International Journal of Economics, Commerce and Management
United Kingdom Vol. V, Issue 10, October 2017
http://ijecm.co.uk/ ISSN 2348 0386

THE DETERRENT EFFECT OF CREDIT REFERENCE BUREAU AS A COMPLIANCE MEASURE ON HIGHER EDUCATION LOAN RECOVERY IN KENYA

Kiplimo Sirma
PhD Student, School of Business and Economics, Kabarak University, Kabarak, Kenya
kiplimosirma@gmail.com

Paul Muoki Nzioki
Lecturer, School of Business, Laikipia University, Nyahururu, Kenya
muokih@yahoo.com; muokih@gmail.com

Clifford Machogu
Lecturer, of School of Business Murang'a University, Murang'a, Kenya
cgm4@rediffmail.com

Adam Shisia
Lecturer, School of Business and Economics, Machakos University, Machakos, Kenya
adamshisia@gmail.com

Abstract

This study set out to examine the deterrent effects of loan compliance measures on higher education loan recovery in Kenya through credit reference bureau (CRB). More specifically, the study sought to analyze the deterrent effects of credit reference bureau as a loan compliance measure on higher education loan recovery in Kenya. The study reviewed literature pertinent to the study problem covering the theoretical, empirical literature and conceptual framework. The study was premised on the deterrence theory. The study adopted both descriptive and longitudinal study designs. Primary data used structured questionnaires to collect data from ex-students who finished their undergraduate studies from both public and private universities in Kenya between 2009 to 2015. The secondary data was sourced through documentary analysis *of annual HELB reports and the World Bank database portfolio for loans recovery rate statistics. Linear Multiple Regression and correlation analysis was used in the data analysis. Both descriptive and inferential analysis was conducted. Findings indicated that there exists a statistically significant association between CRB listing and loan recovery. The study concluded that CRB listing policy has been significantly effective in driving up compliance with HELB loan repayment and therefore has significantly contributed to HELB loan recovery in the country. The study therefore recommends that HELB should explore this preventive measure as it is the most effective loan default deterrent and very effective compliance measure on higher education loan recovery in Kenya.*

Keywords: Loan Compliance Measure, Credit Reference Bureau, Loan Recovery, Higher Loans Board, Kenya

INTRODUCTION

A flourishing economic development significantly relies on human capital as a key investment. In this regard, a considerable amount of resources ought to be channeled to higher education (Ngali, 2013). Student loan schemes in higher education have been established in over 60 countries across the globe since 1940s (Ionescu, 2011). Among other countries, the students' loan schemes are widely applied in the United States of America, China, Australia, Japan, the United Kingdom, Chile and Singapore as a mechanism for funding higher education (Kesterman, 2013; Ionescu, 2011; Mohammed, 2015).

In Kenya, the Higher Education Loans Board (HELB) is as established by an act of parliament, the Higher Education Loans Board Act, 1995 as the main institution that both lends loans to students and recovers the same when beneficiaries are through with their education, (Koch, 2012; Kimani, 2011). This is effected through soliciting lending funds, loan disbursement, scholarships and bursaries and mature loan recovery in order to establish a revolving fund to lend to disadvantaged students. The performance of HELB in terms of recovery of loan has been growing at a slow rate with the performing loans standing at 57% in 2013 (HELB, 2014).

To recover the non-performing loans, HELB has instituted a variety of measures with a view to discourage defaulting and compel loan beneficiaries to repay their loans. These include the decision to forward the accounts in default to the Credit Reference Bureau (CRB), licensed and regulated by the Central Bank of Kenya under The Banking (Credit Reference Bureau) Act 2008; establishment of a monthly default penalty; and issuance of clearance certificates for fully complied higher education loan beneficiaries (Ringera, 2014). HELB has also partnered with other financial institutions to share credit-worthiness of those who have failed to repay their due loans (Kilonzo, 2012).

HELB is in partnership with the CRB where the institution forwards the loan accounts in default for blacklisting. The institution has also approached the employers to deduct the money for direct payment (Kipkech, 2011). CRB collects and syndicates credit information on persons from various sources and provide a credit report to lending institutions. Currently, there are only two credit reference bureaus licensed in Kenya that is Metropol Credit Reference Bureau Limited licensed on 11th April 2011 and Credit Reference Bureau Africa Limited licensed on 9th February 2010.

