THE EFFECT OF CREDIT COLLECTION PRACTICES ON FINANCIAL PERFORMANCE OF MANUFACTURING FIRMS IN KENYA

Florence Jemutai Cheptum

THE EFFECT OF CREDIT COLLECTION PRACTICES ON FINANCIAL PERFORMANCE OF MANUFACTURING FIRMS IN KENYA

Florence Jemutai Cheptum

PhD Candidate: Jomo Kenyatta University of Agriculture and Technology, Kenya

Corresponding author's Email: fjcheptum@gmail.com

ABSTARCT

Purpose: The main objective of this study is to establish the effect of credit collection practices on the financial performance of manufacturing firms in Kenya. Manufacturing firms have been experiencing a number of challenges in their application of credit collection practices to ensure sound financial performance.

Methodology: The study adopted two research designs; descriptive and causal. The accessible population for the study was 558 registered manufacturing firms. Stratified sampling technique was used to select the sample size and a sample of 233 manufacturing firms was arrived at using Yamane's formula. Questionnaires were the main instruments used to collect primary data. Both descriptive and inferential statistics were utilized in data analysis with the aid of SPSS. Data presentation methods used included frequency tables and percentages. Data collected were tested using, univariate test to provide an insight using both parametric (F-test) and non-parametric test (Pearson correlation coefficient). Multivariate analysis was also carried using the multiple regression analysis which indicated the level of the relationship that existed between the independent variables and the dependent variable.

Results: Findings indicate that the credit collection practices have a significant positive effect on the financial performance of the manufacturing firms ($p<0.05$). This can be attributed to the fact that owners of manufacturing firms have the ability to control and manage credit through their experienced and skilled credit managers. In conclusion, credit collection practices positively and significantly affected the financial performance of the firms.

Unique contribution to Theory, Practice and Policy: The study recommends that registered manufacturing firms operating in Kenya should adopt credit collection practices since it positively and significantly affects the financial performance. This can be achieved by setting techniques which are used to collect credit and this helps in reducing chances of credit defaults.

Key Words: Financial performance, credit collection practices, manufacturing firms and debt recovery.

1.0 INTRODUCTION

Credit management practices is a set of guidelines which provide direction on which type of customers are sold on open account, the exact payment terms. Receivables take a larger proportion in an organization's assets and thus it is vulnerable to bad debts and losses, hence it is therefore essential to manage it appropriately by using Credit management practices (Oyadonghan & Bingilar, 2014). Credit is a marketing tool for expanding sales (Ifurueze, 2013). Credit management practices can be summarised as accounts receivable which can broadly be termed as uncollected sales or sales on credit. Accounts receivable is the amount owed to a firm by its customers who have purchased goods or services on credit; it is one of the largest assets of a business which has a great effect on the financial performance (Charles, 2009).

Financial performances of firms listed on the Nairobi Securities Exchange have an inverse relationship between capital structure and financial performance of listed firms in securities exchange in Kenya. The higher the debt ratio, the less the return on equity which therefore supports the need for more equity injection rather than borrowing, as the benefits of debt financing are less than its cost of funding (Siro, 2013) .Net portfolio of loan in Kenyan firms grew by 13.3%, but the profit before tax dropped by 19% between the years 2010 and 2011 (CBK, 2011). However, decrease in profits was thought to be attributed to increased provision for nonperforming loans which constitutes credit risk. Credit standards are the guidelines issued by a firm that are used to determine a customer's creditworthy, they are often created after careful analysis of past borrowers and market conditions, and are designed to limit the risk of a borrower not making credit payments or defaulting on loaned money (Kalunda & Kabiru, 2012). Financial performance involves performing financial activity. It is the degree to which financial objectives have been accomplished. It is the process of measuring the results of a firm's policies and operations in monetary terms (Leah, 2008).

