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Analysis of Credit Management Techniques on the Financial Performance of Logistics Firms in Mombasa County Kenya

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Authors' contributions

This work was carried out in collaboration between both authors. Both authors read and approved the final manuscript.

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ABSTRACT

Financial performance depicts survival rate of any business enterprise. This rate for most firms internationally have been at a declining rate of 70% and 80% mostly in the sub- Saharan Africa. The Logistic firms in Kenya Mombasa County have been striving to survive reasons among other factors the deteriorating credit management techniques. The adverse performance is evidenced by the collapse and the closure of a number of logistics firms. The purpose of this research was to analyze the various credit management techniques and their influence on financial performance of logistics companies in Mombasa County. The specific objectives of the study were to analyze effect of appraisal process, credit risk control, collection policy and terms of credit on financial performance. The study was based on the following theories Agency Theory, Credit Risk Theory, Tax Theory of Credit, Portfolio Theory and Asymmetric information Theory to ascertain if their presumptions explains best the relationship between credit management techniques on financial performance of logistic firms. The study applied a descriptive research design and will target a population of 248

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employees of logistics firms in Mombasa County registered under KIFWA and the sample size of 160 obtained through stratified sampling. The collection of data was done through primary data collection methods. Primary data was amassed through the administration of questionnaires to senior managers and officers in the finance department. Analysis of data was done through Statistical Packages for Social science (SPSS) representing descriptive statistics such as percentages, measures of central tendencies, variation measures and frequencies distribution. The interpretation was based on descriptive statistics and the measures of dispersion as well as inferential statistics were used Pilot test was carried out to ensure the accuracy and validity of the research tools Multi linear regression model was used to analyze effect of credit management techniques on financial performance. The research sought to analyze whether client appraisal process credit risk control collection policy and terms of credit has significant effects on financial performance of logistics firms in Mombasa County. The study further sought recommendation on how a robust credit control mechanism sound credit policies acceptable terms of credit and proper client appraisal process can be applied in credit management to enhance financial performance of logistics firms in Mombasa County. The beneficiaries of the study were the Logistics firms' managers, Policy makers financial managers scholars and academicians.

Keywords: Appraisal process; credit risk control; collection policy; terms of credit.

1. INTRODUCTION

Logistics industry have received much attention from scholars and academicians internationally and in the recent past due to the fact that they contribute substantially to economies of the developing and developed world countries [1]. The logistics sector forms a major backbone of various economies. In the USA by 2012 the logistics industries accounts for almost a half the number of employees. Caruso [2] opines that 51.9 percent are employed by multinationals while the rest are employed by smaller logistics firms thus totaling to around 56.1 employed in the US by 2012 census data. In the US the number of people employed by the logistics sector contribute to more than half on the countries' GDP. According to Uwonda et al. [3] acknowledges that in Europe by the year 2010 Almost 85% of the jobs created comes from the logistics sector.

In Africa the Logistics sector is very crucial since it is the biggest employer in the economy this is very important in fostering the national economy. They play the role of large suppliers of major enterprises in Africa [4]. The logistics sector accounts for more than a quarter of the GDP being more productive than large companies and they contribute significantly to the furtherance of economic austerity [3]. The logistics sector has a key role in East Africa as way of alleviating poverty in the involvement in the international economy by way of export and import trade which is a big boost to the national economies. According to Ernst & Young [5] the Logistics sector is a major contributor to revenue through taxes and suppliers to larger companies in the supply of goods and services. They are major source of revenue.

Credit management is a function that is carried out in an organization so that the organization can improve in the credit control policies this control is intended to guide the organization to get more revenues but at lower risk this can include enhancing the collections, reducing the added cost of passing more credit to the businesses and customers who credit ratings are acceptable and establishing comparable terms of credit. This is otherwise known as control. Credit (or trade credit) administration is the core of entrepreneurial entities in the short and long-run continuity. According to [3] opined that both in the short and long term financial objective credit management consolidates the endeavors responsible in the settlement of the services and goods that have been used, the collection of cash from debtors and general administration of liquidity [6].

Due to the competitiveness of some markets, the companies in order to increase business they issue credit but this is only prudent if the turnover will exceed the additional cost of capital or the cost of credit administration are to be recovered through the offering higher prices though this has a lot of danger. There many losses that are associated with the bad debt because when the bad debts are written off the cost reduces the profit. The costs that are associated with bad debts are enormous the non-quantifiable cost like the cost of waiting losing the very customer and the quantifiable charges like the bank charges

and other interests charges involved. There are instances when the money is lost totally like when a debtor goes into receivership being bankrupt or their company going into liquidation such losses are to be borne by the by the organization and this will reduce financial performance.

The study by Uwonda et al. [3] opines that analysis of credit management practices is the core of any business enterprise both in the long run and short term wellbeing. According to Aminu [6], provides that practice consolidates the efforts that are concerned with payment of goods and services cash collections from clients who are consumers of the said goods and services and the general management of Liquidity. With reference to this it is therefore fundamental that the credit management practices be analyzed with respect to firm's financial performance. The logistics firms should master credit management in order to manage their cash flows [7] credit management will assist the logistics firms to project their cash flow requirements in so doing it will help to optimize their revenues and expenditure planning. According to Yakub & Husain (2015) found out that for SMES to grow, issues that lead to business failure for example problems with the cash flow should be addressed. Better credit management can help to achieve this. The basic of credit management is to make certain that the enterprise identifies their needs in time to avoid crisis in cash flows, (Horner, 2014).