Further, loan accounts in failure to pay attracts penalties of Ksh5,000 per month. According to section 15 (1) and (2) of the Higher Education Loans Board Act beneficiaries of the loan should commence repaying the loan, one year after finishing their studies. Failure to meet the terms is an offence that attracts the fine. HELB has thus been imposing a penalty of Kshs 5,000 per month on all loan beneficiaries who fail to service the loan every month after the said one year. This is effected whether one has commenced repaying or not (Ngali, 2013).

As another deterrent measure, since the enactment of the 2010 Constitution, one is required to present a clearance certificate from HELB in order to qualify for a government job. To this end, HELB issues a clearance certificate to a loanee who has completed loan repayment (Ringera, 2014). Ringera (2014) however admits that among the most challenging factors inhibiting smoother loan recovery is the high level of unemployment.

Purpose of the Study

The deterrent effect of credit reference bureau as a compliance measure on higher education loan recovery in Kenya

THEORETICAL REVIEW

Various theories and models underpin the understanding of the relationship between the main variables underpinning the present study, that is, loan recovery and credit reference bureau. Deterrence and fiscal psychology theory is of particular relevance to this study.

Deterrence Theory and Loan Compliance Measures

The deterrence theory is attributed to the early seminal works of classical philosophers including Cesare Beccaria (1738–1794), Jeremy Bentham (1748–1832) and Thomas Hobbes (1588–1678). Together, the foregoing theorists complained against the legislative policies that were dominant in European thought for over a thousand years, as well as against the spiritualistic accounts of criminal acts on which they were commonly attributed to. Further, in addition to the foregoing complaints, these social philosophers offered the basis for modern deterrence theory in criminology (Abrams, 2012; Ronald and Christine, 2010; Alfred et al., 1978).

Deterrence theory is grounded on the foundation that the indispensable rationale of the criminal justice system is to discourage perpetrators from indulging in crime (Ronald and Christine, 2010). With a view to address this objective, the establishments would increase the severity of law, policy, and extra-legal prohibitions to raise the risks related to correction for crime (Valerie, 2010). In non-compliance with respect to loan repayment for instance, among the measures taken would be to increase the severity of compliance laws in the event of defaulting, in order to deter perpetrators from non-compliance and motivate them to repay.

Accordingly, Franklin et al. (1973) opines that the authorities may, according to deterrence theory, realize lower criminal activity rates via displaying greater repercussions to indulging in a given criminal activity than the conceivable benefits that may be realized. This is premised founded on the argument that acting rationally, human beings would prefer pleasure as opposed to pain, when it comes to making a determination of whether to commit a certain act or not, the individual would consider the pain that would be consequential related to punishment vis a vis the pleasure related to freedom, good repute in the society and financial comfort thus decide not to indulge in the said act (Ronald and Christine, 2010).

Deterrence happens in two broad forms, that is general and specific deterrence. The former inhibits members of the public from indulging in a given crime from observation of the penalties of the committer's actions (Mohammed, 2015). The latter on the other hand specific discourages the committer from indulging in a comparable crime in the future, by demonstrating to the person the repercussions of their actions (Alfred et al., 1978). As such, premised on this theory, an efficacious criminal justice system can be said to be one which guarantees to both the public and the individual that partaking in undesirable activities will lead to adverse penalties which ought to be circumvented by one and all. In the present context for instance, by taking punitive actions against HELB loan defaulters, the current beneficiaries will work at ensuring they avoid the penalties by ensuring that they repay the loan in time.

Attributed to the work of Hobbes, Beccaria, and Bentham, the theory of deterrence relies on three individual components: celerity, certainty and severity (Akers, 2000). The more undecorated a reprimand, it is perceived, the higher the likelihood that a reasonably calculating individual will discontinue criminal acts. Therefore, in order to deter crime, penalties ought to be underscored by criminal law so as to encourage the citizenry to abide by the law (Moyer, 2001). Chastisement that is too undecorated is unwarranted, and reprimand that is not undecorated enough will not dissuade offenders from committing criminal activities. Inevitability of reprimand simply translates to making sure that retribution takes place every time a crime is committed (Jacoby, 1994).