It is used to measure the overall financial health of a firm over a given period of time and to compare similar firms across the same industry or to compare industries or sectors in aggregation (Kljelly, 2004). To intelligently understand, analyse, and interpret financial statements it is crucial to search for the right information, know where to locate it, and then act swiftly on the findings by analysing how credit management practices and financial performance correlate, since a firm using weaker credit management practices, plus other contributing factors is likely to experience financial performance challenges (Oyadonghan & Bingilar, 2014). The main cause of adverse financial challenges in the manufacturing sector has been attributed by Continued laxity in credit standards for borrowers and counterparties, (Ogilo, 2012).

Credit management practices has been said to have some bearing on the financial performance of a manufacturing firm. When a small number of borrowers default their credit obligations, then it may cost the firm a huge loss (Bessis, 2013), this is because the firm may not completely do away with the possibility of such losses, it becomes imperative for management to determine what level of risk is desired. They need to develop, approve and regularly re-evaluate practices, policies and procedures governing management of risks. Management need to keep abreast of risk management best practices as they evolve to ensure that the practices are up to date and can help in ensuring a sound financial performance (Oyodonghan & Bingilar, 2014).

1.2. Statement of the Problem

Adoption of credit management practices by manufacturing firms has greatly improved their financial performance (Kaplan & Bernadette, 2008). The overall goal of the manufacturing sector is to increase its contribution to Kenyan GDP by at least 10% per annum. The sector is also expected to raise market share in regional markets from 7% to 15% and attract at least ten large strategic investors in key agro-processing industries, targeting local and international markets (Gitau & Gathiaga, 2017). Financial performance of the manufacturing firms according to the Kenya Economic report 2013 regarding contribution to GDP has remained below the medium-term plan and Vision 2030 targets (Njoroge, 2015). From the year 2015 some manufacturing firms in Kenya have closed their business due to poor performance while others have been forced to relocate their manufacturing plants to other countries because capital productivity in the Kenyan manufacturing sector is particularly low, compared to regional and global productivity levels (Gitau & Gathiaga, 2017) .Poor financial performance in the manufacturing sector is a clear reflection of the inadequate utilisation of credit management practices (Edem, 2017).

It is prevalent that 95% of Kenya's manufactured goods are basic products such as beverages, food, building materials and basic materials (KAM, 2016). The growth pattern for the manufacturing industry in Kenya has not been stable due to poor adoption of credit management practices which among other factors has contributed to declining financial performance (Mogaka & Jagongo, 2013). Manufacturing firms in Kenya have faced a number of challenges one of them being meeting their short-term commitments and they have extended longer credit periods to those buying on credit as they have shorter credit period from creditors (Mogaka & Jagongo, 2013), this in turn affected the operations of the firm making it difficult to meet their current liabilities (Kagoyire & Shukla, 2016). Credit management practices and financial performance are largely correlated, a study by Mwangi and Muriuki (2013) found that 18 out of 19 respondents indicated that they had a documented credit management practices which is 95% strong agreement.

Inadequate adoption of credit management practices by manufacturing firms' industry has led to higher capital requirements which have raised the cost of credit (Admati *et al.,* 2011). This is a terrific example of static, short-term thinking that has put in to mess the financial performance of manufacturing firms. Recent research survey by Upagade & Shende (2012) posits that higher capital requirements have a very modest effect on the cost of credit and substandard management and preservation of a suboptimal allocation of capital. Important national policy issues will also be affected if the issue of financial performance is not adhered to. Some of the studies that have been done in Kenyan firms on credit management practices include: Olweny, Namusonge and Onyango (2012) established the influence of socio-economic background on individual investor risk tolerance at NSE, the study established the effect of risk tolerance category of the borrower on loan repayment performance, Mungai, Maingi and Muathe (2014) studied loan repayment and sustainability of government funded micro-credit initiatives in Murang'a County, Angaine and Waari (2014) analyzed the factors influencing loan repayment in micro-finance institutions in Kenya, Meru Municipality. None of the above studies clearly focused on the credit management practices on financial performance of manufacturing firms in Kenya. This study therefore sought to fill this gap.

2.0 LITERATURE REVIEW

Theoretical Review

This section outlines the reviewed theories that guided the study, which have been tested by various researchers in the field of finance. They include: Quantitative Theory of Credit, In-Kind Finance Theory and Asymmetric Information Theory.

