

Credit Risk Management Policies and Debt Collection Performance by Registered Security Companies in Kenya

Ernest Opiyo¹, Lucy Wamugo Mwangi, (PhD)², Fredrick W.S. Ndede, (PhD)³

¹Msc (Finance), Department of Accounting and Finance, Kenyatta University, Kenya

² Lecturer, Department of Accounting and Finance, Kenyatta University, Kenya

³ Senior Lecturer, Department of Accounting and Finance, Kenyatta University, Kenya

Abstract: *Security has been and continues to be priority for both life and property world over. Due to the limitations of public security services the private sector has supplemented provision of security services. Over time the registered security firms have come to rely more on establishments that acquire services purely on credit which often lead to due debts. This has led to large uncollected debts putting registered security firms into liquidity challenges. If such debts are not efficiently collected, the company's operations are adversely affected. This study sought to assess the effect of credit risk management policies on debt collection performance by registered security companies in Kenya, for the period 2013 to 2017. The study was grounded on the motive theory of credit, credit risk theory and anticipated income theory. The study used descriptive research design. A census of 38 registered security companies in Kenya was taken. The study used primary data obtained using structured questionnaires and secondary data collected using a secondary data template for complimentary purposes. The study employed multivariate regression model to determine the effect of credit risk management policies on debt collection performance by registered security companies in Kenya. The mediating effect of inflation rate was tested using the stepwise regression technique by employing the logic of Baron and Kenny (1986). The regression results indicated that the credit limit policy had a statistically insignificant positive association with Days Sales Outstanding (DSO), a measure of debt collection performance. The study revealed that credit documentation and review policies improve debt collection performance by registered security companies in Kenya. The study however found that credit approval and scoring policies decreases debt collection performance. The study established that credit limit policy has insignificant effect on debt collection performance of the registered security companies in Kenya. The results of Sobel – Goodman mediation test indicated that inflation had no mediating effect on the relationship between credit risk management policies and debt collection performance by registered security companies in Kenya. The study recommends that managers of registered security companies should review their credit approval and scoring policies in order to improve debt collection performance. Further it recommended that the Government through recently established Private Security Regulatory Authority (PSRA) should come up with minimum documentation requirement for security services acquisition to help improve debt collection performance through complete documentation of credit transactions in the industry.*

Keywords: Credit Risk Management Policies, Debt Collection Performance, Inflation Rates, Kenya Security Industry Association

1. Introduction

The security industry is among the fastest growing industries in Kenya (Catherine, 2012). The industry has been booming especially in the last decade with new players entering the market every now and then (Kaguru & Kepha, 2014). The major reasons for the rapid growth of this industry can be attributed to government failure to effectively regulate the industry, high crime rates and the inability of public security services to provide adequate protection (Tabo, 2013). Hunt (2007) emphasizes that for security firms to be sustainable and achieve increased growth and development, high recovery levels of their debt is a prerequisite. Therefore, policies to implement various debt collection actions and disciplines are crucial and ought to be conducted out constantly and in a consistent way as per the expectations of the credit portfolio analysis.

A look in to a number of players in the registered security industry shows that debt collection and management has not been efficient resulting into huge amounts of delayed payments and bad debt (KSIA, 2015). The registered security industry recorded bad debts amounting to over 1.2billion in 2015 an increase from 0.85 billion in 2014. The

report also showed that there was reduced average monthly cash collection to 58.53% of total revenues in 2015 from an average monthly cash collection of 70.28% of total revenues in 2014. The costs of debt collections related to commissions paid to private debt collectors were also shown to have been on the rise ranging from 15% to 25% of the total revenues of registered security companies (Kenya Security Industry Association, 2016). This therefore, is an indication of inefficient debt collection in the various companies in the industry.