Classical theorists' case in point Beccaria holds the view that if persons are aware that their detrimental acts will face reprimand, they will desist from committing criminal activities in the future (Beccaria, 1963). Further, their chastisement ought to ought to be immediate so as to discourage crime. The nearer the application of retribution is to the perpetration of the wrongdoing, the superior the probability that lawbreakers will appreciate that lawbreaking does not reward. In other words, deterrence theorists hold the school of thought that if retribution is undecorated, swift, and certain; a rational person will weigh the advantages and disadvantages prior to engaging in misconduct and will be dissuaded from profaning the law if the cost is greater as compared to the advantage (Moyer, 2001).

According to the Hobbesian school of thought, persons commonly go after their self-centered interests, such as personal safety, material gain and social reputation, and gain adversaries without consideration if they hurt others in the process of their wrong-doing (Nagin, 1998). Because persons are strong-minded to achieve their self-centered interests, the consequence is often times resistance and conflict absent an appropriate government to uphold safety. Hobbes also argued that human beings are sensible enough to appreciate that the self-centered interest nature of persons would lead to inevitable conflict and crime owing to the exclusion and alienation of some members of the general public. In order to counter this, persons come to an agreement to give up their own self-interests so long as every person does the same thing in unison (Vold et al., 2002).

If the singular determination of chastisement is to deter dissuade crime in the society, Beccaria (1963) is of the opinion that penalties are undeserved when their ruthlessness go beyond what is obligatory to attain deterrence. Because persons are realistically self-centered, they will not conduct crimes if the consequences of indulging in crimes overcome the positive attributes of indulging in detrimental acts. Unnecessary strictness will not diminish delinquency, meaning that it will only intensify crime. According to Beccaria's, certain and swift and penalty are the best ways through which crimes can be controlled and deterred; castigation for any other purpose is erratic, unnecessary, and brutal.

According to Bentham (1948), human nature has positioned human beings under the domination of two autonomous controllers, pleasure and pain. Bentham held the view that morals are that which encourage the greatest contentment of the highest number, a phrase which Beccaria agreed to (Moyer, 2001). In Bentham's view, the duty of the state was to encourage the contentment of the members of the public, by rewarding and punishing (Bentham, 1948). He also, maintained, noting that all chastisement is mischief, that all punishments, per se, are malevolent unless penalty is used to avoid greater malice, or to regulate the deed of the lawbreakers. In other words, the purpose of the law is to broaden the contentment of the people by decreasing the agony and aggregating the desire and of the public. Chastisement, in addition to what is indispensable to dissuade persons from profaning the law, is unwarranted (Moyer, 2001).

Notwithstanding several empirical studies consuming a variety of statistical methods, data sources, crime types, sanctions, and theoretical approaches, there exists little consensus in the empirical literature about whether, to what extent, how, at what cost, under what circumstances, for which crimes, for which persons, and perchance most significantly, in what direction do different aspects of present-day criminal authorizations affect succeeding criminal actions. There are wide-ranging evaluations of this literature with to some extent conflicting reviews (Zimring et al., 1973; Blumstein et al., 1978; Paternoster, 1987).

Some studies have revealed that aggregating the strictness of a penalty does not significantly dissuade crime, while aggregating the inevitability of chastisement does have a significant restraining effect (Abrams, 2012). Undoubtedly, augmenting the ruthlessness of reprimand will have diminutive influence on persons who doubt they will be detained for their criminal activities. Likewise, augmenting the inevitability of chastisement will have diminutive influence on persons who doubt that the prohibitions to be enforced will be undecorated. The use of substantial chastisement has been labelled as "the slightest effective and fair principle of penalizing (Martin, 2005).

In the present study, the theory will be used to understand how the loan compliance measures including credit reference bureau, monthly default penalties and clearance certificate imposed by HELB on the defaulters act as deterrence for potential defaulters and motivate beneficiaries to pay their loans.