Broadly in Kenya, the national logistics and trade historically developed from Mombasa port and this was enabled by the construction of the Kenya Uganda railway as per (World Bank, 2005). Kenya is still facing various obstacles that are constraining it from having a conducive environment for both facilitation of trade in Kenya as well as a more integrated regional logistics market structure. The logistics industries to operate optimally require strong financing sources of the various sources of finance credit financing is key and this will require a stringent and careful monitor of the credit management. In the organization to ensure that this source of finance doesn't plunge the company in bad debts and uncontrolled obligations.

The logistics firms in Mombasa plays an important role in the international trade with east and central Africa as a gateway for imports and exports trade through the port of Mombasa. The other logistic fraternities include freight agencies, transport companies, clearing and forwarding agent and NVOCCs, (Ashraf & Zheng, 2016). The clearing and forwarding sector in Kenya is a very complex one carrying out activities related to freight management and supply chain logistics, (John & Morris 2016). It is associated with all modes of transport shipping lines airlines railway lines including SGRs warehousing and road transport.

The financial performance of the logistic firms in Mombasa County who offer credit service to clients to obtain a large market share will find credit management crucial. The world's economy continues to be transformed by globalization owing to the continued growth of world economies increasing the industry's demand for timely delivery of goods. This means that an efficient logistics chain is a very important tool that enhances the creation of competitive advantage in a growing economy. Customers that are brought about by globalization enhance the financial performance of the logistics chain when for example C&F firms can operate optimally because of the financial strength that results from good credit administration practices. Financial performance is therefore very key in any business enterprises as it motivates the shareholders the management all the parties that are in the internal and external environment of the organization

1.1 Statement of the Problem

The link between credit management practices and financial performance of logistics companies in Kenya has been substantially incomprehensible and incomplete. The available studies have majorly dealt on financial performance without linking it to credit management which is key in Logistics firms. Most businesses fail due to poor credit management, internationally it is estimated by the specialists to be in the region of 70% and 80%.This figure is significantly higher in the countries of sub-Saharan Africa. In the opinion of Bungule et al. [8], firms lose millions of money by way of mistake that can be evaded like such of poor credit management. In the case of, Aminu [6] opined that majority of firms are managed by individuals who are not qualified for the task and thus doesn't take in to consideration the business fundamentals.

According to the business list 2020 in Kenya, majority of the logistics firms come from Mombasa County this being due to its proximity to the port of Mombasa. The firms are constantly

faced with unstable financial performance this has manifested in several firms closing down. The reasons for this among the many others the unemployment of better credit management techniques resulting to deteriorations of financial performance. The (Netherlands-African business council, 2014) report provides that a number of logistics firms in Mombasa County have been unable to maintain that balance as a result of the competiveness in nature of the industry due to this some firms have downsized or stopped operation The survival rate of logistics firms has deteriorated further according to Gichuru [9].

The report by Price Water Coopers (2015) illustrates that the performance of the Logistics and transport sector has been on the decline trend over years. Kenya was ranked at position 76 globally and in 2007 and now is at position 122 out the 155 countries. Contrasting with the global volumes in shipment the logistics and transport that has increased notably. This is yet to be translated to better financial performance .This study sought to identify the problem of increasing decline in the financial performance in relations with credit management techniques in the Logistics firms in the County of Mombasa.

1.2 Objectives of the Study

1. To ascertain the effect of appraisal process on the financial performance of Logistics firms in Mombasa.
2. To find out the effect of credit risk control on the financial performance of Logistics firms in Mombasa.
3. To find out the influence of collection policy on the financial performance of Logistics firms in Mombasa.
4. To establish the effect of terms of credit on the financial performance of Logistics firms in Mombasa.

2. LITERATURE REVIEW

2.1 Theoretical Literature

2.1.1 Agency theory

The theory explains the possible conflicts that arise between management, shareholders creditors as a result of the imbalances in distribution of earning. This may result in the company consuming much risk and not participating in the worthwhile net worth of the project (Mayers & Smith, 2015). The assumption is that the organizations normally conflict from the conceivable disparities of the interests between the shareholders and the directors of the firm. The key obligation of the supervisors is to deal with the organization in the manner that it gives back to the shareholders and the directors of the firm in the manner that it expands their wealth. For the harmonization of the principals interest and their agents the theory suggest a comprehensive contract to ensure that of the principals are met. This relationship can be further strengthened through employing experts strong control systems [10].

According to Fama [11] they propose that this agency issues can be mitigated through the partition from the onset and the actualization of the choices. The choices can be reviewed in the credit administration in order to reduce risk required in a business for example, if the credit personnel maintain an anomalous state of the stock past the inventory cycle requirement and offering credit over the item revenues, favoring given clients more credit period than others and could be interpreted as the abundance of the sales this should be handled by carefully reviewing the actual performance against the expected and these agency issues should be addressed so that proper information is given regardless of the agency conflicts. This theory will assist in trying to find out if the firm’s current monitoring mechanism of managers and the action have the lesser collections. The theory backs the objective of the study collection policy and financial performance.