Days Sales Outstanding (DSO) is a measure of the average number of days that it takes a company to collect payment after a sale has been made. In security companies, DSO is often determined on a monthly basis and calculated by dividing the debtors outstanding during a given period by total credit sales during the same period, and multiplying the result by the number of days in the period measured. The DSO can be improved by optimizing the collection processing in a security company. Also, credit policies in registered security companies can be harmonized, which leaves less room for sales to give out lax payment schedules (Rhen, 2012).

1.1 Problem Statement

Security services are important for protection of life as well as security of property. These services are provided for by both public and private establishments. Whether by public or private establishments, availability is critical (Safer World, 2008). For private firms, security services are largely provided on credit. Despite the important contribution of the private sector in the provision of security services the firms are faced with a number of problems. Notable among the problems is the ever increasing uncollectable debt leaving the firms to operate under very limiting conditions due to poor cash flow.

For routine operation security firms are forced to obtain overdrafts from banks which are costly. The increasing debts and poor cash flow has also made the firms to rely on debt collectors which increase operational costs making it difficult for the firms to acquire both the human and physical resources required (Kenya Security Industry Association, 2016). Escalation of bad debts negates the principles of credit purchases and sales which is profit maximization. As observed by Bravad (2010), challenges of credit risk arising from account receivables must be confronted in order for the registered security firms to be profitable. In case this position continues, there is a likelihood of the firms closing, which will result into loss of jobs and breakdown of security services as well as reduced wealth creation.

Studies conducted in the banking sector have not comprehensively highlighted the effect of credit risk management policies on debt collection. For instance, the study conducted by Turan, Ugur, and Barlas (2013) argues that a credit card limit policy as part of credit risk management policy can be used to prevent high debts in the banking sector but does not specify how this is achieved. The studies by Bonaya (2013) and Nyasaka (2017) also give a general conclusion that credit approval policy guidelines affect non-performing loans in the banks but do not show how this is achieved. The studies also concentrate more on the components of the credit approval policy but do not provide a clear link between the policy and debt collection in the bank.

A number of studies have been carried out on credit risk management including Atrill (2006), Lamberson (2005), Waweru (2013) and Sushma & Bhupesh (2011). But none of the studies have examined the relationship between credit risk management policies and debt collection performance by registered security companies in Kenya. These are the gaps this study aims to fulfil.

1.2 Specific Objectives

The specific objectives of the study were;

- 1) To identify the effect of credit approval policy on debt collection performance by registered security companies in Kenya.
- 2) To determine the effect of credit scoring policy on debt collection performance by registered security companies in Kenya.

- 3) To find out the effect of credit limits policy on debt collection performance by registered security companies in Kenya.
- 4) To identify the effect of credit documentation policy on debt collection performance by registered security companies in Kenya.
- 5) To find out the effect of credit review policy on debt collection performance by registered security companies in Kenya.

2. Literature Review

The study explored the literature that shows the effect of credit risk management policies on debt collection performance.

2.1 Credit Approval Policy and Debt Collection Performance

Nyasaka (2017) investigated the relationship between credit risk management practices and non-performing loans in Kenyan Commercial Banks using a case study of KCB Group Limited. The study adopted a descriptive research method. It was found that for banks to minimize the level of non-performing loans, credit unions ought to have in place written guidelines on credit approval process, approval authorities of individuals or committees as well as decision basis or criteria. The study made a general observation that an established credit approval policy minimizes non-performing loans but did not specify how this is achieved. The study concentrated more on the components of the credit approval policy but did not provide a clear link between the policy and debt levels in the bank. The context of the study is also different from that of this study and since banks and security firms operate in different business environments, the findings obtained in the banking industry may not reflect the situation in the private security firms.

