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Customers Awareness of Credit Reference Bureau Policy on Borrowing Behaviour in Uasin Gishu County, Kenya

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Abstract

The purpose of this study was specifically carried out to determine how customer awareness of CRB policy influence borrowing behaviour, how perceived benefits of CRB affect lending behaviour and to what extend does CRB policy benefit banks. The study employed a survey research design. The target population for the study was 411,734 customers drawn from 12 banks within Eldoret town, Uasin Gishu County. Systematic and simple random sampling technique was used to select a sample size of 225 customers. Data was collected by use of structured questionnaires addressed to the respondents. The data collected and analyzed using both descriptive and inferential statistics. Descriptive statistics include those of the mean, standard deviation and frequency distribution while inferential statistics involves use of Pearson coefficient correlations. The findings showed that information on credit registration bureau is easily accessible from the bank. Further findings indicated that the credit registration bureau always offers more flexibility in granting credit to borrowers. The study also established that there is a linkage between the factors and customers borrowing behaviour with CRB perceived benefits having the highest value and CRB having the lowest value. The regression analysis tested at 5% level of significance and 95% level of confidence, showed that the most significant factor was CRB perceived benefits followed by CRB awareness then CRB policy. In conclusion, it was observed that CRB awareness contributes significantly to customer borrowing behavior and therefore the study recommends that credit bureaus should strive to provide credit reports with information that is complete, accessible and accurate.

Key Words: customers' awareness, credit reference bureau, and borrowing behaviour

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Introduction

1.1 Background to the problem

Customer borrowing behaviour is rarely the result of a single motive. Several factors combine to make a borrower to promptly repay or default repayment of a facility. Behaviour primacy theory holds that, common behavior results mainly from an individual's interaction with the environment (Nguyen, 2007). Customer borrowing Behavior may be defined as the interplay of forces that takes place during a borrowing and can influence the repayment of a facility. A survey by the World Bank (2005) shows that credit bureaus or credit registries now exist in over 100 countries worldwide. In the United State of America where credit reporting is most prevalent, over 3 million credit reports are issued every day (Hunt, 2005). Many developing and transition economies have also introduced credit registries or fostered credit bureaus in the hope of boosting credit growth (Miller, 2003).

Giving 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 examines how credit reporting affects the performance of the financial sector. Kenya established a credit referencing system or credit reference bureau (CRB) early 2010 aiming to manage the high rate of loan defaults in its banking system that only escalated in the past two years of economic slowdown. Credit Reference Bureau is an institution that consolidates and facilitates 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. The major benefit that the banks receive from CRB was that they were able to get credit information on prospective borrowers that facilitated assessment of credit requests to mitigate risks of bad debts.

On the side of the borrower, a good credit record acts as an incentive for competitive pricing of loan facilities. In a nutshell, credit information sharing rewards and promotes good credit track record. Further, credit sharing facilitates reduction in the cost of credit and appropriately analyzing and pricing risks (CBK, 2010). Lack of credit information has in the past led to banks factoring a risk premium in the pricing of credit. However, credit information was not the only factor that contributes to high cost of borrowing; there are other structural rigidities that contribute to this high cost of credit. The government has put in place policies to guide decisions and achieve rational outcomes. These are rules and regulations that govern lending decisions, customer borrowing, and future prediction on repayment and reduction on delinquency.

The emergence of Credit Reference bureaus has significantly revolutionized lending and contributed to good borrowing behaviour of many customers in banks as well as in other financial institutions. Before the introduction of CRB, many borrowers used to borrow from one institution to the other without being identified. This led into many financial institutions experiencing immense losses as a result of non-performing loans. Through the use of CRB, the banks are in a position to obtain detailed information on a person's credit history, including information on their identity, credit accounts and loans, bankruptcies and late payments and recent inquiries. Other information shared include: proven frauds and forgeries, Cheque kiting, false declarations and statements, receiverships, bankruptcies and liquidations, credit default and late payments, use of false securities and misapplication of borrowed funds (CBK, 2009).

1.2 Statement of the problem

Ideally, CRB is supposed to help in sharing information on default among banks, assist in eliminating corrupt borrowers that is, those with the intentions of borrowing from different financial institutions with the aim of defaulting as well as to provide commercial professional credit reference to identify honest or credible borrowers based on known history and character. This shows that the existence of credit registries is associated with increased lending volume, growth of consumer lending, improved access to financing and a more stable banking sector. However, this has not been the case because since the introduction of credit references bureau in Kenya in July 2010 and banks submitted credit information to the licensed credit reference bureau in August 2010, the demand for credit has reduced, with a little over half of consumers within the financial industry applying for loans or overdraft facility from their Banks (CBK, 2011).

Currently, the banking industry in Kenya has in the past been faced with the adverse setbacks of obtaining all-inclusive information on clients' payment history for use during the credit assessment process. This has led to a high rate of Non- performing loans after defaulters move from one bank to the other to secure credit facilities. This was attributed to the lack of adoption CRB by the lending institutions. In addition, as banking industry spread, competition increases, and bad borrowers who default on one loan might simply take their next loan from another financial institution that is unaware of the bad credit history. Conversely, even though many conducted researches suggest that the existence of credit reference bureau (CRB) leads to a bigger credit market, lower default and interest rates, improved profitability and increased competitiveness within the industry, none of the studies have critically examined the relevance of the CRBs and its effect on the borrower behaviour.

This study therefore, attempt to fill this existing gap in literature by determining customers' awareness of credit reference bureau policy on borrowing behaviour, in Uasin Gishu county, Kenya,

1.3 Research questions

1. How does customer awareness of CRB policy influence borrowing behaviour?
2. Does perceived benefit of CRB affect lending behaviour?
3. To what extent has CRB policy benefited banks?