Quantity Theory of Credit

This theory was developed by Werner (1992). The theory argues that the credit viewpoint of money is compatible with the quantity theory of money. The theory was developed in with the argument that the predictive power of the sectoral approach towards a quantity theory of credit is weak (Werner, 1997)). As a result of that, the theory developed to a quantity theory of seigniorage (Werner, 2009. This approach was proposed and further suggest that the financial system may be held responsible for price and output fluctuations to the extent commercial bank seigniorage alters the stock of money in circulation, if not, the financial sector can become the source of instability by influencing profitability in the real sector through a Goodwin-type interaction (Werner, 2012). These trends could be countered by an interest rate rule based on deposit habits and on the deposit rate, and supplemented perhaps by a policy of influencing these habits and manipulating the deposit rate (Werner, 2015).

The theory is relevant to this study in that institutions enjoy the privilege of using their liabilities as a form of money; their lending decisions based on private interest affect in the aggregate the stock of money and thus social welfare. To maximize profit, institutions tend to minimize their level of deposit reserve holdings, loaning out as much of their funds as possible at the market rate of interest. Banks create money, out of thin air, as the saying meaning that money, chasing a given volume goods, decreasing afterwards individuals' buying power, no differently than what would have been done with forged money.

The Austrian School of Economics argues that the government tolerates the lending practices of banks in exchange for banks' commitments to buy debt from the government to fund government's ambitions (Myers, 2012). Graeber (2011), argued against this statement that for most of human history, money has been widely understood to represent debt. So, this is the environment in which the institution of commercial banking had to develop. Nowadays most of the money in circulation is credit money (Werner, 2015). It is income earned by banks by expanding lending under fractional reserve banking, and labelled through the term commercial bank seigniorage (Huber, 2014). Credit is powerful in disturbing economic activity in the short- and medium-run (Iacoviello, 2015). Theoretically, the credit approaches to money that have been advanced fall into a broader category of study which postulates that monetary creation is endogenous (Wray, 2016).

However, the theory has some criticisms. Werner's sectoral approach towards a quantity theory of credit is too vague in its predictions. A quantity theory of commercial bank seigniorage approach is proposed in its place, arriving at the conclusion that the financial system may be held responsible for price and output fluctuations to the extent commercial bank seigniorage. These trends could be countered by an interest rate rule based on deposit habits and on the deposit rate, and supplemented perhaps by a policy of influencing these habits and manipulating the deposit rate (Wray 2016). The quantity theory of money wants money to be exogenous, with independent causal role, whereas commercial bank seigniorage refers to money endogeneity. Such has been the standard doctrinal standpoint. Thirlwall (2017) distinguishes three versions of the quantity theory: the equation of exchange, the

income quantity theory, and the cash balance equation. But, none of these is actually a theory. They are all equations, alternative expressions of a single analytical tool adapted to the needs of the particular hypothesis.

Empirical Review

Financial performance is an important aspect of financial risk management (Cheruiyot, 2010). On their study, Hgokçehan and Waseem (2014) investigated the factors that affect the financial performance of manufacturing firms listed in Borsa Istanbul, Turkey, during the recent financial crisis during the period 2008-2013, using a sample size of 140 listed firms, using factor analysis. The study findings suggest that liquidity of the firm affects the firm's market value positively and that firms with good liquidity perform better during crises period.

According to a study which was done by (Makori, Munene & Muturi, 2013) on the challenges facing deposit-taking SACCOs regulatory compliance in Kenya, Gusii region. The study adopted cross sectional survey research design and it was conducted for a three-year period between 2010- 2012. The population of the study was 215 deposits taking SACCOs with a sample size of 30 banks. Data was collected using both primary and secondary methods. Questionnaire was the main tool of data collection. Data was analysed by multiple regression and Pearson correlation analysis. Findings indicated that adoption and implementation of sound credit risk management practices, favourable external business environment, appropriate credit risk policy, and setting of credit risk limits had an impact on the financial performance of the SACCOs. Appropriate credit risk policy was regarded as having the greatest impact on the financial performance of SACCOs in Kenya and that financial analysis of a firm helps in assessing the financial position and the financial performance over a given period of time.