2.1.2 Credit risk theory

This is an important theory developed by Melton in 1974 as regards to credit management. Historically the early studies on credit used the statistical methods of credit risk of which their major big problem was in the total reliance on past statistics. Currently there are threesome numerical ways of examining credit risk, the structural method reduced form of appraisal and the incomplete information method (Crosbie et 2003) as cited by Lunalo, Onyiego [12] this presumption was introduced by Melton and is also known as structural theory. Melton (1974) refers to credit risk theory as which with the event of defaults comes from the evolution of assets by entities the diffusion process has created with the continuous constants.

According to Cantor and Frank (1996) as cited by Njenga (2014) describes that credit risk theory is

the predominant freely existing portfolio model for credit risk assessment method this technique allows for room for the organization to combine risks in the company and it gives the values at risk (VaR) resulting from the downgrades upgrades and the defaults. It is helpful to all the firms that are exposed to the credit risk in their day to today operations .this theory thus stipulates that a firm need to come up with a technique to measure credit risk across some instruments such as letters of credit traditional loans, commitments, fixed income instruments commercial contracts e.g. receivables, swaps debtors and creditors (Padilla &Pagano,2000) as cited by Kipkirui Omagwa [13]. The credit risk theory supports the objective of credit risk control.

2.1.3 Portfolio theory

The majority of the companies currently apply value at risk models for the management of the market exposure and interest rate fluctuations. Though market risk remains the greatest risk that majority of the companies face, it has remained a challenge in the implementation of current portfolio theory [14].The entities must acknowledge how the credit concentrations will negatively impact financial capabilities and with this various organization are proactively adopting statistical techniques to measure credit risk. The industry has also been on the fore front to develop credit risk measuring tools the context of a portfolio. Besides there is the use of credit derivatives to hedge against risk but maintaining the relationship the company has with the business. The productivity indicators and portfolio quality ratios have been employed [15].

In the past, firms have adopted an asset-by-asset procedure to credit risk management. Whereas each firm's way diverges with the other, This method presupposes regularly measuring the worth exposure to credit, using a credit risk grading plus statistical analysis of outcomes so that the expected losses of the portfolio can be identified .The grounds for this approach good in internal credit risk rating system and accurate credit revision depending on what changes noted, credit identification ,review and rating of credit risk the organization may organize the portfolio schemes or enhance prompt oversight of credit. The asset by asset way however through very crucial in administering credit risk doesn't provide entire image of portfolio credit risk, hear risk means the possible outcome of the expected losses superseded by actual losses.

According to Mason and Rodger [16] posit that to understand clearly credit risk management, the companies or organization ought to take into account to augment the technique of asset by asset way with a numerical review in application of the credit system. The organization increased attempts to cite the ineffectiveness of the method to measure the unanticipated loss they have resolved to use the portfolio method because one of the problems with the asset by asset approach is the challenge in the identification and measurement of the concentration. According to Richardson (2017) Risk of concentration refers the auxiliary portfolio risk that because of the larger vulnerability to extension of credit either to a unit of interrelated customers. The portfolio theory upholds the objective of credit risk control.

2.1.4 Asymmetric information theory

According to the theory it describes a situation where all the participants involved in the transaction are not aware of the pertinent details. In the debt market, this information asymmetry does arise whilst the persons given credit has sufficient knowledge about the possible risks and the returns with the project and the person issuing credit or lender do not have on the other side do not have enough information concerning the person to whom credit is extended to Edward &Turnbull, (2014). This information imbalance therefore brings in two problems to the logistics firms, Moral hazard (where the entrepreneurs behavior is monitored and adverse selection (where there is making mistakes in the financing decisions).

Logistics companies get challenging times going through these snags because it is uneconomical to apportioning funds for the monitoring where the amounts involved is not significant. This could be due to the fact that the required statistical information to be screened about the borrowers and the lender could not be available freely to the logistics firm in Mombasa County. The firms therefore are faced with asymmetry of information for engaging in the giving out or accessing credit [17]. The required information access may be limited or not economical or not easy to understand and interpret this again will create to the firm two risks (Deakins 2016). The theory necessitated this work to have earlier intelligence or information of the customers in the market environment which will be viable enough to support the approval of the issuance of credit process. The theory underpins the objective of credit terms and credit risk

2.2 Empirical Literature

2.2.1 Client appraisal process and financial performance

Ahmed & Malik [18] in their study in Pakistan evaluating impact of credit risk management techniques on the loan performance when collection policy client appraisal were the aspects on credit risk management practices. In consideration of the primary data in cross sectional form. In the banking microfinance sector the data was obtained from the mangers of credit risk department. The outcome of the approach established that the appraisal of clients has a positive influence on the performance of loan, whereas credit risk control and credit policy a positive but insignificant effect on the loan performance. This study is crucial as it assist firms' management to improve on the performance with dimensions of risk management practices in focus.

In Kenya a research that was done by Gatuhu [19] regarding MFIs to establish effect of credit management on financial performance. The research was to find out to what magnitude has the MFIs applied the client appraisal process in the credit management process. From the outcomes it was established 45.3% showed great extent 35.8% out of the responders showed to very a great extent and18.9% intimated a moderate extent. This therefore indicates that most financial institutions apply client appraisal to a greater extent in the management of credit. Outcome of the study suggests that client appraisal is suitable tool for credit management. While appraising client's collateral and character of clients are taken into consideration. According to this study the failure to do appraisal to ascertain the capacity of the people accessing credits result to default.