EMPIRICAL LITERATURE REVIEW

Credit Reference Bureau and Higher Education Loan Recovery

In a study to assess the causes of student loan recovery in institutions funding, taking a case study of HELB, according to Kimani (2011), there is scarce literature focusing on lending of educational loans as a majority of the available literature is mainly focused on the commercial banking sector. The study concluded that among other factors contributing to poor loan recovery by HELB include high graduate unemployment rates and a lack of adequate cooperation by employers especially in the private sector.

In a study on factors associated to student failure to repay their higher education loans among different ethnic and racial groups, Volkwein and Cabrera (2013) offer that studies of nonpayers reveal that only two thirds of ex-students make loan repayments since the documented failure to pay first happened. Not only did 66% resume payment, but 31% completed payment. Volkwein and Cabrera (2013) associated the failure to pay with employability of ex-students, adding that a majority of those who possessed higher employability attributes reported having repaid their loans.

Monteverde (2010), in a study on mitigating student loan failure to pay risk found that failure to pay is primarily associated with potential loan beneficiary ability and willingness to settle their loans, and not to any measures taken by the institution in this respect. Results obtained from both the quantitative techniques and the qualitative including interviews with staff, students and faculty reveal that learners have certain features independent from the colleges and universities that lead to their loan defaulting, including displeasure with the learning institution as well as their attitude towards default and debt.

Mounting empirical literature is in support of the assertion that credit information sharing increases effective credit risk management. Founded on a 43 country survey of credit reporting, Jappelli and Pagano (2002) reveal that lending institutions' awarding of loans is greater and with lower default rates in countries whose information sharing is extensive and more solidly established. These cross-sectional relationships continue even after controlling for other institutional and economic and factors of lending institution lending, such as GDP, country size, and growth rate.

In a study that involved scrutinizing large companies' balance sheet data in 23 countries, Galindo and Miller (2001) also offer evidence that loan constraints at firm level are significantly reduced by credit referencing. A positive relation was revealed between an information sharing index and credit access. Doblas-Madrid and Minetti (2009) found in their study that when lending financial institutions engage credit referencing institutions, their potential loan beneficiaries significantly enhances their repayment performance as defaulting payments on loans and leases decline.

According to Getenga (2007), one of the attributes that lending institutions consider when determining on loan advancement is the projected likelihoods of repayment. To this end, the lending institutions check with credit reference bureaus to obtain credit information on how well the potential loan beneficiaries has honored past loan commitments. Kalberg and Udell (2003) also put across that information exchange with credit reference bureaus enhances the accuracy of the indication about the credit worthiness of the potential loan beneficiary. In return, the default rate decreases.

METHODOLOGY

Research Design

The study design was multivariate in nature, incorporating both descriptive and longitudinal study designs. The descriptive research design was employed since the study attempts to explore ideas with a view to understand cause and effect, which in the present study involves determining whether significant associations exist between the conceptualized variables namely loan compliance measures and loan recovery as stated in the hypotheses. The longitudinal approach was applicable since the study sought to study a particular cohort over specified time periods.

Population of the study

The population of this study comprised of Higher Education Loans Board beneficiaries who have either cleared their loan repayment or are now servicing the same (HELB, 2016). The information used was loans recovery collections data and monthly default penalty data. The target population was a total of 272,701 beneficiaries who have either cleared their loan repayment or are now servicing the same (HELB, 2016).

Sample and Sampling Procedure

Owing to the anticipated large number of ex-undergraduate university students, the study employed the Fisher *et al* (1983) formula for determining sample sizes in populations and arrived at sample size of 384 ex-undergraduate university students across the country. The individual respondents were selected by use of stratified sampling and convenience sampling. The strata comprised of the formally employed and the non-formally employed sample populations based in Nairobi County as it harbors Kenyans from all over the country.

Data Collection

The study used both primary and secondary data. Secondary data was sourced from the Manager, Loan Repayment & Recovery Department and the World Bank database portfolio for loans recovery collections and monthly default penalty data and whereas primary data was sourced the use of structured questionnaires from the former student population.

Reliability and Validity of Data Collection Instruments

The present study performed content validity testing which consisted of consulting with the university supervisors who gave their feedback on the extent to which the indicators correctly represent the concept of the study.