1.4 Research Hypothesis

$H_{1:}$ There is a relationship between customer awareness of CRB policy and borrowing behaviour.
$H_{2:}$ There is a relationship between Perceived benefit of CRB and lending behaviour of banks.
$H_{3:}$ There is a relationship between CRB policy and benefit to banks.

1.5 Significance of the Study

The study findings were significant to bank management since they were able to observe how CRBs have impacted to rate of borrowing of their customers. Also the study helped investors to identify the borrowing behaviour of customers since the introduction of CRB. The study also provided customer borrowing behaviour to CRBs management team who were able to incorporate information about borrower's income, employment, living costs and existing loan repayments to help the creditor decide whether the borrower can afford to repay a loan and therefore reduce chances of loan delinquencies and through provision of up to date borrower credit information. The study offered insight into the effectiveness of CRB.

1.6 Conceptual Framework

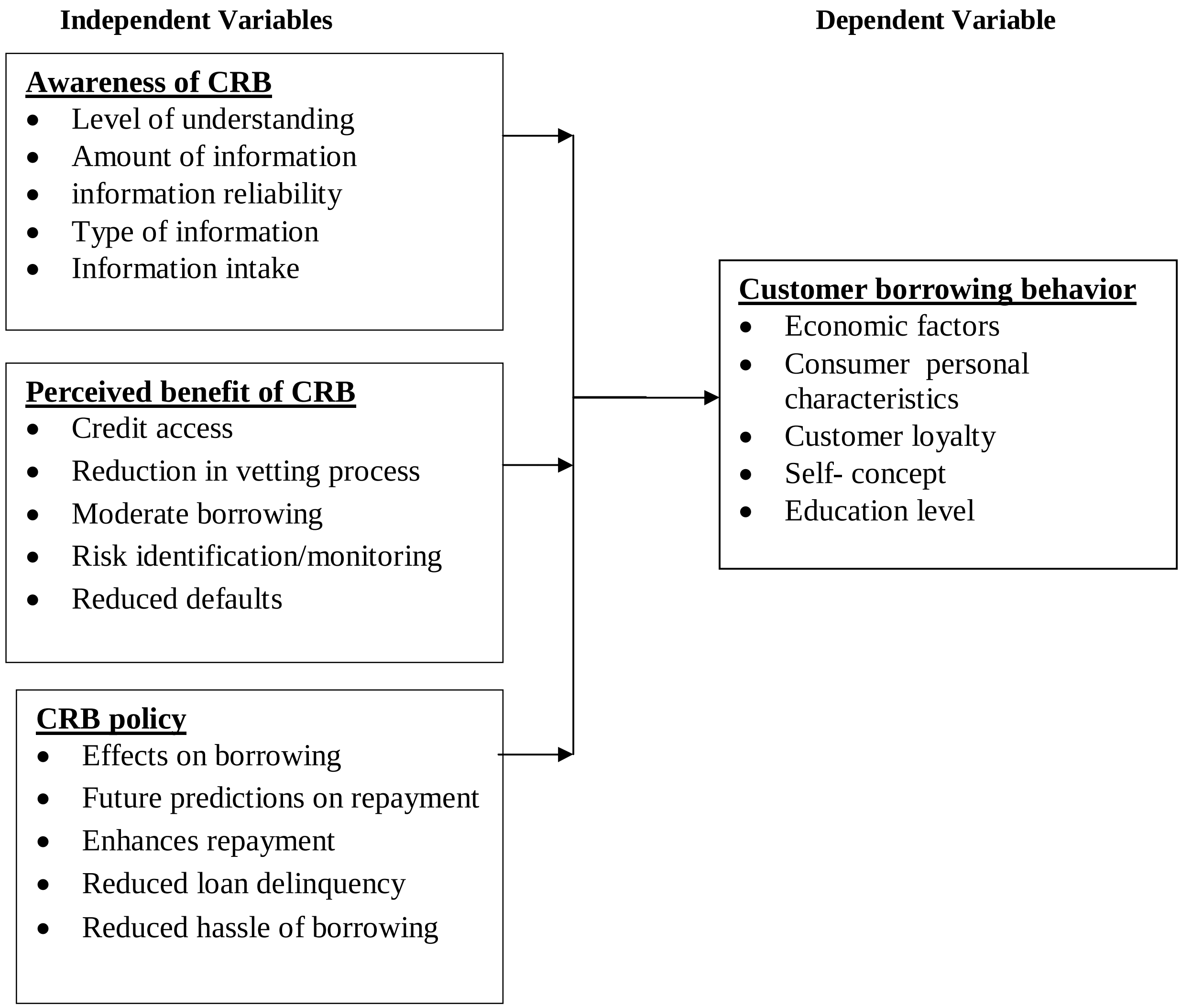

Figure 1.1: Conceptual Framework

Source: Researcher (2014)

Literature Review

2.1 Review of Theories

2.1.1 Neoclassical Theory of Consumer lending

Neoclassical Theory of Consumer lending was propounded by Cohen, Natorp & Cassirer, 1986). A neoclassical economic analysis is important in helping to explain consumer behavior, so provides a useful starting point before turning to behavioral economics.

Furthermore, a potential benefit of behavioral economic analysis is in developing regulation that may address other policy goals that may be identified through a neoclassical analysis. For example, the findings of behavioral economics may be used in developing policies to support other policy goals regarding consumer saving (Hendriske, 2001). Two main consumer issues stemming from a neoclassical analysis of consumer credit relating to consumer spending and saving and the search costs for consumers are discussed below. However, it is worth first noting that there are other potential market failures with the consumer credit industry that are not related to consumer behaviour.