2.2.2 Credit risk control influence on financial performance

Fernandez (2010) while investigating the effect of credit management and the impact on financial performance opined that there is a significant link between the performance of the bank and credit risk control. He found out that it is crucial to set up a sound credit risk environment, proper credit advancing process, clear control of credit, assessing checking and measures over credit risk policy and approaches in which the portfolio of credit is managed for example the origin of loan, supervising, appraisal and collection as key factor in credit management. In Spain Claudine (2012) while investigating on the link between the performance of the bank and credit risk management. It was resolved from their study that the Return On Asset (ROA) and Return On Equity (ROE) the two measuring profitability were related inversely to the non performing ratio to the total loan of financial institutions resulting to a drop in profitability. The study concluded that better risk management is better banking which in the end results a profitable survival of the organization. Gestel &Basem 2013 established that the default of a small number of clients may result to a big loss for the bank.

Afrifa [20] investigated the payment terms and credit risk control in its criticality in the financial performance of (SMEs) around the world. The research targeted on 248 listed firms. The study established that amidst the parameters of payment terms that influenced performance were level of bad debts emanating from credit sales, the time offered for credit terms period of credit terms and the level of credit sales. These are related with the cash flow aspect and thus financial performance. Lapteva2015) opines that proper management of credit the credit risk is attached to the growth of the logistics firms' technology which enhances the decision making and at the same time mitigate on the cost of credit risk control costs which requires full set of contractors and partners

2.2.3 Collection policy on financial performance

Ayodele, et al. [21] who studied on the impact of credit policy on the performance of Nigerian Commercial Banks using a case study of Zenith Bank. The result of the study indicated bad debt would be reduced when a proper credit policy is established in banks. Byusa and Nkusi [22] while studying on the effects of credit policy on the performance of selected commercial banks in Rwanda. The study attempted to ascertain the ramification of credit policy on selected Rwandan commercial banks. The outcome of the study was that the commercial banks in Rwanda enhanced their customer base and increased financial strengths resulting to the maximization of their profits. Customarily, banks have uncommon high and continual average spread of interest and interest rate margins indicating both inefficiency and highly poor competition

2.2.4 Credit terms influence on financial performance

Kakuru [23] established that cash discounts enhances collections and therefore a means to

increase sales. This will lead to the reduction in the debtors' level and the related costs. The cash discount will increase the collections that are due to customers and hence a tool to enhance sales. Nyangoma [24] while studying to what degree credit terms and accessibility to credit have influenced the financial performance of SMEs in Uganda. The outcome was that there is a convincing positive link between the parameters of credit terms. The investigation concluded that credit terms present 33.1% of the divergence in financial performance. The financial institutions fix the credit terms that businesses like logistics firms can afford.

Abo & Gimire (2013) in their investigation of the Ivorian airlines focusing on credit systems and the limiting parameters and financial performance. The approach used included descriptive statistics cross tabulation together with dependency test of chi-square and crammers value. The analysis were calculated amid the most crucial parameters in the financial performance. This study used questionnaires that were submitted to responders 4 main airline firms. The study focused on 50 managers and 36 were returned. The tabulated results presented that firm having flexible credit systems and rigorous credit policies got sale targets of 92% and 83.3 sequentially. This outcome revealed that credit control term and automation affect performance of airline firms Muturi [25] assessing effect the credit management techniques on the performance of loans in the microfinance banks taking deposit. The research was to establish how loan repayment is affected by credit management. He applied descriptive research method. The dissection of the primary data was performed using mean and standard deviation. Linear regression model was used in the application inferential statistics. Through the model effects of credit risk on repayment of loans was established. The study established through the findings that credit standard terms of credit, credit policy collection policy has an influence of the performance of companies with reference to study findings it was found out that sound credit management is a crucial element in company that shouldn't be ignored by companies who engage in credit.

3. RESEARCH METHODOLOGY

3.1 Research Design

Research design relates to the structure which represents the basis for collection of data, measurement and analysis, it expounds on the necessary steps for acquiring information required in solving a research problem Cooper & Schindler [26]. The research design that was adopted in this study was descriptive research design. The design focused on the large population as it gave an explanation to current situation [27]. In consonance with Mugenda and Mugenda [28], research design is the designation of the research study. In the Descriptive study was to investigate, what, where and how substantial of a phenomenon, which is the subject of the study.

3.2 Population

Research population will consist of 28 logistic companies based in Mombasa County who are bonafide members of the regulatory association body, Kenya Freight Forwarders and Warehousing Association, (KIFWA Report, 2021). The head of credit, credit officer, operation managers and logistics manager were interviewed. Therefore in this study 248 employees working in the logistics firms in Mombasa were considered.