Past literature by Cheptum and Otuya (2016) on the relationship between employee relations and performance of firms in Kenya, which adopted the descriptive research design and target population of 6,335 out of which a sample size of 108 was used for the study? Both primary and secondary methods were used to collect data whereby questionnaire was the main tool of data collection. Inferential and descriptive methods were employed and multiple regression model was used in analysis of data found that, performance of a firm comprises of the actual output or results of a firm as measured against its intended outputs. Ongoing and on-the-job training can help employees succeed in their current job and position them for future responsibilities within the firm. Investments in employee training and development can help to build the firm's overall capacity enabling it to achieve its business goals hence increasing its financial performance (Cheptum & Otuya, 2016).

Nelson (2002) on a study on commercial banking crises in Kenya, investigated the reasons for nonperforming loans and the actions that bank managers undertook to mitigate the issue of non-performing loans (NPLs) and the level of success of such actions, the study used descriptive design with a sample size of 30 bank managers. Findings of the study agreed that national economic downturn was perceived as the most important external factor. Customer failure to disclose vital information during the loan application process was considered to be the main customer specific factor that inhibited the collapse of financial institutions in Kenya since 1986 due to non-performing loans. Conclusions drawn from the study was that lack of an aggressive credit collection practices was perceived as the main bank specific factor, contributing to the non-performing debt problem in Kenya (Nelson, 2002). On their study, Acharya and Naqvi (2012), defined Collection Period as the average time taken to collect trade debts. A reducing period of time is an indicator of increasing efficiency. Acharya and

Naqvi (2012) on their study further found out that, collection period enables the firm to compare the real collection period with the granted theoretical credit period.

A study by Mwangi and Muriuki (2013), on Credit Risk Management Practices by Oil Companies in Kenya puts that, Collection policy involves all processes and strategies an organization employs to ensure that credit sales is fully collected and on time. The study further clarified that a good credit collection policy should have clearly defined procedures which should be communicated to customers. Firms strategize to embrace policies which should reduce the debt collection cycle as long cycles affect both cash inflows and liquidity adversely. In order to avoid incompatible collection policies which, manage debt collection poorly, all essential departments of an organization including finance and sales department must sit and decide on unified ideas in structuring the collection practices. Most of the studies done on trade credit collection deliberate on credit period, late payment, and collection period Kljelly (2004). Credit period is the length of time allowed to the buyer before payment is considered past due. The period is usually conveyed, as credit term, to the credit customer either verbally or expressed in writing. Late payment is the fulfilment of debt obligation at a date beyond the credit period. Collection period is the number of days taken by customers to pay their bills. Late payment occurs when the collection period exceeds the credit period.

Collection period can be calculated from the financial statements (Howorth & Reber, 2004). The Aging Schedule is a popular accounts receivable tool (Pike & Cheng, 2001). It comprises a classification of outstanding balances according to the period of time they have been outstanding. The age categories can be calibrated according to months, weeks and days, depending on the firm's requirements. They are frequently expressed as a percentage relative to the total accounts receivable. If debts are collected on time then most of the debts should be younger and few should be older. Increased collection efficiency would reduce the percentage of debt in the older categories (Kargi, 2011). Collection department and sales department in a firm get involved in a number of conflicts in circumstances where their ideas are not unified in a policy. This sales department in turn complains so that they can win new credit customers but then the collection departments scare them away with threatening letters Myers and Brealey (2003). Good administration of debtors can only be achieved through a clear, concise and well communicated collection policy. He further suggests three principles towards a maintaining a good collection policy i.e. being strict with credit limits, sending invoices promptly and systematically reviewing debtors. Arnold (Arnold, 2003). The study revealed that commercial Banks in Rwanda use collection policy in Credit Management to a great extent.

