an F statistic of 57.273 and p value of 0.000. The reported probability was less than the conventional probability of 0.05 (5%) significance level.

Table 4: Anova

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	35.449	1	35.449	57.273	.000 ^a
	Residual	29.709	48	.619		
	Total	65.158	49			

a. Predictors: (Constant), privacy

b. Dependent Variable: dissemination_information

Regression coefficients results in table 4.5 indicate that the relationship between dissemination of information and privacy is negative and significant ($b_1 = -1.098$, p value 0.000). The findings imply that privacy has a significant and negative effect on dissemination of credit information. It further implies that an increase in privacy by one units leads to a decrease in dissemination of information by -1.098 units.

Table 5: Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	7.825	.587		13.327	.000
	privacy	-1.098	.145	-.738	-7.568	.000

a. Dependent Variable: dissemination_information

4.3 Influence of Competition on Disseminating Credit Information

The study sought to determine the factors influencing dissemination of credit information by credit reference bureaus in Kenya. Table 6 indicates the results.

Results in Table 4.6 revealed that 48% agreed and 36% strongly agreed bringing to a total of 84% of the respondents who agreed with the statement that intense industry competition has been a setback to various aspects of credit bureau operations that has adversely affected Credit Reference Bureaus sharing. Meanwhile, 10% disagreed and 4% strongly disagreed with the statement while another 2% neither agreed nor disagreed with the statement. The results agree with those in (Marquez *et al.*, 2003) which found that increased competition reduces intermediaries' rents and decreases their overall incentives to generate information, thereby affecting both the pricing and the allocation of credit.

Results further revealed that 56% agreed and 30% strongly agreed bringing to a total of 86% of respondents who agreed with the statement that business competition in the financial industry compromises the stakeholders' standards and norms reducing effectiveness of credit information sharing. Results also reveal that 10% disagreed and 6% strongly disagreed with the statement. The results agree with those in (Marquez *et al.*, 2003) which found that increased competition reduces intermediaries' rents and decreases their overall incentives to generate information, thereby affecting both the pricing and the allocation of credit.

In addition, study findings indicated that 76% of respondents agreed with the statement that strict business competition is a huge impediment to effective credit information sharing in the financial industry. Results also reveal that 8% strongly disagreed and 6% disagreed with the statement while 10% neither agreed nor disagreed. Results also reveal that 10% disagreed and 6% strongly disagreed with the statement. The results agree with those in (Marquez *et al.*, 2003) which found that increased competition reduces intermediaries' rents and decreases their overall incentives to generate information, thereby affecting both the pricing and the allocation of credit.

Results also revealed that 54% strongly agreed and 30% agreed bringing to a total of 84% respondents agreed with the statement that a competitive and dynamic credit bureau market in the making – is a strong likelihood for greater data accuracy and other value added services given the existence of only two licensed bureau. Results also reveal that 8% disagreed and 6% strongly disagreed bringing to a total of 14% respondents who disagreed with the statement and 2% neither agreed nor disagreed with the statement. The results agree with those in (KBA, 2010) which found out that Credit Reference bureaus complement the central role played by banks and other financial institutions in extending financial services within an economy. CRBs help lenders make faster and more accurate credit decisions.

Study findings revealed that 64% strongly agreed and 22% agreed bringing to a total of 86% respondents agreed with the statement that stiff competition for clients in the financial sectors is major constraint in credit information sharing, and the limitations in credit bureaus' effectiveness. Results also reveal that 6% disagreed and 4% strongly disagreed bringing to a total of 10%

respondents who disagreed with the statement and 4% neither agreed nor disagreed with the statement.

Finally the study findings revealed that 68% agreed and 6% strongly agreed bringing to total 74% respondents agreed with the statement that many banks use their internal means of appraising customer creditworthy because CRB reports are mechanical and sometimes outdated. Meanwhile, 10% disagreed and 8 % strongly disagreed bringing to a total of 18% respondents who disagreed with the statement and 8% neither agreed nor disagreed with the statement. Table 6:Influence of Competition on Disseminating Credit Information

	disagree	Disagree	Neutral	Agree	Agree	strongly	Strongly
			%	%	%	%	%
Intense industry competition 2, (4%) has been a set-back to various aspects of credit bureau operations, that has adversely affected Credit Reference Bureaus sharing			5, (10%)	1, (2%)	24, (48%)	18, (36%)	
Business competition in the financial industry compromises the stakeholders standards and norms reducing effectiveness of credit information sharing		3, (6%)	3, (6%)	1, (2%)	15, (30%)	28, (56%)	
Strict business competition is a huge impediment to effective credit information sharing in the financial industry		3, (6%)	5, (10%)	0, (0%)	18, (36%)	24, (48%)	
A competitive and dynamic credit bureau market in the making – is a strong likelihood for greater data accuracy and other value added services given the existence of only two licensed bureau		4, (8%)	3, (6%)	5, (10%)	38, (76%)	0, (0%)	
Stiff competition for clients in the financial sectors is major constraint in credit information sharing, and the limitations in credit bureaus' effectiveness		3, (6%)	4, (8%)	1, (2%)	15, (30%)	27, (54%)	