3.3 Sampling Design and Sample Size

A sample is a portion of a larger population that has been preferred for monitoring and study whereas sampling is a purposeful in lieu of a haphazard criterion of adopting subjects for experiment so that the scientist can draw presumption regarding the population [27]. In this study the sample size has been obtained by the application of the formulae by Cooper and Schinder [26]. The sample size was 160.

$$n = N/1+N(\alpha)^2$$

Where

n = sample size=n
N = the sample frame (population)
α = margin of error (0.05%)
$n = 248/1+248(0.05)^2 = 160$

3.4 Research Instruments

The key instrument that was used in this study was a questionnaire. The questionnaires were administered and they comprised of open and close-ended questions. The researcher had constructed open and close ended questions which did not have predetermined responses while the close ended ones had predetermined feedback. The questionnaires were directed to the respondents in the logistics firms in Mombasa County

Table 1. Sample size

Strata Group	Target Population	Sample size	Percentage
Credit Managers	90	58	36
Credit officers	90	58	36
Operation managers	34	22	14
Logistic Managers	34	22	14
Total	**248**	**160**	**100**

Source: Research Data 2022

Table 2. Reliability

Variable	Number of items	Cronbach's Alpha	Decision
Appraisal process	4	.750	Acceptable
Credit risk control	5	.790	Acceptable
Collection policy	4	.757	Acceptable
Terms of credit	3	.904	Acceptable

Research Data (2022)

3.5 Reliability of the Research Instrument

Latunde (2016) explains that reliability of the instrument is when it the instrument can provide replicable results over a period of time. This means that findings are similar between divergent timelines. Reliability was checked by the application of Cronbach alpha coefficient of 0.7 and above to ensure its reliability for analysis.

3.6 Data Analysis and Presentation

Inferential and descriptive statistics were applied in data analysis. Multiple regression was applied to establish link between client appraisal processes, collection policy, terms of credit and credit risk control as independent variables and financial performance as of Logistics firms in Mombasa as the dependent variable. The study also used Pearson's to find out the relationship among the variables. The strength of relationships between the variables were analyzed by the calculation correlation coefficient. A series of multiple regression analysis was applied to provide the estimates of the net effects and explanatory power. (ANOVA) were used to test for the significance of the regression model. The extent of fitness of the regression model was measured using R^2.

And the multiple linear is to be used to establish the coefficients as below:

$$Y = \beta0+\beta1X1+\beta2X2+\beta3X3+\beta4X4+\varepsilon$$

In this case,

Y= Represents financial performance of transport firms-dependent variable
β0-Is the constant of the firm
β1= (1, 2, 3, 4) the coefficient for the independent variables
X1 is the value of client appraisal process
X2 = the value of credit risk control
X3 = the value of collection policy
X4 = the value of assessment of terms of credit
ε is Error Term
β_1 β_2 β_3 β_4 = Are the regression coefficient

4. RESEARCH FINDINGS ANALYSIS AND PRESENTATION

4.1 Response Rate

The response rate is the number of respondents who answered the questionnaires divided by the number of people in the sample and it is always expressed in the percentage form. The research targeted 130 respondents of which 100 of the questionnaires were attended to with accurate level of 77%. Mugenda and Mugenda [28] indicated that a response rate of 50% is acceptable, 60% is good and above 70% is tremendous. Consequently, the response rate of 77% was considered outstanding to analyse the effect of credit management on financial performance of logistics firms in Mombasa County.

4.2 Descriptive Analysis

4.2.1 Effect of appraisal process on the financial performance

The researcher enquired from the respondents about the effect of appraisal process on the financial performance of Logistics firms in Mombasa. The result shows the mean and standard deviation of responses to the four statements pertaining to the effect of appraisal process on the financial performance of Logistics firms in Mombasa.

Table 3. Effect of appraisal process

Effect of appraisal process	Mean	SD
Client appraisal is an important tool for credit management.	3.4	1.310
The firms have qualified personnel in client appraisal process	3.2	1.270
There is character check for client looking for credit facilities	2.9	.987
Customers' defaults arises with failure to assess capacity to repay.	3.12	1.310

From the result, majority of the respondents indicated that client appraisal is an important tool for credit management with a mean of (m=3.4, SD=1.31). Other respondents indicated that firms have qualified personnel in client appraisal process with a mean of (m=3.2, SD=1.27). The respondents also indicated that there is a character check for client looking for credit facilities with a mean of (m=2.9, SD=.987) and some of the respondents indicated that customers' defaults arises with failure to assess capacity to repay with a mean of (m=3.12, SD=1.31). The result shows that indeed client appraisal is an important tool for credit management. The findings concur with those of Ahmed & Malik [18] who indicated that the appraisal of clients has a positive influence on the performance of loan, whereas credit risk control and credit policy a positive but insignificant effect on the loan performance.

4.2.2 Effect of credit risk control on the financial performance of logistics firms in Mombasa

The second variable in this study is about the effect of credit risk control on the financial performance of Logistics firms in Mombasa. Just like in the previous variable, data was collected and analyzed using the mean and standard deviation. The data collected on cash conversion cycle items was computed and findings are presented in Table 4.

Based on the mean and SD, the participants agreed that the application of regular credit checks improves credit management with a mean of (m=3.37, SD=1.299), others indicated that the use of client application forms enhances monitoring and well credit management with a mean of (m=4.22, SD=.822). Some respondents agreed that the with flexible payment period it improves debt payment with a mean of (M=3.29, SD=1.167) while others indicated that establishing a credit size limit is a good technique in credit management (M=3.66, SD=1.175). The findings concur with those of Fernandez (2010) who indicated that it is crucial to set up a sound credit risk environment, proper credit advancing process, clear control of credit, assessing checking and measures over credit risk policy and approaches in which the portfolio of credit is managed for example the origin of loan, supervising, appraisal and collection as key factor in credit management.