Formulation of collection practices in the manufacturing sector have been a challenge in credit management, enforcement of guarantee policies provide chances for credit recovery in case of credit defaults, staff incentives are effective in improving recovery of delinquent credit, a stringent policy is more effective in debt recovery than a lenient policy, regular reviews have been done on collection practices to improve state of credit management, and finally that available collection practices have assisted towards effective credit management (Kargi, 2011) . Credit committees involvement in making decisions regarding credit are essential in reducing default/credit risk, the use of credit checks on regular basis enhances credit management, penalty for late payment enhances customers commitment to credit repayment, the use of customer credit application forms improves monitoring and credit management, flexible repayment periods improve debt repayment and finally that the use of credit checks on regular basis enhances credit management (Myers & Brealey, 2003).

A common goal of accounts receivable management in manufacturing firms is to ensure debts are collected within specified credit terms and to identify delinquent accounts to reduce the total trade credit which is written off as a bad debt (Jackling, Raar, Wigg, Williams & Wines, 2004). Delinquent customers reduce the size and age of accounts receivable and the probability of accounts defaults. (Peacock *et al.,* 2003). Accounts receivable collection efficiency measures indicate the performance of accounts receivable processes and the success of policies applied hence sound financial performance of a manufacturing firm (Ejoh & Sackey, 2014).

2.3. Conceptual Framework

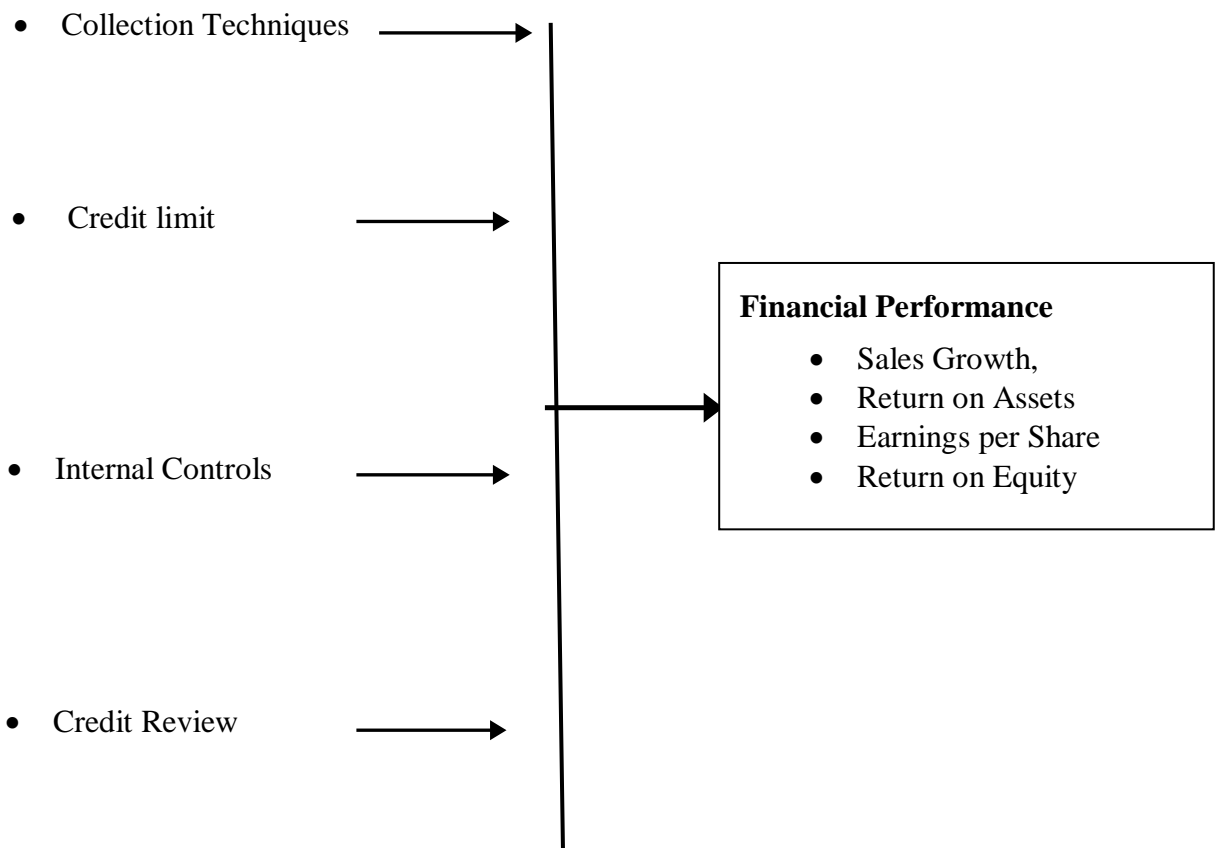**Independent Variable**   **Dependent Variable**