Some financial institutions could end up using the customer financial information to poach customers from other organization	2, (4%)	3, (6%)	2, (4%)	11, (22%)	32, (64%)
Many banks use their internal means of appraising customer creditworthy because CRB reports are mechanical and sometimes outdated	3, (6%)	3, (6%)	2, (4%)	18, (36%)	24, (48%)
Banks are very selective on whom they report to CRB and hence reducing the intended effect	4, (8%)	5, (10%)	4, (8%)	34, (68%)	3, (6%)

of exposing credit defaulters

4.3.1 Regression for Competition and Dissemination of Information

Regression analysis was conducted to empirically determine whether competition was a significant determinant of dissemination of information to the credit reference bureau. Regression results in table 4.7 indicate the goodness of fit for the regression between competition and dissemination of information is satisfactory. An R squared of 0.485 indicates that 48.5% of the variances in dissemination of information are explained by the variations in the competition.

Table 7: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.697 ^a	.485	.474	.83596

a. Predictors: (Constant), competition

Anova statistics in table 4.8 indicate that the overall model was significant. This was supported by an F statistic of 45.239 and p value of 0.000. The reported probability was less than the conventional probability of 0.05 (5%) significance level

Table 8: Anova

Model		Sum Squares	of df	Mean Square	F	Sig.
1	Regression	31.614	1	31.614	45.239	.000 ^a
	Residual	33.544	48	.699		
	Total	65.158	49			

a. Predictors: (Constant), competition

b. Dependent Variable: dissemination_information

Regression coefficients in table 4.9 indicate that the relationship between competition and dissemination of information is negative and significant ($b_1 = -0.816$, p value 0.000). The findings imply that competition has a significant and negative effect on dissemination of credit information. It further implies that an increase in competition by one units leads to a decrease in dissemination of information by -0.816 units.

Table 9: Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	6.739	.501		13.442	.000
	competition	-.816	.121	-.697	-6.726	.000

a. Dependent Variable: dissemination_information

4.4 Influence of Business Ethics on Disseminating Credit Information

The study sought to determine the factors influencing dissemination of credit information by credit reference bureaus in Kenya. Table 4.10 indicates the results.

Results in Table 4.10 revealed that 42% strongly agreed and 30% agreed bringing to a total of 72% of the respondents who agreed with the statement that lack of business ethics compromises the virtues of honesty and integrity reducing effectiveness of disseminating credit information by credit reference bureaus. Meanwhile, 14% disagreed and 4% strongly disagreed bringing to a total of 18% who disagreed with the statement while another 10% neither agreed nor disagreed with the statement. Results indicated that 42% strongly agreed and 30% agreed bringing to a total of 72% of the respondents who agreed with the statement that lack of business ethics compromises individual conscience reducing effectiveness of disseminating credit information by credit reference bureaus. Meanwhile, 14% disagreed and 4% strongly disagreed bringing to a total of 18% who disagreed with the statement while another 10% neither agreed nor disagreed with the statement.

Results also revealed that 44% agreed and 30% strongly disagreed bringing to a total of 74% of respondents who agreed with the statement that lack of business ethics compromises social responsibility of the bank's executive reducing effectiveness of disseminating credit information by credit reference bureaus. Meanwhile, 12% strongly disagreed and 6% disagreed bringing to a total of 18% who disagreed with the statement while 8% neither agreed nor disagreed. In addition, results revealed that 60% agreed and 18% strongly agreed bringing to a total of 78% of respondents who agreed with the statement that Compulsory positive information sharing including both banks and non-bank credit providers could make an important contribution to the stability of the financial sector and reduce the challenges of dissemination credit information by Credit Bureaus. Fourteen percent disagreed and 8% strongly disagreed bringing to a total of 22% respondents who disagreed with the statement. Furthermore, results indicated that 52% strongly agreed and 22% agreed bringing to a total of 74% respondents who agreed with the statement that a review of the current business ethics is the best way to create fairness among the players that could enhance sharing arrangements and overcome potential challenges in dissemination of information by Credit Reference Bureaus. Meanwhile, 14% disagreed and 8% strongly disagreed bringing to a total of 22% respondents who disagreed with the statement and 4% neither agreed nor disagreed with the statement.