Danjuma, Kola, Magaji, and Kumshe (2016) investigated the relationship between credit risk management and customer satisfaction in tier-one deposits money banks using evidence from Nigeria. The study adopted a descriptive survey research design. It was found that adherence to credit approval process by banks led to reduction of bad debts. The study recommended strengthening of the credit approval procedures of banks through generation of accurate and reliable credit information. Through credit approval, the study noted that banks reduced or eliminated the granting of loans to customers who had no capacity to repay and already had non-performing loans in other banks. The context of the study is in the banking industry in Nigeria which is different from that of this study which focuses on the private security industry and therefore, the findings may not be generalizable to fit the scenario in the private security industry.

2.2 Credit Scoring Policy and Debt Collection Performance

Opiyo (2014) examined credit scoring and the role of credit reference bureaus in Kenya. A descriptive survey design was applied. The study found that it was easier using credit

scoring to predict the probability of repayment and that credit scoring was important in debt collection since it assisted in debt collection prioritization, account management and loan servicing. The study also found that credit scoring models for collection decisions assisted firms in selecting optimal debt collections. Therefore, credit scoring models that decided when actions should be taken on the accounts of delinquents and which debt collection techniques might be more appropriate and successful were resourceful in the debt collection exercise. The study highlighted the importance of credit bureaus who could be contracted by firms which is not part of the objectives of this study.

Bhardwaj and Senguptayz (2011) investigated the relationship between credit scoring and loan default in the US. A panel data regression analysis was conducted. The results demonstrated an increasing trend of reliance on credit scoring not only as a measure of credit risk but also as a means to offset other riskier attributes of the origination. This reliance led to deterioration in loan performance pointing to the possible manipulation that might increase the credit scores of borrowers without any real improvements in their creditworthiness. Therefore, the study concluded that credit score manipulation affected default rates. Even though the study linked credit scoring to loan performance, it didn't show how credit scoring can be used in recovering the debts arising from the default cases. The study did not discuss credit scoring from the policy point of view which is the focus of this study and the context is the banking industry which is different from that of this study.

2.3 Credit Limit Policy and Debt Collection Performance

Turan, Ugur, and Barlas (2013) investigated the dynamics of consumerism and persistent personal debts as a result of extensive use of credit cards under the influence of advertising. A system dynamics simulation model related to consumption behavior of middle-income people in Turkey under the influence of advertising was constructed. It was found that in the long run, credit card limit could act as effective policy in preventing very high debts even though it could affect client satisfaction. The study noted that a credit card limit policy could be used to prevent high debts but does not specify how this is achieved. The context of the study is the banking industry in Turkey while this study focuses on security firms in Kenya which are non-financial institutions hence the scenarios may be different.

Sangwayire (2016) examined the effect of credit risk management mechanisms on financial performance of microfinance banks using a case study of the Urwego Opportunity Bank in Rwanda. A descriptive case study design was used. The study found that the banks applied credit limits as an approach to mitigating the exposure to credit risk emanating from new clients that had no collateral, standardized loan terms, zero tolerance to delinquency and group-based lending. The study findings also highlighted that credit limits depended on credit history and consistency of the client's income. The study focused on the contents of a credit limit policy and the aspects considered in setting up

a credit limit but do not link this to debt collection which is the focus of this study. The context of the study is on the banking industry.

2.4 Credit Documentation Policy and Debt Collection Performance

Durrani (2017) conducted a study on sound credit risk management. The study was based on a literature review of existing banking documents. The study highlighted that proper assessment of credit risk, loan monitoring and delinquency control begin with well documented member files. Maintaining orderly and adequately documented loan files was an important element of credit risk management. Proper documentation provided major benefits namely; it constituted evidence of the terms and conditions of a member's indebtedness; it created valid security which could be realized if it was in compliance with legal requirements; it provided an audit trail of the loan decision (e.g. that the loan was authorized in accordance with policy and good lending judgment); it allowed easy and efficient follow up of problem situations (e.g. skip tracing) or routine member inquiries; it established a member's credit history for future lending decisions. The study applied a different methodology from that of this study and the concentration is on the banking sector which is different from this study.