4.2.3 The influence of collection policy on the financial performance of Logistics firms in Mombasa

The influence of the collection policy on the financial performance of Logistics firms in Mombasa formed the third independent variable in this research. Data was amassed via means as well as standard deviation. The mean as well as standard deviations of the data amassed was calculated and results were presented and are as shown in the Table 5.

Table 4. Effect of credit risk control on the financial performance of logistics firms

Effect of credit risk	Mean	SD
The application of regular credit checks improves credit management	3.37	1.299
The use of client application forms enhances monitoring and well credit management	4.22	.822
With flexible payment period it improves debt payment	3.29	1.167
Establishing a credit size limit is a good technique in credit management	3.66	1.175

Table 5. The influence of collection policy

The influence of collection policy	Mean	SD
Proper credit management has been enhanced by the collection policies in use	3.29	1.309
The credit policies formulation enhance the management of credit.	3.05	1.071
Guarantee policies enforcement improves debt recovery in cases of non-payment.	3.59	1.072
Systematical checks on collection policy revamp the credit management state.	3.73	1.184

The study revealed that, proper credit management has been enhanced by the collection policies in use with a mean of (M=3.29, SD=1.309), other respondents agreed that the credit policies formulation enhance the management of credit with a mean of (M=3.05, SD=1.071), others indicated that guarantee policies enforcement improves debt recovery in cases of non- payment with a mean of (M=3.59, SD=1.072) while some other respondents indicated that systematical checks on collection policy revamp the credit management state with a mean of (M=3.73, SD=1.184). The result suggests that indeed there is proper management of liquidity.

The findings concur with those of Kariuki [29] who indicated that when the process of collection policy is done in a better way, it is crucial in the financial performance of the firm of which logistics companies are part of. The findings also concur with those of Abdi [30] concluded that Information technology is important in the performance of organizations in the logistics sector. This is because, it offers an explanation that is visual about the process of allocation of resource and the process of decision making [31-35].

4.2.4 Effect of terms of credit on the financial performance of logistics firms in Mombasa

The effect of terms of credit on the financial performance of Logistics firms in Mombasa formed the fourth independent variable in this study. Just like in other variables, data was collected through mean and standard deviation and was calculated and results were presented in Table 10.

Based on the responses, the respondents strongly agreed that the terms of credit if not adjusted appropriately may lead to increased bad debts with a mean of (Mean=3.00, SD=1.360), other respondents agreed that the terms of credit should be varied from client to client for good credit management as indicated with a mean of (Mean=3.41, SD=1.161). The respondents also agreed with the statements that the regular checks on the credit period granted improves credit management with a mean of (Mean=3.22, SD=1.107) while some respondents agreed that the available terms of credit assisted in enhancement of an effective credit management with a mean of (Mean=3.29, SD=1.078). The findings concur with those of Kakuru [23] who indicated that cash discounts enhances collections and therefore a means to increase sales which lead to the reduction in the debtors' level and the related costs. The cash discount will increase the collections that are due to customers and hence a tool to enhance sales [36-38].

4.2.5 Financial performance of logistics firms in Mombasa

The study set to establish the financial performance of Logistics firms in Mombasa. The findings are presented below in table 11. It indicates that the respondents strongly agreed that enhancement of better credit terms has led to increase in sales with a mean of (M=3.77, SD=1.445), some respondents indicated that there has been an improved debt collection as a result of the improvement of the collection policy with a mean of (M=3.81, SD=1.482) while others agreed that the firms growth has been as a result of proper financial management practices employed by the company with a mean of (m=3.52, SD=1.173). The result suggests that financial performance of Logistics firms in Mombasa is better.

4.3 Correlation Results

The correlation result in table 9 below, the respondents shows that appraisal process and financial performance of logistics firms are positively related (r=.230, p=.00), credit risk control and financial performance are positively related (r=.144, p=.019), collection policy and financial performance are positively related (.689, p=.000). Finally, terms of credit and financial performance are positively related (r=.278, p=.000). The result suggests that appraisal process, credit risk control, collection policy and terms of credit influence financial performance.

Table 6. Effect of terms of credit

Effect of terms of credit	Mean	SD
The terms of credit if not adjusted appropriately may lead to increased bad debts.	3.00	1.360
Terms of credit should be varied from client to client for good credit management	3.41	1.161
The regular checks on the credit period granted improves credit management	3.22	1.107
The available terms of credit assisted in enhancement of an effective credit management.	3.29	1.078

Table 7. Financial performance of firms

Financial performance	Mean	SD
The enhancement of better credit terms has led to increase in sales	3.77	1.445
There has been an improved debt collection as a result of the improvement of the collection policy	3.81	1.482
The firms growth has been as a result of proper financial management practices employed by the company	3.52	1.173

Table 8. Correlation analysis

		Appraisal	Credit	Collection	Terms	Financial P
Appraisal P	Pearson Correlation	1				
	Sig. (2-tailed)					
Credit R	Pearson Correlation	-.033	1			
	Sig. (2-tailed)	.591				
Collection	Pearson Correlation	-.203**	-.067	1		
	Sig. (2-tailed)	.001	.277			
Terms of C	Pearson Correlation	-.075	-.025	.330**	1	
	Sig. (2-tailed)	.224	.685	.000		
Financial P	Pearson Correlation	-.230**	.144*	.689**	.278**	1
	Sig. (2-tailed)	.000	.019	.000	.000	

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

4.4 Regression Analysis Results

4.4.1 Model summary

The model summary result indicate that R=.588, this implied that the four predictor variables, moderately correlate with financial performance of Logistics firms. The coefficient of determination; R square is .345, this indicate that the four predictors collectively accounted for 34% of performance of Logistics firms in Mombasa. The other remaining percentage is accounted for variables other than the ones in the model.