For example, some commentators have questioned whether the consumer credit industry is sufficiently competitive, leading to a concern that consumers pay more for credit than they should (Bertrand, 2010). Another potential concern is that because lenders are unable to distinguish between low and high default-risk borrowers they are unable to price differentiate between the two. In this case, a problem of adverse selection could evolve whereby low-default-risk borrowers view the borrowing costs as excessive and are discouraged from borrowing. This in turn leads to a bias towards borrowing by high-default-risk borrowers. As a result, market outcomes may be inefficient, even if there is strong competition (Stiglitz &Weiss, 1981).

2.1.2 Criticism of the Theories

The first criticism of Neoclassical Theory of Consumer lending are that its components and rules about their inter-relationships are not well defined and that it does not include social or economic or unconscious determinants of behavior, which are generally considered to be at least as important as the personal cognitive factors covered by the mode (Janz & Becker, 1984). One of the key strengths of the behavior model is that it has continued to evolve since original publication in 1968 (Engel, 1968), evolutions that should have improved the explanatory power of the model in light of advances in behavior theory and knowledge. One such evolution is the inclusion of such factors as consumption and divestment, embracing contemporary definitions of Approaches and Models behavior which include such stages of consumption in their scope (Janz & Becker, 1984).

Research Design and Methodology

3.1 Research Design

The study employed a survey research design because the researcher collected data and present data the way it was without any manipulation of the variables. Survey research designs are used in preliminary and exploratory studies to allow researchers to gather information, summarize, present and interpret for the purpose of clarification. The survey research design was suitable for this study because the researcher collected data and present them the way it was without any manipulation of the variables. By applying this method, the study allowed the researcher to circumvent this endogeneity issue and identify how the exogenous introduction of a credit reference affects customer borrowing behaviour.

3.2 Target Population

The target population for a study is the entire set of units for which the data are to be used to make inferences. The study area has 31 well established banks. This study targeted 12 banks within Eldoret town in Uasin Gishu County namely; KCB, Barclays, Equity, Transnational, National, Corporative, CFC Stanbic, Commercial Bank of Africa, Diamond Trust bank, and Standard chartered bank, Bank of Baroda and Family Bank. From the 12 banks database, there is a total 411,734 customers which was taken as the study target population.

Table 3.1 Target Population

Category	Target population
KCB	50124
Barclays	38714
Equity	85184
Transnational	15644
National	41641
CFC Stanbic	14803
Commercial Bank of Africa	31220
Diamond Trust bank	11483
Standard chartered bank	27158
Bank of Baroda	9001
Family Bank	25431
Corporative	61331
Total	**411734**

Source: Bank Database, (2014)

3.3 Description of Sample Size and Sampling Procedures

Sampling procedure refers to a technique of selecting a part of population on which research can be conducted, which ensures that conclusions from the study can be generalized to the entire population. The sample size was obtained using coefficient of variation. Nassiuma, (2000) asserts that in most surveys, a coefficient of variation in the range of 21%≤ C≤ 30% and a standard error in the range 2%≤ e ≤ 5% is usually acceptable. The study therefore used a coefficient variation of 30% and a standard error of 2%. The higher limit for coefficient of variation and standard error was selected so as to ensure low variability in the sample and minimize the degree or error. Nassiuma (2000) gives the formula as follows:-

$$n = {Nc^2}/{c^2 + (N-1)e^2} = {411734(0.3)^2}/{0.3^2 + (411734-1)0.02^2} = 225$$

Where, n=Sample size, N=Population, c=covariance, e= standard error Using this formula a sample of 255 customers was selected. The sample frame of the study stratified the banks into 12 banks strata. A stratified random sample was a useful blend of randomization and categorization, which enables both a quantitative and qualitative process of research to be undertaken (Cohen, 2003). The advantage in stratified random sampling is that, it ensures inclusion in the sample of subgroups, which otherwise, would be omitted entirely by other sampling methods because of their small numbers in the population. Neyman allocation formula was used to allocate respondents into 12 banks (strata). The purpose of the method was to maximize survey precision, given a fixed sample size. With Neyman allocation, the "best" sample size for stratum h would be:

$$n_{h=}\left(\frac{N_h}{N}\right)n$$

Where, n_h is the sample size for stratum h, n is total sample size, N_h is the population size for stratum h, N is the total population. Hence the sample size of respondents was obtained as in Table 3.2.

Table 3.2 Sample size of Respondents

	Population	**Sample size** $n_{h=}\left(\frac{N_h}{N}\right)n$
KCB,	50124	27
Barclays	38714	21
Equity,	85184	47
Transnational,	15644	9
National,	41641	23
CFC Stanbic,	14803	8
Commercial Bank of Africa,	31220	17
Diamond Trust bank,	11483	6
Standard chartered bank,	27158	15
Bank of Baroda,	9001	5
Family Bank	25431	14
Corporative,	61331	34
Total	**411734**	**225**

Source: Bank Database, (2014)

3.4 Description of Research Instruments

The researcher used questionnaires as the main tool for data collection. The questionnaires consisted of both open and closed ended questionnaires because they are easier to administer and analyze and that they capture a broad audience response.

3.5 Validity and Reliability of research instruments

It is recommended that prior to formulating the research instruments, the researcher has to reflect on the aim and objective of the study .This enabled the researcher formulate questions which will result into accurate responses

3.5.1 Validity of Research Instrument

The researcher used validity strategies such as making contrast and comparisons to data collected and assessing rival explanations.

3.5.2 Reliability of Research Instrument

A reliable research instrument is one that will give the same results if you used it repeatedly with the same group. The one that is able to fetch the required information. This means that there is high level of clarity of the questions asked in the interview schedule to enable the correspondent to understand the questions being asked. In order to test the reliability of the instrument, the Crobanch alpha test which is a measure of internal consistency was used in which closely related set of items were taken as a group. A "high" value of alpha is often used as evidence that the items measure an underlying (or latent) construct used. Content validity of the instrument was determined through piloting, where the responses of the subjects were checked against the research objectives.