Matanda (2010) examined the effect of 7Cs credit appraisal model on the level of non-performing advances of commercial banks in Kenya. A cross sectional survey was conducted. The study highlighted that credit documentation was a pre-requisite for each phase of the credit cycle, credit application, credit approval, credit monitoring, collateral valuation, impairment recognition, foreclosure of impaired loans and realization of security. The study emphasized that credit files ought to be properly maintained with an appropriate system of indexing to facilitate quick review and follow up as and when need arises. Documentation established a relationship between the bank and the borrower and it formed a base for any legal action in the courts of law. Contextual gap exists since the study limited itself to the banking industry while this study focuses on the private security sector in Kenya.

2.5 Credit Review Policy and Debt Collection Performance

Siqani and Sekiraca (2016) assessed the impact of the internal audit in reducing credit risk in commercial banks in Kosovo. The study made use of descriptive survey research design. The results of the survey showed that each commercial bank operating in Kosovo had the relevant departments of internal audit which regularly undertook the process of controlling in order to reduce credit risk. It highlighted that internal audit provided alternatives for solving the problems and in helping the institution in achieving its objectives as planned, as well as recommendations for improvement and further development. The study only discussed the importance of credit reviews in credit risk management which is a different objective from that of this study which linked credit review policies to debt collection. The study was limited to the banking industry

which is a different focus from that of this study which focuses on the registered security companies in Kenya.

Salim (2016) sought to determine the effect of external auditor's report on the credit decision for Yemeni Banks where a descriptive research design was employed. The results of the study showed that auditor's report was considered as one of the important sources for credit officers in making their credit decision. Based on the conclusions of the study, the researchers recommended that the banks needed to increase their reliance on the various types of audit reports in making credit decisions and pay more attention to disclosure and accounting policies qualifications. The study also recommended that the Yemen Association of the Certified Public Accountants should encourage the auditors to be very careful when expressing their opinions about the financial statements in order to avoid misleading decision makers. The study had a different objective from that of this study. It linked external auditor's reports to credit decision which was whether or not to extend credit while this study sought to link the report to how the exercise of debt collection is conducted within the registered security industry in Kenya.

Minh (2013) examined the link between credit risk management and bad debt controlling using a case of ANZ Vietnam. The study was qualitative in nature where interviews with the ANZ Vietnam's employees were conducted. The study findings highlighted the need for management to maintain a written loan review policy that was reviewed and approved at least annually by the board of directors. It was found that the loan review process was instrumental in debt collection since it aided the prompt identification of loans with potential credit weaknesses that could jeopardize repayment. The study focused on the banking industry in Vienna while the context of this study is the private security firms in Kenya and therefore, the findings may not be generalizable. The study also used a qualitative research approach while this study is based on quantitative research where a survey is conducted as opposed to a case study.

3. Research Methodology

This section describes how the research was carried out in order to achieve the stated objectives.

3.1 Research Design

This study adopted a descriptive survey design. A descriptive design is usually concerned with describing a population with respect to important variables with the major emphasis being establishing the relationship between the variables. The major purpose of descriptive research design is description of the state of affairs as they exist at present (Mugenda & Mugenda, 2008). Causal relationship helps the researcher to establish how one variable affects changes in another. This focuses on understanding, explaining, predicting and controlling relationships between variables. Therefore, since this research design allows one to establish the causal relationship between variables, it was useful in explaining how credit risk management policies affect debt

collection performance by registered security companies in Kenya. The data was analyzed using statistical techniques to determine the causal relationships through the multiple regression analysis.