To measure of internal consistency, Cronbach alpha was used to test the internal reliability whose result was .07 and was deemed an acceptable reliability coefficient to measure the instrument.

Data Analysis

Data was analyzed using SPSS software which included both descriptive analysis as well as inferential analysis. Descriptive analysis entailed frequencies and percentages as well as means and standard deviations as measures of central tendencies and dispersion respectively. Inferential analysis was done to determine the hypothesized relationships and test the hypotheses of the study.

Pearson correlation was used to check for the nature and significance of associations between the hypothesized relationships while linear regression analysis was used to assess the strength of the relationships between the specified variables. The regression analysis model is shown below:

$Y = \alpha + \beta_1 CRB + \varepsilon$

Where:

Y = Higher Education Loan Recovery

α is the y-intercept or model coefficient;

β_1 is the coefficient of the independent variables;

CRB= Credit reference bureau

ε is the error term established from heteroscadiscity test.

FINDINGS

Descriptive Statistics for CRB Listing

The study sought to analyze the impact of deterrent effects of credit reference bureau on higher education loan recovery. To this end, respondents were asked to respond to pertinent statements posed by indicating the level at which they agreed with the same, as applied in their respective cases. Responses were given on a five-point Likert scale (where 1= Strongly Disagree; 2 = Disagree; 3 = Neutral; 4 = Agree; 5 = Strongly Agree). The mean scores of 0 to 2.5 have been taken to represent statements dissented upon by a majority of respondents while mean scores of between 2.6 to 5.0 have been taken to represent statements agreed upon by a majority of respondents. The strengths in disagreement or agreement is represented by the respective strengths of the mean scores, descending for disagreement and ascending for agreement. Table 1 presents the findings.

Table 1. Descriptive Statistics for Deterrent Effects of Credit Reference Bureau

	N	Mean	Std. Dev	Skewness; S.E = .141	Kurtosis; S.E = .282
Has denied me an opportunity to get a loan from other financial institutions	297	1.92	.925	.980	.722
Motivates (d) me to pay my HELB loan	297	3.49	1.000	-.650	.234
Motivates (d) me to get a job to pay my HELB loan	297	3.37	1.098	-.659	-.272
Motivates (d) me to channel some funds towards paying my HELB loan	297	3.49	1.010	-1.036	.533
Motivates (d) me to source for funds to pay my HELB loan	297	3.33	.993	-.521	-.300
Motivates (d) me to save enough to pay my HELB loan	297	3.32	1.098	-.406	-.486
Is the sole reason why I pay/paid my HELB loan	297	2.29	.996	.626	-.166
Is the sole reason why I intend to pay my HELB loan	297	2.24	1.049	.914	.392

As presented in table 1, a majority of respondents agrees that the credit reference bureau listing has either motivated or motivates them to pay their HELB loan (3.49); to channel some funds towards paying their HELB loan (3.49); to get a job to pay their HELB loan (3.37); to source for funds to pay their HELB loan (3.33); and to save enough to pay their HELB loan (3.32). A majority however dissented that credit reference bureau listing has denied them an opportunity to get a loan from other financial institutions (1.92); is the sole reason why they intend to pay their HELB loan (2.24); and that it is the sole reason why they pay or have paid their HELB loan (2.29). As observed in the descriptive statistics, all the variables were normally and moderately normally distributed.

Inferential statistics for CRB Listing

Logistic Regression

The study sought to test four null hypotheses: Credit reference bureau does not have statistically significant deterrent effect on higher education loan recovery in Kenya. To test the hypotheses, the study performed a binary logistic regression. This was necessitated by the categorical dependent variable that is whether respondents had either paid or were paying their

HELB loans or not, as a measure of loan recovery. This was responded to as either yes or no. The logistic regression analysis produced the omnibus tests of model coefficients, a model summary, the Hosmer and Lemeshow Test as well as the coefficient of variables in the equation. The following logit multiple regression model was used:

$Y = \alpha + \beta_1 CRB + \varepsilon$

Whereby:

Y = Higher Education Loan Recovery

α is the y-intercept or model coefficient;

β_1 are the coefficients of the independent variables;

CRB= Credit reference bureau

ε is the error term established from heteroscadiscity test

Table 2. Logit Regression

Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
Step 1	Step	62.791	4	.000
	Block	62.791	4	.000
	Model	62.791	4	.000

Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	160.257[a]	.191	.361

a. Estimation terminated at iteration number 6 because parameter estimates changed by less than .001.