4.4.2 ANOVA

Analysis of Variance (ANOVA) results in Table 11 indicate that the regression model linking appraisal process, credit risk control, collection policy and terms of credit as independent variables with financial performance is fit for prediction (F=34.158, p=.000). This implies that knowledge of the level of the predictor variables can lead to the prediction of the dependent variable.

Table 9. Model summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.588[a]	.345	.335	.656

a. Predictors: (Constant), Appraisal. Credit risk, Collection P, Terms of credit

Table 10. ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	58.760	4	14.690	34.158	.000[b]
	Residual	111.387	259	.430		
	Total	**170.148**	**263**			

a. Dependent Variable: Financial performance, b. Predictors: (Constant), Appraisal. Credit risk, Collection P, Terms of credit

Table 11. Regression coefficient

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.374	.373		6.368	.000
	Appraisal P	.444	.067	.375	6.586	.000
	Credit risk	.101	.044	.129	2.324	.021
	Collection P	.612	.181	.182	3.389	.001
	Terms of C	.104	.036	.153	2.906	.004

a. Dependent Variable: Financial performance

4.4.3 Regression coefficient

The result in Table 11 indicates the regression coefficients of the four independent variables (and the constant). The regression model of

$$\text{Financial P} = 2.374 + .444\ \text{Appraisal} + .101\ \text{Credit risk} + .612\ \text{Collection P} + .104\ \text{Terms of Credit}$$

The result shows that appraisal process has a positive significant influence on Financial performance (β=.444, p=.000), credit risk control have a significant positive influence on financial performance (β=.101, p=.021), collection policy positively and significantly influence the financial performance (β=.612, p=.001). The terms of credit has a significant influence on financial performance (β=.104, p=.004). The regression equation was:

The regression model of: $Y = \alpha + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \varepsilon$

Where;

Y= the dependent variable (financial performance)
X_1 is the client appraisal process
X_2 = the credit risk control
X_3 = the collection policy
X_4 = the assessment of terms of credit
$Y = 2.374+ 0.444X_1 + 0.101X_2 + 0.612X_3 + 0.104X_4$

5. CONCLUSIONS AND RECOMMENDATIONS

5.1 Conclusions

The study shows the progressive importance of credit management on financial performance of logistics firms and the weaknesses these firms have in doing this. From the findings, it can be concluded that indeed credit risk control systems has an effect on the overall financial performance of logistics firms. This can be seen from the high response rate who responded in the affirmative. The study demonstrated that client appraisal is an important tool for credit management.The result shows that indeed client appraisal is an important tool for credit management. The researcher also concluded that the appraisal of clients has a positive influence on the performance of loan, whereas credit risk control and credit policy a positive but insignificant effect on the loan performance.

The researcher can conclude that the use of client application forms enhances monitoring and well credit management. The researcher concluded that it is crucial to set up a sound credit risk environment, proper credit advancing process, clear control of credit, assessing checking and measures over credit risk policy and approaches in which the portfolio of credit is managed for example the origin of loan, supervising, appraisal and collection as key factor in credit management. Logistics firms should consider involving their clients in the formulation of implementation strategies in order to avoid complaints and dissatisfactions among the clients.

The researcher concluded that systematical checks on collection policy revamp the credit management state. This means that the process of collection policy is done in a better way, it is crucial in the financial performance of the firm and logistics companies are part of the firms.

5.2 Recommendations

The study recommends the creation and strengthening of an independent credit management authority to oversight and monitor best credit management practices in firms and even provide technical advice when necessary. The study recommends the following measures

which will help improve credit risk management in logistics firms hence improve the financial performance. The researcher recommends that it is important for firms to make a preliminary cost-benefit analysis and revise their credit risk management policies and be broader by maintaining high liquidity, having stringent monetary policies, Utilization of collateral, background check on applicants, regular market analysis, collaboration with other players and using skilled personnel as opposed to the traditional observation of default risk, liquidity risk and market risk. This is backed by the fact that majority of the respondents indicated that client appraisal is an important tool for credit management. The researcher recommends that proper credit management practices will enable a firm to effectively manage its credit especially with logistics firms whose massive chunk of capital needs are channeled to their operation activities. Effective credit management policies will therefore enable firms to carefully evaluate their financing needs whether long term or short term.