The questionnaires were administered twice within an interval of two weeks. To determine the coefficient of stability, Pearson product moment formula was used. This establishes the extent to which the questionnaire elicits the same responses every time it is administered. A crobanch alpha value of $\alpha>0.7$ was considered reliable for the study. The results obtained from the pilot study assisted the researcher in revising the questionnaire to make sure that it covers the objectives of the study (Fraenkel & Wallen, 2000).

3.7 Description of Data Analysis Procedures

Data was analyzed quantitatively. The study ensured that the collected data was processed before carrying out the analysis. The analysis of the field was done using statistical package for Social Scientists (SPSS) and computer application package specifically-spread sheet.

The data was then summarized, coded, tabulated, and analyzed using both descriptive and inferential statistics. Descriptive statistics include those of the mean, standard deviation, and frequency distribution while inferential statistics involves use of Pearson coefficient correlations. Data presentation was done by the use of tables. This ensured that the gathered information was clearly understood. In addition, multiple regression analysis was employed to test the hypotheses. Multiple regression analysis is applied to analyze the relationship between a single dependent variable and several independent variables

The beta (β) coefficients for each independent variable was generated from the model, and subjected to a t –test, in order to test each of the hypotheses under study. The regression model was used to test is shown below. All the above statistical tests were analyzed using the Statistical Package for Social Sciences (SPSS), version 20. All tests were two-tailed. Significant levels were measured at 95% confidence level with significant differences recorded at $p < 0.05$.

The multiple regression equation estimated was of the form

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon$$

Where β0 is the intercept, β1 measures change in Y with respect to X_1, holding other factors constant, β_2 measures the change in Y with respect to X_2 holding other factors constant, β3 measures the change in Y with respect to X_3 holding other factors constant, Where;

Y represents customer borrowing behavior.
X_1 represent CRB awareness
X_2 represents CRB perceived benefit
X_3 represents CRB policy
E error term

Results

4.1 Presentation of the Findings

4.1.1 Response rate

The study findings revealed that 225 questionnaires were distributed to the respondents. 210 questionnaires out of the 225 were returned, which gives a response rate of approximately 93% percent.

4.1.2 Demographic Information

This aspect of the analysis deals with the personal data on the respondents of the questionnaires given to them. The demographic description of respondents, presented for analysis included their age, highest level of education and customer-bank experience. The table below (table 4.1) shows the details of background information of the respondents. The study put into account the age of the respondents.

Table 4.1 Demographic information of respondents

		Frequency	**Percent**
Age	Below 25 years	44	21
	Between 26-30	86	41
	Above 31 years	80	38.1
	Total	210	100
Highest level of education	Masters	36	17.1
	Bachelor	127	60.5
	Diploma	47	22.4
	Total	210	100
customer-bank experience	Less than 1 year	30	14.3
	1 - 4 years	63	30
	5 - 9 years	115	54.8
	10- 14 years	1	0.5
	Above 15 years	1	0.5
	Total	**210**	**100**

From the findings in table 4.1, 41% (86) of the respondents are between 26-30 years, 38.1% (8) are over 31 years and 21% (44) are below 25 years. In reference to respondents' highest level of education, 60.5% (127) of the respondents have a Bachelor's degree as their highest level of education, 22.4% (47) diploma and 17.4% Masters. In relation to customer-bank experience, 54.8% (115) have been customers for 5-9 years, 30% (63) for 1-4 years, 14.3% (30) for less than a year, 0.5% (1) for 10-14 years and 0.5% (1) for over 15 years.

4.1.3 Specific information based on study objectives

4.1.3.1 Credit registration bureau awareness

The study first objective sought to determine the credit registration bureau awareness. The findings were analyzed and illustrated as in table 4.2.

Table 4.2 Credit registration bureau awareness

	AWARE		**UNAWARE**		**TOTAL**	
We understand what is CRB	59	28%	151	72%	210	100%
	YES			NO		TOTAL
Are you aware of the effects of the policy?	63	30%	147	70%	210	100%
Has it influenced your borrowing?	126	60%	84	40%	210	100%

The researchers found that 72 % of the respondents were unaware of the meaning of CRB, its existence in Kenya, the rights of customers, the obligations of CRBs and Banks, the information that trigger negative credit rating, and the effects of credit reports even in general terms due to:
Firstly, illiteracy was a barrier to understanding financial issues as exemplified in the quotation below:

"Mimi sijasoma shule, Sijui hiyo kitu unauliza ni nini hiyo." (Secondly, non-banked customers were not exposed to the developments in the banking sector. These include customers served by Credit Co-operative Society (SACCOs) and other non-bank financial institution including the Kenya Farmers Association (KFA) which specializes in serving farmers at flexible and preferential terms. This is exemplified by the quotation below: "Banks put so many conditions before they lend, for example collateral yet many farmers don't have title deeds."

Thirdly, some channels of communication did not appropriately reach respondents as exemplified by the quotation below:“I don’t read newspapers, may be that is why I don’t know” “… wachapishe makaratasi ya maelezo kuhusu hiyo kitu na wapeane kwa watu wengi…pia wangeweka kwa mabenki makaratsi mengi yenye maelezo …radio ni ngumu kwasababu kuna station nyingi sana…SMS itasaidia kwa sababu watu wengi sana wako na simu siku.”