3.2 Empirical Model

The study used a multiple linear regression model in showing the link between credit risk management policies and debt collection performance by registered security companies in Kenya. The regression model used was of the form:

$$Y_i = \beta_0 + \beta_1 X_{1i} + \beta_2 X_{2i} + \beta_3 X_{3i} + \beta_4 X_{4i} + \beta_5 X_{5i} + \epsilon_i \dots \dots (3.1)$$

Where:

Y_i = Debt Collection Performance in Registered Security Company i

β_0 = Constant Term

β_1, β_2 and $\beta_3, \beta_4, \beta_5$ = Beta coefficients

X_1 = Credit Approval Policy

X_2 = Credit Scoring Policy

X_3 = Credit Limit Policy

X_4 = Credit Documentation Policy

X_5 = Credit Review Policy

ϵ = Error term

i = denotes the observation (registered security company), where $i = 1, 2, 3, \dots, 38$.

To determine the mediating effect of inflation on the relationship between credit risk management policies and debt collection performance, equations 3.2 and 3.3 are specified as follows:

$$Y = \beta_0 + \beta_1 X_{1i} + \beta_2 X_{2i} + \beta_3 X_{3i} + \beta_4 X_{4i} + \beta_5 X_{5i} + \beta M + \epsilon_i (3.2)$$

$$M = \beta_0 + \beta_1 X_{1i} + \beta_2 X_{2i} + \beta_3 X_{3i} + \beta_4 X_{4i} + \beta_5 X_{5i} + \epsilon_i \dots \dots (3.3)$$

Where: M = mediating variable = inflation rate

3.3 Target Population and Data Collection

The study targeted all the 38 security companies registered with the Kenya Security Industry Association who had fulfilled all characteristics and legally accepted by the association (KSIA) as at 2013. This study used primary data that was collected using structured questionnaires. The questionnaire was divided into various sections that capture themes under this study as per the research objectives. The questionnaire comprised straight forward and easy to comprehend questions which enabled respondents to take a short time to complete. Semi-structured questionnaires are usually in an immediate usable form and are easy to analyze and interpret (Kothari, 2006).

4 Results and Discussions

4.1 Empirical Results

Five independent variables (credit limit, credit approval, credit scoring, credit documentation, credit review) policies

were regressed against the dependent variable, debt collection performance.

The relationship between debt collection performance and the five variables were as follows:

$$\text{Debt Collection Performance} = 102.4 + 2.8 \text{Credit Approval Policy} + 11.8 \text{Credit Scoring Policy} + 0.5 \text{Credit limit Policy} - 8.9 \text{Credit Documentation Policy} - 7.8 \text{Credit Review Policy}$$

The value obtained for coefficient of determination was 0.635 and the value of adjusted R – squared was 0.572. This means that 63.5% of DSO (debt collection performance) is determined by credit risk management policies. The 36.5% is contributed by other factors which are not included in this model. The ANOVA model was employed in testing the significant of the model further. The outcome analysis revealed that the P-value was .000 which is less than 0.05 which implies that the model was significant. It means that credit management policies significantly affect debt collection performance as measured by DSO.

Based on the regression model above, credit approval, credit scoring, credit documentation and credit review policies had p-values of 0.006, 0.000, 0.000 and 0.004 respectively and were all statistically significant at 0.05 level of significance. This means that credit approval, credit scoring, credit documentation and credit review policies implementation had a significant impact on performance of debt collection in registered private security companies. However, credit limit policy had a p-value of 0.748 implying that their effect on debt collection performance was statistically insignificant at 0.05 level of significance.

The first objective was to identify the effect of credit approval policy on debt collection performance by registered security companies in Kenya. The regression results indicate that credit approval policy is significant at 5 percent level. The coefficient of credit approval is 2.774 and significant with a p-value of 0.006 which is less than 0.05 which is the level of significance for this study. The results indicate that there was a significant positive relationship between credit approval policy and debt collection performance. However, a positive relationship between credit approval policy and debt collection performance as measured by DSO, leads to increase in number of days it takes to collect debt and low debt collection performance. These results are consistent with those done by Nyasaka (2017) who found a positive relationship between credit approval and loan performance. However, his measurement of loan performance was direct to the level of non-performing loans. In this case, debt collection performance is measured by the days sales outstanding which decreases as debt collection performance improves.