Hosmer and Lemeshow Test

Step	Chi-square	df	Sig.
1	54.725	8	.000

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1[a]	CRB listing	0.126	0.051	6.257	1	0.012	1.135

a. Variable(s) entered on step 1: Credit reference bureau listing.

As table 2 details, the omnibus tests of model coefficients reveals a Model Chi-square value of 62.791 with a P value of .000 which is statistically significant both at 99% confidence interval (0.01) and 95.0% confidence interval (0.05). This implies that the data fits well in the model and there exists linear dependence between the dependent (loan recovery) and the explanatory variable that is credit reference bureau listing. The model summary further shows that the model has a considerable explanatory value. It was established from the summary that the predictor, that is credit reference bureau listing explain between 19.1% (Cox & Snell R Square) and 36.1% (Nagelkerke R Square) of the variation in loan recovery. The remaining percentage is explained by other factors not included in the model. The Hosmer and Lemeshow Test further reveals the overall fit of the model. The P value of .000 implies that the model is statistically significant can be relied upon to project a linear association between the dependent (loan recovery) variable and the explanatory variables that is credit reference bureau listing.

The analysis further reveals both positive and negative Beta coefficients. The analysis particularly revealed that a unit increase in CRB listing would lead to a .126 unit increase in probability of HELB loanees falling into the target group, that is of those who have either fully paid their loans or are in the process of servicing the same. The statistic is statistically significant with a P value of .012 < .05 implying that there exists a statistically significant association between CRB listing and loan recovery. T

he study thus fails to accept the first null hypothesis of the study that states that credit reference bureau does not have statistically significant deterrent effect on higher education loan recovery in Kenya (H_{01}). The study therefore accepts the alternative hypothesis that credit reference bureau has a statistically significant deterrent effect on higher education loan recovery in Kenya.

CONCLUSION

The study concluded that CRB listing policy has been significantly effective in driving up compliance with HELB loan repayment since its introduction and therefore has significantly contributed to HELB loan recovery in the country. This is so, considering the secondary effects of CRB listing which denies the affected, access to other loan facilities from commercial banks and other financial institutions. In this regard, credit reference bureau listing has either motivated or motivates them to among other things, pay their HELB loan; channel some funds towards paying their HELB loan; get a job to pay their HELB loan; source for funds to pay their HELB loan; as well as to save enough to pay their HELB loan.

RECOMMENDATIONS

The study has established statistically significant associations between CRB listing, monthly default penalty and unemployment rates and loan recovery in Kenya. It is in light of these findings that the following recommendations are made. Given that investment in higher education involves risks emanating from uncertainty in student abilities and future jobs, which in turn leads to a human capital bias due to the lack of credit rating mechanisms for students and collateral, the private lending sector is unlikely to alleviate the plight of higher education financing anytime soon. Thus it is necessary for HELB to maintain CRB listing and monthly default penalty as key preventive mechanisms that mitigate against default behavior and thereby improve upon recovery efficiency. In the absence of student credit rating and collateral, it will be important for HELB to explore the foregoing preventive measures as most of the factors that contribute to default as per the study are inevitable on the part of the beneficiaries as most of it happens to be part of the natural growth of the individuals and increasing unemployment rates.

REFERENCES

Abrams, D. S. (2012). Estimating the Deterrent Effect of Incarceration Using Sentencing Enhancements. American Economic Journal: Applied Economics. 4 (4): 32–56

Akers, R. L. (2000). Criminological theories. Los Angeles: Roxbury.

Alfred, B., Jacqueline, C. & Daniel, N. (1978). Deterrence and Incapacitation: Estimating the Effects of Criminal Sanctions on Crime Rates' (Report of the Panel on Research on Deterrent and Incapacitative Effects, National Academy of Sciences).