The respondents recommended the use of pamphlets in public places and mobile phone short messages (SMS) because SMS instantly alerted the phone user and many customers had access to mobile phones than Newspapers and radios. Newspapers were less accessible and readers focused on personal interests like sports ignoring business sections where C.I.S information was likely to be. It was difficult to pick the most appealing radio channel given the customers’ diverse interests. 70% of the respondents were unaware of the side effect of CRB policy. The respondents perceived financial information to be of interest only to the middle class or wealthy people as exemplified by the quotation below:

“Hii watu wengi hawaijui, labda wale wako na mapesa mengi kwa benki ndio wanaijua…”

Secondly, there were gender disparities in financial transactions. Respondents stated that men handled financial matters for their families thus fewer women than men had information about side effects of CRB policy as exemplified in the quotation below:

“My husband handles all bank matters, so I don’t know whether I can answer you much”

The researchers found that 28% of the respondents were aware of the effects of CRB policy in Kenya. However there was asymmetry in their knowledge of the rights of customers, the responsibilities of CRBs and Banks, the information that trigger negative credit rating, and the effects of credit reports due to: Firstly, the respondents got the CRB information through: seminars sponsored by their banks; letters written by banks; bank officials especially credit officers; and through persons affected by negative credit reports as exemplified by the quotations below:

“I belong to Barclay’s business club. At one of the clubs meeting we were educated on CRBs” “My bank gave me a letter…I don’t remember everything.

The study found that 60 % of the respondents said that CRB had influenced their borrowing as depicted by the respondent who asserted that: "I delayed paying my loan…the credit officer rang me to follow up the matter. He informed me that I will be taken to CRB…I was afraid… I don't want that CRB thing, it is terrible."(R12)

"I heard my dad talking about CRB… his name was in CRB because he was yet to pay land rates. This got him in trouble since he was not able to access loans from the bank

4.1.3.2 Credit registration bureau perceived benefits on Lender (Banker)

The study sought to establish how a perceived benefit of credit registration bureau benefits the lender. The findings of the study are illustrated in table 4.3

Table 4.3 Credit registration bureau perceived benefits on Lender (Banker)

Statement	Yes		No		Total	
Do you seek consent of customers before sharing negative credit information	179	85%	31	15%	210	100 %
Are you at liberty to disclose all credit information to interested person without their consent	17	8 %	193	92 %	210	100%
Can you misrepresent credit to implicate your long term valued customers	2	1 %	208	99%	210	100 %

The study found out that 85% of the respondents seek consent of customers before sharing information the customers considered the right to confidentiality to be absolute. However the law obligated banks to share with CRBs customers' negative credit information without seeking their consent. Customers' consent was only required when sharing their positive credit information**.** On the other hand, 92% of the respondents were unaware that CRBs are obligated to keep their credit information confidential; they believed that CRBs were at liberty to disclose all their credit information to any interested person without their consent. A related finding was that 100% of the respondents were unaware that CRBs and banks were obligated to use a system that allowed continuous audits and supervision by the regulators (CBK).

This could explain the concern by 1% of the respondents that banks could misrepresent credit information not to implicate their valued customers in whom they had long-term business interests. The respondents expressed concern that where the loans were deducted through the Check-Off System and employers failed or delayed to remit the loan installments to the financiers, customers were unfairly exposed to negative credit rating as exemplified by the quotation below: "…Do the CRB counter check the information they have or just take it as they are given?"

"Higher Education Loans Board (HELB have penalized me for the mistake of my employer who failed to remit the loan payments for HELB loan"

If you default then you cannot go to another bank ... pay your obligations, sit down with your financiers and reschedule your loans kuliko kuhepa, let them know what you are going through … I think the bank should be able to talk with their clients first before posting their names"

4.1.3.3 Extend that CRB policy has affected the lending behaviour

The study sought to establish the extent to which CRB policy has affected the lending behaviour. The findings of the study are illustrated in table 4.4

	YES		**NO**		**TOTAL**	
	F	%	F	%	F	%
Do banks charge different rates according to CRB policy?	95	45	115	55	210	100%
Do the customers benefit from good credit information system?	189	90	21	10	210	100%
Do CRB policy enable customers come up with effective way of repaying the money that they borrowed?	147	70	63	30	210	100%
Do good CRB policies help to predict the future ability of customers to repay loans	168	80	42	20	210	100%

Table 4.4 Credit registration bureau policies

		SD	D	N	A	SA	Mean	Std. Deviation
I have read all CRB policies	Frequency	1	45	29	94	41	3.61	1.04
	Percent	0.5	21.4	13.8	44.8	19.5		
I easily understand all CRB policies	Frequency	39	29	37	34	71	3.33	1.52
	Percent	18.6	13.8	17.6	16.2	33.8		
CRB policies are easy to comply with	Frequency	1	58	104	34	13	3	0.84
	Percent	0.5	27.6	49.5	16.2	6.2		
Its easy to access CRB policies	Frequency	3	21	1	129	56	4.02	0.9
	Percent	1.4	10	0.5	61.4	26.7		
CRB policies are fair and just	Frequency	1	1	30	69	109	4.35	0.78
	Percent	0.5	0.5	14.3	32.9	51.9		

4.1.3.4 Customer Borrowing Behavior

This section sought to establish customer borrowing behavior. Table 4.5 illustrates the results on customer borrowing behavior.