The second objective was to determine the effect of credit scoring policy on debt collection performance by registered security companies in Kenya. The regression results indicate that credit scoring policy is significant at 5 percent level. The coefficient of credit scoring is 11.767 and significant with a p-value of 0.000 which is less than 0.05. The results indicate that there was a significant positive relationship between

credit scoring policy and debt collection performance. However, a positive relationship between credit scoring policy and debt collection performance as measured by DSO, leads to increase in number of days it takes to collect debt and low debt collection performance. These results are consistent with those done by Mukami (2017) who found a positive relationship between risk identification through credit scoring and loan default rates. Therefore, the null hypothesis which states that credit scoring policy does not have significant effect on debt collection performance by registered security companies in Kenya is rejected.

The third objective was to find out the effect of credit limit policy on debt collection performance by registered security companies in Kenya. The regression results indicate that credit limit policy is insignificant at 5 percent level. The coefficient of credit limit policy is 0.510 and insignificant with a p-value of 0.748 which is greater than 0.05. The results indicate that there was a significant positive relationship between credit limit policy and debt collection performance. However, a positive relationship between credit limit policy and debt collection performance as measured by DSO, leads to increase in number of days it takes to collect debt and low debt collection performance.

The fourth objective was to identify the effect of credit documentation policy on debt collection performance by registered security companies in Kenya. The regression results indicate that credit documentation policy is significant at 5 percent level. The coefficient of credit documentation policy is -8.916 and significant with a p-value of 0.000 which is less than 0.05. The results indicate that there was a significant negative relationship between credit documentation policy and debt collection performance. However, a negative relationship between credit approval policy and debt collection performance as measured by DSO, leads to decrease in number of days it takes to collect debt and high debt collection performance.

The fifth objective was to find out the effect of credit review policy on debt collection performance by registered security companies in Kenya. The regression results shown in table 4.9 indicate that credit review policy is significant at 5 percent level. The coefficient of credit review policy is -7.502 and significant with a p-value of 0.004 which is less than 0.05. The results indicate that there was a significant negative relationship between credit review policy and debt collection performance. However, a negative relationship between credit review policy and debt collection performance as measured by DSO, leads to decrease in number of days it takes to collect debt and high debt collection performance. This further, indicates that credit review policy significantly improves debt collection performance of registered security companies in Kenya.

The sixth objective was to determine the mediating effect of inflation on the relationship between credit risk management policies and debt collection performance of registered security companies in Kenya. The study used the Sobel-Goodman mediation test to further ascertain whether there is any mediation effect. The fact that the observed p-value does not fall below the established alpha level of .05 indicates that

the association between the independent variables and the dependent variable is not influenced significantly by the inclusion of the mediator (inflation rate) in the model. Based on the results that account for bootstrapped standard errors, the Sobel-Goodman mediation test suggests that inflation rate does not influence credit limit, credit approval, credit scoring, credit documentation and credit review. Therefore, the study failed to reject the hypothesis that inflation does not mediate the relationship between credit risk management policies and debt collection performance by registered security companies in Kenya.

5 Conclusions

Based on the findings, several conclusions were made. On objective one it was concluded that credit approval policy negatively affects debt collection performance. On objective two, the study confirmed that credit scoring policy improves debt collection performance. However, on objective three, the study concluded that credit limit policy does not affect debt collection performance. On objective three, the study concluded that credit documentation improves debt collection performance. The study also arrived at conclusion that credit review policy enhances debt collection performance. It can therefore, be hypothesized that there is a relationship between credit risk management policies (credit approval policy, credit scoring policy, credit documentation policy and credit review policy) and debt collection performance.

The study finally concluded that inflation rate do not mediate the relationship between credit risk management policies and debt collection performance.