Beccaria, C. (1963). On crimes and punishments (introduction by H. Paolucci, Trans.). New York: Macmillan. (Original work published 1764)

Bentham, J. (1948). An introduction to the principles of morals and legislation (with an introduction by W. Harrison, Ed.). New York: Macmillan.

Blumstein, Alfred; Cohen, Jacqueline; Nagin, Daniel, eds. (1978). Deterrence and Incapacitation: Estimating the Effects of Criminal Sanctions on Crime Rates. Washington, D.C.: National Academy of Sciences

Fisher, R.C. Godderis, J.H. and Young, J.C (1989). Participation in tax amnesties: The individual Income tax, National Tax Journal 42 No. 1:15-27

Franklin, E., Zimringand, G. (1973). Deterrence: The Legal Threats in Crime Control. University of Chicago Press

HELB (2016). 2015 Annual Report & Financial Statements. Available at www.helb.co.ke/wp-content/uploads/2013/06/HELB-Annual-Report.pdf. Accessed 27th November 2016

Ionescu, F. (2011). Risky Human Capital and Alternative Bankruptcy Regimes for Student Loans. Journal of Human Capital, 5(2), 153-206.

Jacoby, J. E. (Ed.). (1994). Classics of criminology. Prospect Heights, IL: Waveland

Kesterman, F. (2013). Student borrowing in America: Metrics, Demographics, Default Aversion Strategies. NASFAA Journal of Student Financial Aid 36(1): 34-51.

Kilonzo, T.M (2012). The effect of tax amnesty on Revenue growth in Kenya: Unpublished MBA Research paper, University of Nairobi.

Kimani, V.K (2011). Determinants of loan Recovery in student funding Organization; A case of the Higher Education Loans Board: Unpublished MBA Research paper, University of Nairobi.

Koch, J. (2012). Regional Economic Impacts of the World-Wide Recession: A Case Study of Hampton Roads, Virginia. [Article]. International Advances in Economic Research, 18(2), 163-176. doi: 10.1007/s11294-012-9346-3

Kipkech, J. R. (2011). Determinants of students loan default; A case of the Higher Education Loans Board: Unpublished MBA Research paper, University of Nairobi.

Martin, Jacqueline (2005). The English Legal System (4th ed.), p. 176. London: Hodder Arnold

Mohammed, H. (2015). Credit Rating Agencies: Self-regulation, Statutory Regulation and Case Law Regulation in the United States and European Union: Springer

Monteverde, K. (2010). Managing Student Loan Default Risk: Evidence from a Privately Guaranteed Portfolio. Research in Higher Education 41(3): 331-352.

Moyer, I. L. (2001). Criminological theory: Traditional and nontraditional voices and themes. Thousand Oaks, CA: Sage.

Nagin, D. S. (1998). Criminal deterrence research at the outset of the twenty-first century. In M. Tonry (Ed.), Crime and justice: A review of research (pp. 1–42). Chicago: University of Chicago Press.

Ngali, R.M, (2013). The effect of penalty amnesty on loans recovery at the higher education loans board of South Africa. MBA Project, University of Cape Town

Paternoster, Raymond (1987). The deterrent effect of the perceived certainty and severity of punishment: a review of the evidence and issues. Justice Quarterly. 4: 173–217

Ringera, M. (March 3 2014). We are coming for you, HELB warns defaulters. Daily Nation. Available at http://www.nation.co.ke/lifestyle/DN2. Accessed on 28th November 2016

Ronald, L. Christine, S. (2013). Student Study Guide for Criminological Theories: Introduction, Evaluation, and Application (6 edn, OUP)

Valerie, W. (2010). Deterrence in Criminal Justice: Evaluating Certainty vs Severity of Punishment: The Sentencing Project.

Vold, G. B., Bernard, T. J., & Snipes, J. B. (2002). Theoretical criminology (5th ed.). Oxford, UK: Oxford University Press.

Volkwein, J. F., Szelest, B. P., & Cabrera, A.F., & Napierski-Prancl, M.R. (2013). Factors related to student default among different racial and ethnic groups. Journal of Higher Education, 69(2), 206-237.

Zimring, Franklin E.; Hawkins, Gordon J. (1973). Deterrence: The legal threat in crime control. Chicago: University of Chicago Press.