Table 4.5 Customer Borrowing Behavior

		SD	D	N	A	SA	Mean	Std. Deviation
I will borrow more loans from banks despite CRB	Frequency	69	37	22	34	48	2.79	1.59
	Percent	32.9	17.6	10.5	16.2	22.9		
I intend to borrow loans from banks in future	Frequency	10	23	45	82	50	3.66	1.1
	Percent	4.8	11	21.4	39	23.8		
Am contend with the loan i have borrowed from banks	Frequency	31	33	45	26	75	3.39	1.47
	Percent	14.8	15.7	21.4	12.4	35.7		
Given more opportunities i would not fear borrowing from banks because of CRB	Frequency	64	13	45	23	65	3.06	1.62
	Percent	30.5	6.2	21.4	11	31		

As evidenced in the table, 39% (82) of the respondents agreed that they intend to borrow loans from banks in future, 23.8% (50) strongly agreed, 21.4% (45) were neutral, 11% (23) disagreed and 4.8% (10) strongly disagreed (mean = 3.66, SD = 3.66).Further, 35.7% (75) of the respondents strongly agreed that they are contended with contend with the loan they have borrowed from banks,12.4% (26) of the respondents agreed,21.4% (45) were neutral,15.7% (33) disagreed and 14.8% (31) of the respondents strongly disagreed (mean = 3.39,SD = 1.47).Additionally,31% (65) of the respondents strongly agreed that if they are given more opportunities they would not fear borrowing from banks because of CRB,11% (23) agreed,21.4% (45) were neutral,6.2% (13) disagreed and 30.5% (64) of the respondents strongly disagreed (mean = 3.06, SD = 1.62).Finally, when the respondents were asked if they borrow more loans from banks despite CRB,16.2% (34) of the respondents agreed,22.9% (48) strongly agreed,10.5% (22) were neutral.17.6% (37) disagreed and 32.9% (69) of the respondents strongly disagreed (mean = 2.79, SD = 1.59).

4.1.4 General Descriptive Statistics

Table 4.6 General Descriptive Statistics

	Mean	Std. Deviation	Skewness	Kurtosis
Customer borrowing behavior	3.2226	0.86161	-0.138	-0.432
CRB awareness	3.4048	0.56472	-0.003	-0.602
CRB perceived benefits	3.3000	0.75273	-0.545	0.064
CRB policy	3.4057	0.88926	-1.42	1.598

As indicated in Table 4.6, customer borrowing behavior, CRB awareness, CRB perceived benefits and CRB policy summed up to a mean and standard deviation (customer borrowing behavior 3.226 and .86161, CRB awareness 3.4048 and .56472, CRB perceived benefits 3.3 and .75273 and CRB policy 3.4057 and .88926) respectively.

4.1.5 Factor analysis

Table 4.7 shows the factor loading for each item, they are sorted by size. Any item that fails to meet the criteria of having a factor loading value greater than 0.5 and loads on one and only one factor is dropped from the study (Liao et al., 2007; Toh Tsu Wei et al, 2008).

The study requested that all loading less than 0.5 be suppressed in the output, hence providing blank spaces for many of the loadings. Thus from the findings all values for all the factors were more than 0.5 reflecting the accepted value of factor loading.

Table 4.7 Factor analysis

	XI	X2	X3	Y
CRB awareness				
The bank provide us with credit registration bureau after getting loan from them	0.898			
The bank has provided with trainings on use and importance of credit registration bureau	0.937			
I have read many articles regarding credit registration bureau in other countries	0.954			
The bank adequately encourages us to share information on credit registration bureau with friends, working colleges , my families among others	0.894			
I believe i can be able to explain to someone else what is credit registration bureau	0.944			
Information regarding credit registration bureau is easily accessible from the bank	0.900			
CRB perceived benefits				
I perceive credit registration bureau to help me in being credit worthy.		0.894		
It will help me to make better credit decisions		0.972		
credit registration bureau assist with clearance report crediting me as worthy to be employed		0.816		
credit registration bureau always offers more flexibility in granting credit to borrowers		0.821		
P ay my loans promptly to avoid defaulting and information given to credit registration bureau		0.944		
CRB policy				
I have read all CRB policies			0.788	
I easily understand all CRB policies			0.973	
CRB policies are easy to comply with			0.931	
Its easy to access CRB policies			0.926	
CRB policies are fair and just			0.95	
customer borrowing behavior				
I will borrow more loans from banks despite CRB				0.974
I intend to borrow loans from banks in future				0.46
Am contend with the loan i have borrowed from banks				0.913
Given more opportunities i would not fear borrowing from banks because of CRB				0.909
KMO and Bartlett's Test				
Bartlett's Test of Sphericity	6318.188			
p value	0.000			

4.1.6 Correlation statistics

Pearson's product moment correlation analysis was used to assess the relationship between the variables. Correlation results are presented in table 4.8.Correlations results in table 4.8 showed that CRB awareness was positively and significantly correlated with customer borrowing behavior ($r=0.331$, $\rho<0.01$). Therefore, CRB awareness explains 33.1% of the variation in customer borrowing behavior. Further, CRB perceived benefits was also positively associated with customer borrowing behavior ($r=0.525$, $\rho<0.01$) hence it contributes about 52.5% of the variation in customer borrowing behavior.

Finally, CRB policy was positively and significantly correlated with customer borrowing behavior ($r= -0.335$, $\rho<0.01$) an evidence of 33.5% negative relationship with customer borrowing behavior. From the foregoing, all the factors were significant with CRB perceived benefits being the most significant factor followed by CRB awareness then CRB policy.

Table 4.8 Correlation statistics

		Customer borrowing behavior	CRB awareness	CRB perceived benefits	CRB policy
Customer borrowing behavior	Pearson Correlation	1			
	Sig. (2-tailed)	1			
CRB awareness	Pearson Correlation	.331**	1		
	Sig. (2-tailed)	0.000			
CRB perceived benefits	Pearson Correlation	.525**	0.108	1	
	Sig. (2-tailed)	0.000	0.117		
CRB policy	Pearson Correlation	-.335**	.136*	-.243**	1
	Sig. (2-tailed)	0.000	0.048	0.000	

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

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

4.1.7 Regression model

Table 4.9 illustrates the model summary for the regression model. Coefficient of determination explains the extent to which changes in the dependent variable can be explained by the change in the independent variables or the percentage of variation in the dependent variable (customer borrowing behavior) that is explained by all the three independent variables (CRB policy, CRB awareness and CRB perceived benefits). The three independent variables that were studied, explain 42.2% of the variation in customer borrowing behavior as represented by the R^2.