The logistics firms are also advised to open up and share information with other players on market risk thus involves consultants more in their market risk management. This is from the fact that market risk analysis is an external activity and not internal and from the fact that these consultants have vast expertise and specialization in this field. It is also imperative that the logistics firms start thinking of more future oriented methods of risk management other than the traditional detection and action method. The logistics firms should consequently start using prediction and advance preventive measures methods. This calls for effective strategic management and projections. The participants agreed that the application of regular credit checks improves credit management. This is from the fact that the risks are coming so fast and wide thus catching up with them is becoming more difficult. The logistics firms should thus run ahead of the risks. The study calls for a revision to specifically determine whether logistics firms have very effective default identification and response systems. The study revealed that, proper credit management has been enhanced by the collection policies in use. Based on the findings, it is also imperative to conduct a study on the best methods to project credit risks in the logistics firms so that they can use these methods in projecting the future risks instead of detecting the risks once they have occurred.

5.3 Recommendations for Further Research

Given the scope and limitations of this study, the researcher suggests a number of areas for further study. The scope of this study should be expanded to include other variables not identified in this study as captured by the error term. To get a better perspective of the relationship between credit management and financial performance, this study should be conducted in a different industry/sector. The study can also be improved by using a different yardstick to measure financial performance.

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COMPETING INTERESTS

Author has declared that no competing interests exist.

REFERENCES

1. Asiedu. Democracy FDI & natural resources. J Int Econ. 2016;84(11).
2. Caruso. St*atistics of business of US businesses Employment and payroll summary*. Washington, DC; 2017.
3. Uwonda, Okello. 2014. Cash flow Management Utilization by SMEs in Northern Uganda. *Journal of Accounting*. Auditing, economics and finance.
4. Abor, Quartey. Financing the growth of SMES in Africa; 2017.
5. Ernst & Young. Study on the promotion micro small and micro small and medium enterprises in East Africa. ACTS press; 2016.
6. Aminu, Zainab. A review of anatomy of working capital management theories. Eur J Bus Manag. 2016.
7. Muller. Managing cash flows Dynamic business magazine. London Sage Publishers; 2015.

8. Bungule, Ndemo. Effect of credit management practices on the performance of SMEs in transport and logistics industries in Nairobi; 2017.
9. Gichuru, 2015. Critical success factor in business process outsourcing of transport and logistics firms in Kenya (MBA unpublished paper UON).
10. Jussi, Petri. Does Agency Theory Provide general framework for audit pricing. Int J Aud. 2014;8(2):253-62.
11. Fama EF. Components of investment performance. Fin J. 2016;27(3):551-67.
12. Lunalo O, 2019. Effects of credit management on financial performance of transport firms in Mombasa County. International journals of academics & research.
13. Kipkirui O. Credit management practices and financial performance of microfinance institutions in Nairobi central business district, Kenya; 2018.
14. Margrabe. The incidence of secured debt evidence from small business community. J Financ Quant Anal. 2017.
15. Kairu. Credit management. 2nd ed Focus Publishers Ltd Nairobi; 2016.
16. Mason R. A capital adequacy framework for Islamic banks. Appl Financ Econ; 2017.
17. Binks, Enew. Credit management practices and financial performance of microfinance in Nairobi CBD. Int Sci Educ Res J. 2015;2018.
18. Malik A. Credit risk management and loan performance. Int J Econ Financ Risks. 2015.
19. Gatuhu. The effect of credit management on financial performance of microfinance institutions in Kenya. Int Bus Manag. 2016.
20. Afrifa. Int J Acad Res (DOI). 2015:Article 07..
21. Ayodele. The impact of credit policy on performance of Nigerian commercial banks; 2014.
22. Byusa, Nkusi. Effect of credit policy on selected Rwandan commercial banks Brewer, (2015). Int J Acad Res 2012. Available:www.ijarke.com.
23. Kakuru, 2015. Basic financial management. MUBS Kampala.
24. Nyangoma. Credit terms access to finance and financial performance of SMES in Kampala; 2017.
25. Muturi, 2016. Effect of credit risk on financial performance of commercial banks Kenya. *Journal of economics and finance* IOSR-JEF 7(4) 72-843.
26. Cooper, Schindler. Business research methods. New York: McGraw-hill; 2013.
27. Kothari. Research methodology methods and techniques. 3rd ed. New Delhi, India; 2014.
28. Mugenda, Mugenda, 2010. Research Methods Quantitative and qualitative approaches. Nairobi. Africa center for technology studies.
29. Kariuki, 2010. Effective collection policy. Kasneb publishers Nairobi.
30. Abdirahman. Financial factors affecting performance of logistics companies in Mombasa County; 2018.
31. Azende. Risk management and insurance of SMES in Nigeria. Int J Bus Manag ISSN-8916. 2012.
32. Bryman, Bell 2011. Business research methods. Allan Bryman Emma Bell. 3rd ed.
33. Griffin, Zikmund. Business research methods. London South Western Cengage College; 2017.
34. Kumar. Research Methodology a step by step guide for beginners. London Sage publications Ltd; 2011.
35. Ngare, 2013. A survey of credit risk management practices by commercial banks in Kenya. (Unpublished MBA project, University of Nairobi).
36. Njeru, Njeru, Memba, Tirimba. Effect of loan repayment on financial performance of deposit taking saccos in Mount Kenya region. Int J Bus Soc Sci. 2015;10(4):1238-44.
37. Sekaran, 2015. Research methods for business, a skill building approach. New Delhi: John Wiley & sons.
38. Thatcher RW. Validity and reliability of quantitative electroencephalography. J Neurother. 2010;14(2):122-52.

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