Results further revealed that 48% strongly agreed and 26% agreed bringing to total of 74% of respondents who agreed with the statement that banks do not report influential people like politicians and top businessmen to CRB and hence dilute the very essence of dissemination of defaulters' information. Results also reveal that 14% disagreed and 10% strongly disagreed bringing to a total of 24% respondents who disagreed with the statement and 2% neither agreed nor disagreed with the statement. Finally study findings indicated that 34% agreed and 32% strongly agreed bringing to total 66% respondents agreed with the statement that Banks use CRB

reports for the sake of having them but they do not use them to appraise borrowers. Meanwhile, 16% disagreed and 12 % strongly disagreed bringing to a total of 28% respondents who disagreed with the statement and 6% neither agreed nor disagreed with the statement. Table 10: Influence of business ethics on disseminating credit information

disagree	strongly Disagree	Strongly Neutral	Agree	Agree
%	%	%	%	%
Lack of business ethics compromises the virtues of honesty and integrity reducing effectiveness of disseminating credit information by credit reference bureaus	2, (4%)	7, (14%)	5, (10%)	15, (30%) 21, (42%)
Lack of business ethics compromises individual conscience reducing effectiveness of disseminating credit information by credit reference bureaus	2, (4%)	7, (14%)	5, (10%)	15, (30%) 21, (42%)
Lack of business ethics compromises social responsibility of the bank's executive reducing effectiveness of disseminating credit information by credit reference bureaus	3, (6%)	6, (12%)	4, (8%)	22, (44%) 15, (30%)
Compulsory positive information sharing including both banks and non-bank credit providers could make an important contribution to the stability of the financial sector and reduce the challenges of	4, (8%)	7, (14%)	0, (0%)	30, (60%) 9, (18%)

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A review of the current
business ethics is the
best way to create
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players that could
enhance sharing
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information by Credit

2, (4%) 9, (18%) 2,(4%) 26, (52%) 11,(22%) Reference Bureaus.

Banks do not report influential people like politicians and top businessmen to CRB and hence dilute the very essence of dissemination of defaulters information	5, (10%)	7, (14%)	1, (2%)	24, (48%)	13, (26%)
Banks use CRB reports for the sake of having them but they do not use them to appraise	6, (12%)	8, (16%)	3, (6%)	17, (34%)	16, (32%)

borrowers

4.4.1 Regression for Business Ethics and Dissemination of Information

Regression analysis was conducted to empirically determine whether a business ethics characteristic was a significant determinant of dissemination of information in the credit bureau.

Regression results in table 4.11 indicate the goodness of fit for the regression between business ethics and dissemination of information is satisfactory. An R squared of 0.825 indicates that 82.5% of the variances in dissemination of information are explained by the variances in the business ethics.

Table 11: model summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.909 ^a	.825	.822	.48678

a. Predictors: (Constant), business_ethics

Anova statistics in table 4.12 indicate that the overall model was significant. This was supported by an F statistic of 226.975 and p value of 0.000. The reported probability was less than the conventional probability of 0.05 (5%) significance level

Table 12: Anova

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	53.784	1	53.784	226.975	.000 ^a
	Residual	11.374	48	.237		
	Total	65.158	49			

a. Predictors: (Constant), business_ethics

b. Dependent Variable: dissemination_information

Regression coefficient in table 4.13 indicates that the relationship between business ethics and dissemination of information is positive and significant ($b_1=1.046$, p value 0.000). The findings imply that business ethics has a significant effect on dissemination of information. It further implies that an increase in competition by one units leads to an increase in dissemination of information by 1.046 units.

Table 13: Coefficients

Model	Unstandardized Coefficients	Standardized Coefficients	t	Sig.
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		B	Std. Error	Beta		
1	(Constant)	-.449	.269		-1.671	.101
	business_ethics	1.046	.069	.909	15.066	.000

a. Dependent Variable: dissemination_information

5.0 DISCUSSION CONCLUSIONS AND RECOMMENDATIONS

5.0. Introduction

The chapter addressed the summary of the findings, the conclusions and the recommendations. This was done in line with the objectives/research questions of the study.

5.1. Summary of Findings

5.5.1 Privacy Protection on dissemination of credit information

One of the objectives of the study was to assess the effect of privacy protection on dissemination of credit information. Results indicated that majority agreed with the statement that there are adequate legal and institutional measures to protect consumer information in Kenya. Results reveal that majority agreed with the statement that Kenyan consumers are quite sensitive with their personal information and hence they can easily use legal means if they become aggrieved from any exposure. Study results show that, a majority agreed with the statement that the information should be coded to ensure high level privacy. Results also reveal that majority agreed with the statement that lack of customer privacy reduces the development of intimacy and trust in Credit Reference Bureaus reducing the effectiveness of credit information sharing. Study results show that a majority agreed with the statement that lack of privacy has led to a reduction in the customer fundamental rights reducing the effectiveness of credit information sharing by Credit Reference Bureaus. Study results show that agreed with the statement that lack of privacy has led to severed diversity of relationships reducing the effectiveness of credit information sharing. The findings were supported by a majority who agreed with the statement that information sharing constitutes a genuine moral violation of privacy reducing the effectiveness of credit information sharing by Credit Reference Bureaus.