Table 4.9 Model summary

R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
.650a	0.422	0.414	0.65972	2.053

a Predictors: (Constant), CRB policy, CRB awareness, CRB perceived benefits

b Dependent Variable: customer borrowing behavior

The model summary indicated that about 42.2% of the data could be accounted for in the regression model (R = 0. 650).

4.1.8 Test of goodness of fit

The study used ANOVA to test the relationships since ANOVA removes some of the random variability so that significant differences can be found more easily and also helps to look at interactions between factors. The significance value is 0.000 which is less than 0.05 and the F critical (value = 50.161) thus the model is statistically significance in predicting customer borrowing behavior.

Table 4.10 ANOVA

	Sum of Squares	Df	Mean Square	F	Sig.
Regression	65.496	3	21.832	50.161	.000
Residual	89.659	206	0.435		
Total	155.155	209			

a Dependent Variable: customer borrowing behavior b Predictors: (Constant), CRB policy, CRB awareness, CRB perceived benefits

4.1.9 Test of Hypothesis

Multiple regression analysis was conducted so as to determine the relationship between customer borrowing behavior and the three variables. The regression equation becomes: **Customer borrowing behavior** = (0.857) +X_1 (0.323) + X_2 (0.423) -X_3(0.276) +e

According to the regression equation, taking all factors into account (CRB policy, CRB awareness and CRB perceived benefits) constant will be 0.857. Hypothesis testing is based on standardized coefficients beta and p-value to test whether the hypotheses are rejected or not.

Hypothesis 1

$H_{01:}$ There is no significant relationship between awareness of CRB and customer borrowing behaviour

The results of multiple regressions, as presented in table 4.11 revealed that CRB awareness has a positive and significant effect on customer borrowing behaviour with a beta value of $\beta 1 = 0.323$ (p-value = 0.000 which is less than $\alpha = 0.05$). Therefore, the researcher rejects the null hypothesis and it is accepted that for each unit increase in CRB awareness, there is 0.323 unit increase in customer borrowing behaviour. Also, the effect of CRB awareness was stated by the t-test value = 5.98 which implies that the standard error associated with the parameter is less than the effect of the parameter.

Hypothesis 2

$H_{02:}$ There is no significant relationship between Perceived benefit of CRB and customer borrowing behaviour.

The results of table 4.11 showed that the standardized coefficient beta and p value of perceived benefit of CRB were positive and significant (beta = 0.423, $p < 0.05$). Thus, the researcher rejects the null hypothesis and it is accepted that, perceived benefit of CRB has a positive and significant effect on customer borrowing behaviour. Also, for each unit increase in perceived benefit of CRB, there is 0.423 unit increase in customer borrowing behaviour. The effect of customer borrowing behaviour is shown by the t-test value of 7.667 which implies that the effect of perceived benefit of CRB surpasses that of the error by over 7 times.

Hypothesis 3

$H_{03:}$ There is no significant relationship between CRB policy and customer borrowing Behaviour

As shown in table 4.11, p-value is significant ($p < 0.05$), and the beta value of CRB policy was negative (beta = -0.276). Therefore, the researcher rejects the null hypothesis and concludes that CRB policy has a negative and significant effect on customer borrowing behaviour. Consequently, for each unit increase in CRB policy, there is 0.276 unit decrease in customer borrowing behaviour. Finally, the effect of CRB policy is shown by the t-test value of -4.989 which implies that the effect of CRB policy surpasses that of the error.

Table 4.11 Test of Hypothesis

	Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
	B	Std. Error	Beta	t	Sig.	Tolerance	VIF
(Constant)	0.857	0.378		2.264	0.025		
CRB awareness	0.493	0.082	0.323	5.98	0.000	0.96	1.042
CRB perceived benefits	0.484	0.063	0.423	7.667	0.000	0.921	1.086
CRB policy	-0.268	0.054	-0.276	-4.989	0.000	0.914	1.094

a Dependent Variable: customer borrowing behavior

4.2 Interpretation of the Findings

The findings show that majority of the respondents were above 26 years and thus were considered mature and therefore beneficial to the study as they would give reliable information as sought by the study. Also, the respondents in this study had high level of academic qualification and thus were considered ideal in this study as they would be relied upon to give informed opinion as sought by the study. Since majority of the customers have been served by the bank for over 5 years, it implies that they are an informed group of customers hence likely to be reliable and valid.

Further findings show that the bank has encouraged the customers to share information on credit registration bureau with their families, friends as well as working colleagues. As a result, valid information regarding credit registration bureau is easily accessible from the bank.

The customers have a knowledge on credit registration bureau hence they are able to explain it to others. However, there was doubt if there was a credit registration bureau provided by the bank after getting a loan, training on its use and importance.

It has also helped customers in being credit worthy and making better credit decisions. CRB helps identify defaulters in terms of credit history and obligations thereby created an avenue for banks to determine if their customers are worthy to be employed. However, it has not been fully established if the customers pay their loans promptly.

In general, CRB policies are fair and just and easy to access. The customers have read all CRB policies though they are not sure if they easily understand all the CRB policies and if the policies are easy to comply with. Finally, all the factors had a significant p-value ($p<0.01$) at 99% confidence level. The significance values for CRB policy, CRB awareness and CRB perceived benefits were -0.335, 0.331and 0.525 respectively. This indicated that all the factors were significant with CRB perceived benefits being the most significant factor followed by CRB awareness then CRB policy.