References

- [1] Bhardwaj, G., & Senguptayz, R. (2011). *Credit scoring and loan default*. Research Division Federal Reserve Bank of St. Louis Working Paper Series
- [2] Baron, R. M., and Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal Personality and Social Psychology*, 51(6), 1173-11182.
- [3] Bonaya, J. F. (2013). Effects of credit risk management practices on non-performing loans in commercial banks in Kenya. (Master's Dissertation).
- [4] Catherine, N. W. (2012). Challenges of strategy implementation in private security firms operating in Nairobi. (Doctoral Dissertation).
- [5] Danjuma, I., Kola, I. A., Magaji, B. Y., & Kumshe, H. M. (2016). Credit risk management and customer satisfaction in Tier-one Deposits Money Banks: Evidence from Nigeria. *International Journal of Economics and Financial Issues*, 6(3S).
- [6] Durrani, F. A. (2017). Credit risk management. Retrieved from: <https://www.scribd.com/document/82115393/Credit-Risk-Management-Credit-Management>
- [7] Kaguru, K. G., & Ombu, K. (2014). Factors affecting performance of private security firms in Nairobi County: A case study of G4S Security Services (K) Ltd. *International Journal of Science and Research (IJSR)*, 3(2), 281-286.
- [8] Kenya Security Industry Association (2016). Kenya private security industry performance report; Retrieved from: <http://www.ksia.co.ke/> (20th August, 2016).
- [9] Limsombunchai, V., Gan, C., & Lee, M. (2005). An Analysis of Credit Scoring for Agricultural Loans in Thailand. *American Journal of Applied Sciences* 2(8), 1198-1205.
- [10] Matanda, W. J. (2010). The effect of 7Cs credit appraisal model on the level of non-performing advances of commercial banks in Kenya. (Unpublished Dissertation, University of Nairobi, Nairobi).
- [11] Minh, T. T. (2013). Credit risk management and bad debt controlling: A case of ANZ Vietnam. (Unpublished Dissertation, Lahti University of Applied Sciences).
- [12] Mugenda, O. M., and Mugenda, A. G. (2008). *Research Methods: Quantitative and Qualitative Approaches*, Acts Press, Nairobi-Kenya
- [13] Nyasaka, F. O. (2017). The Relationship between credit risk management practices and non-performing loans in Kenyan Commercial Banks: A case study of KCB Group Limited (Doctoral dissertation).
- [14] Oanda, V. T. (2013). Challenges of strategy implementation in private security companies in Kenya. (Master's dissertation).
- [15] Opiyo, I. (2014). Credit scoring and the role of credit reference bureaus. Retrieved from: <https://www.icpak.com/wp-content/uploads/2016/08/Credit-Scoring-and-the-Role-of-Credit-Reference-Bureaus-Isaiah-Opiyo-session-2.pdf>
- [16] Salim, A. H. (2016). The effect of external auditor's report on the credit decision for Yemeni Banks. (Master's dissertation).
- [17] Sigdel B .wordpress.com/2018/12/20/census-and-sampling-method www.grantthorton.
- [18] Simon M. K. & Goes J. (2013). *Disertation and Scholarly Reseach: Recipes for Success*. Seattle, WA: Dissertation Success, LLC
- [19] Siqani, S. H., & Sekiraca, E. (2016). The impact of the internal audit in reducing credit risk in commercial banks in Kosovo. *European Scientific Journal*, ESJ, 12(4).
- [20] So, M. M., & Thomas, L. C. (2007). Optimizing credit limit policies to maximize customer lifetime value. Centre for Operational Research, Management Science and Information Systems.
- [21] Tabo, O. V. (2013). Challenges of strategy implementation in private security companies in Kenya. (Master's dissertation).
- [22] Turan, Ö., Ugur, D., & Barlas, Y. (2013). Dynamics of consumerism and credit card debt under the influence of advertising. Retrieved from: <http://www.systemdynamics.org/conferences/2013/proceed/papers/P1301.pdf>.