Results indicate that there is a negative and significant relationship between privacy and dissemination of information. This was supported by a regression coefficient of $b_1 = -1.098$, (p value 0.000).

5.5.3 Competition on dissemination of credit information

One of the objectives of the study was to assess the effect of competition on dissemination of credit information. The findings were supported by a majority of respondent who indicated that intense industry competition has been a set-back to various aspects of credit bureau operations that has adversely affected Credit Reference Bureaus sharing. Results also reveal that a majority agreed with the statement that business competition in the financial industry compromises the stakeholders' standards and norms reducing effectiveness of credit information sharing. The study results also show that a majority agreed with the statement that strict business competition is a huge impediment to effective credit information sharing in the financial industry. The findings were also supported by a majority of respondent who indicated that a majority agreed with the statement that a competitive and dynamic credit bureau market in the making – is a strong likelihood for greater data accuracy and other value added services given the existence of only two licensed bureau. The study also found that a majority agreed with the statement that stiff competition for clients in the financial sectors is major constraint in credit information sharing, and the limitations in credit bureaus' effectiveness. Results also reveal that a majority agreed with the statement that some financial institutions could end up using the customer financial information to poach customers from other organization. The study also found that a majority agreed with the statement that many banks use their internal means of appraising customer creditworthy because CRB reports are mechanical and sometimes outdated. Results indicate that there is a negative and significant relationship between competition and dissemination of information. This was supported by a regression coefficient of $b_1 = -0.816$, (p value 0.000).

5.5.4 Business Ethics on dissemination of credit information

One of the objectives of the study was to assess the effect of business ethics on dissemination of credit information. The findings were supported by a majority of respondent who indicated that a majority agreed with the statement that lack of business ethics compromises the virtues of honesty and integrity reducing effectiveness of disseminating credit information by credit reference bureaus. The study also found that a majority agreed with the statement that lack of business ethics compromises individual conscience reducing effectiveness of disseminating credit information by credit reference bureaus. The results also reveal that a majority agreed with the statement that lack of business ethics compromises social responsibility of the bank's executive reducing effectiveness of disseminating credit information by credit reference bureaus. Results also reveal that a majority agreed with the statement that Compulsory positive information sharing including both banks and non-bank credit providers could make an important contribution to the stability of the financial sector and reduce the challenges of dissemination credit information by Credit Bureaus. The study results also show that a majority agreed with the statement that a review of the current business ethics is the best way to create fairness among the players that could enhance sharing arrangements and overcome potential challenges in decimation of information by Credit Reference Bureaus. The study results also show that a majority agreed with the statement that banks do not report influential people like politicians and top businessmen to CRB and hence dilute the very essence of

dissemination of defaulters' information. The findings were also supported by a majority who agreed with the statement that Banks use CRB reports for the sake of having them but they do not use them to appraise borrowers.

Results indicate that there is a significant relationship between competition and dissemination of information. This was supported by a regression coefficient of $b_1=1.046$, (p value 0.000).

5.2: Conclusions

From the study findings, one can conclude that there was a negative and significant relationship between privacy and dissemination of information.

The study concludes that there was a negative and significant relationship between competition and dissemination of information.

It was also possible to conclude that there was a positive and significant relationship between business ethics and dissemination of information. Therefore enhancing business ethics is beneficial to dissemination of credit information.

5.3: Recommendations

The study makes the following recommendations based on the objectives of the study; privacy protection on dissemination of credit information

That there should be adequate legal and institutional measures to protect consumer information in Kenya; information should be coded to ensure high level privacy; increase the development of intimacy and trust in Credit Reference Bureau.

In addition the, the study further recommends that the government should penalize those financial institutions that could end up using the customer financial information to poach customers from other organization; the government should also set rules on stiff competition in the financial sectors; CRB reports are mechanical and sometimes outdated therefore there is a need to improve their technology as this will improve their competitive edge

The study further recommends on enhancing business ethics to improve the virtues of honesty and integrity; Banks should use CRB reports to appraise borrowers; to enhance business ethics both banks and CRB employees should join professional and trade association codes.

5.4: Suggested Areas for Further Research

The study suggests that future areas of study should be on how Pestel factors affect the dissemination of information. This factor includes; Political, Economic, Social and Technological.

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