4.3 Discussion of the Findings

The study has shown that CRB policy has a positive and significant effect on customer borrowing behavior as evidenced by $\beta 1 = 0.323$ (p-value = 0.000 which is less than $\alpha = 0.05$).Consistent with the findings, Becket al, (2004) study revealed that banks require reporting and reviewing policies so as to as to ensure that risks are easily identified, assessed and that appropriate measures are in place to favor customer borrowing behaviour. In with the results of the study, Al-Tamimi's, (2007) study on bank risk management that codes of conduct that cover what CRBs and their clients can do enable customers to come up with an effective way of repaying the money that they have borrowed. From the foregoing, it is clear that CRB policy has reduced loan and has aided in the lending and borrowing process.

Further, the study has also established that CRB awareness has a positive and significant effect on customer borrowing behavior based on $\beta 2= 0.423$ (p-value = 0.000 which is less than $\alpha = 0.05$).Cognate to the results, Anderson, (2003) echoes that awareness creation enables the credit providers to submit information about their borrowers to a credit reference Bureau making it possible for the credit providers

to understand how the borrowers repay their loan. In so doing, customers have a lot of information about the CRBs hence they can effectively manage their borrowing behaviors.
In a similar vein, Bessis, (2003) opines that awareness creation enables borrowers to have knowledge of how the borrowing system works hence improving consumer borrowing behaviour. Further support to the study is by Binner, (2005) who asserts that awareness creation enables customers to rely on information that is true and valid thus improving their borrowing behaviour.

Finally, CRB perceived benefits has a negative and significant effect on customer borrowing behavior as shown by $\beta3 = -0.276$ (p-value = 0.000 which is less than $\alpha = 0.05$).Contrary to the results, Armstrong, (2008) opines that the existence of credit registries is associated with increased lending volume and growth of consumer lending which in turn improves the access to financing and a more stable banking sector. This is due to the fact that CRB enables the credit providers to sort out prospective borrowers who have defaulted with other lenders. This infers that CRB provides credit reports that include both positive and negative information that help build or destroy borrower’s reputation (Bessis, 2003).According to Pearce (2005),CRB improves the credit access for the poorest borrowers through the information provided for by the annual reports. As opposed to the findings of the study, Levine (2004) argues that CRB has enhanced microcredit extension in Kenya making it possible for low-income clients to have access to formal banking.

Findings

5.1 Summary of the Findings

The study indicates that majority of the respondents had a customer-bank experience for more than 5 years. Majority of the customers were above 26 years of age with most of them between 26 and 30 years. It was also established that majority of them had at least a Bachelor‘s degree. According to the study, the bank has encouraged its customers to share information on credit registration bureaus. However, there was doubt whether customers are able to explain to others about credit registration bureau. Similarly, it was not fully established whether the bank provides its customers with information on credit registration bureau after getting a loan. Additionally, the customers have not read many articles regarding credit registration bureau.

Further findings indicated that the credit registration bureau always offers more flexibility in granting credit to borrowers. As such, the credit reference bureau is of benefit to banks since it helps them to make better credit decisions.

As much as most of the respondents affirmed that the credit registration bureau assists banks to identify the customers to lend money, not all of the customers were in agreement with this assertion. Finally, the findings of the study revealed that CRB policies are fair and just. Further, the CRB policies are easy to access hence the customers have read all CRB polices though they are not sure if they have understood all the CRB policies and whether the policies are easy to comply with. The study also established that there is a linkage between the factors and customers borrowing behaviour with CRB perceived benefits having the highest value and CRB having the lowest value. From the regression analysis the following regression equation was formulated; $Y = (0.857) + X_1\ (0.323) + X_2\ (0.423) - X_3(0.276) + e$. At 5% level of significance and 95% level of confidence, the most significant factor is CRB perceived benefits followed by CRB awareness then CRB policy.

5.3 Conclusion

There is overwhelming evidence from the study indicating that CRB awareness contributes significantly to customer borrowing behaviour. Precisely, awareness on CRB assists banks to avoid bad clients and have the capacity to pay off their present and future borrowers. Further, CRB perceived benefit has a positive and significant influence on customer borrowing behaviour. It is evident that CRB has enabled effective risk identification and monitoring. As a result, there is flexibility in granting credit to borrowers. It has also helped to identify defaulters in terms of credit history and obligations hence instilling a culture of financial discipline and enabling banks to make better credit decisions. Finally, the study has established that the policies on CRB allow for provision of financial services to low-income earners who have no access to formal banking. Besides, the policies are easy to access though majority of customers are unaware.

5.4 Recommendations

Based on the findings of this research the following recommendations will be useful to stakeholders.

1. Since CRB awareness has a positive influence on customer borrowing behaviour, there is need for credit bureaus to strive to provide credit reports with information that is complete and accurate. CRB should be made easily accessible so that clients can be able to share its information by others through banks.

2. Perceived benefit of CRB is a key in enhancing customer borrowing behaviour. It is necessary for banks to embrace CRB since through it; there is flexibility in granting credit to borrowers, identification and monitoring of defaulters in terms of credit history and obligations.
3. Finally, CRB policy has an influence on consumer borrowing behaviour. Therefore, these policies should incorporate credit investigation and background checks as part of their policies to help decide whether the creditor is capable of repaying the loan, and they need to be fair and just and easy to understand.

5.5 Recommendations for Further Studies

This study has looked at the effect of credit registration bureau on customer borrowing behaviour. This study recommends that more study should be done on the effect monetary policies have on borrowing behavior for the consumer.

Further, to augment the research finding of this study, the study recommends that another research on customer borrowing behaviour be done but include all credit providers namely; micro finance institutions,

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