Figure 1: Conceptual Framework of the Study

3.0 RESEARCH METHODOLOGY

The study adopted two research designs; descriptive and causal. The accessible population for the study was 558 registered manufacturing firms. Stratified sampling technique was used to select the sample size and a sample of 233 manufacturing firms was arrived at using Yamane's formula. A pilot study was conducted to test for the validity and reliability of the research questionnaire; content validity was used and Cronbach's alpha to test for reliability. Questionnaires were the main instruments used to collect primary data secondary data collection sheet was used to collect secondary data.

4.0 FINDINGS

4.1 Background Information Results

Analysis on the demographic characteristics of the respondents was done. This included: gender, level of education, duration of operation of the firm, and duration respondents had worked in the firm. A description of the study variables under various sections of the questionnaire was also analyzed.

4.1.1 Gender of the Respondents

The questionnaire required the respondents to indicate their gender by ticking against gender option - male or female. The findings revealed that 150 (68%) of the respondents were male whereas 71 (32%) were female. This implies that, most of the males engage in business activities and are ready to take risks and that's why most of them are credit officers. This was to ascertain as to whether there was gender balance in the distribution of views as well as indicating that the researcher was compliant with the gender equality rule as required by the Kenyan Constitution (2010), which states that no single gender should be more than two thirds of the total population and that institutions should give equal opportunities to both males and females. Gender distribution is presented in Table 1.

Table 1: Gender Distribution of the Respondents

Gender	Frequency	Percentage
Male	150	68
Female	71	32
Total	**221**	**100**

4.1.2 Level of Education of the Respondents

The study sought to determine the highest level of education of the respondents. Findings from the study indicated that, 122 (55%) of the respondents were holders of Bachelor degree, 52 (24%) were holders of Master degree 44 (20%) of the respondents were holders of Diploma and 3 (1%) were holders of PhD. This implies that, most of the firms when advertising for jobs indicate bachelors degree as the minimum qualification (Abbas 2015). There are also organizations who sponsor their employees for degree courses and some offer scholarships which give employees opportunities to further their education. Respondents with Masters were 24% as per the study findings, this is attributed to the fact that some employees having gained experience, opt for masters programs in order to increase their expertise and level of education for better opportunities. Respondents with Diploma degree stood at 20%, this follows the establishment of the technical and vocational education and training Act of 2013. The act aims to expand and improve learning institutions in Kenya by imparting practical and technical skills to the learners. Learners from these institutions have the practical skills to create their own jobs and this explains the small number in employment as evidenced in those in State corporations. Respondents with Doctorate were the least with 1% and this is attributed to the fact that those employees who advance their education to this level prefer to teach at institutions of higher learning as compared to working in the office. As per this study' findings, majority of the respondents were well above diploma level.

The findings are similar to those found by Abbas (2015) in a similar study where he indicated that a majority of the population had bachelor degrees which are a satisfactory level of education that enables proper understanding of a research questionnaire. This is because the level of education influences the decision made by credit managers as observed by Reeve and Warren (2016). Response on the level of education of the respondents is presented in Table 2.

Table 2: Level of Education of the Respondents

Level of Education	Frequency	Percentage
Diploma	44	20
Bachelors	122	55
Masters	52	24
PhD	3	1
Total	**221**	**100**

4.1.3 The Duration of Existence of the Firm

The respondents were asked to indicate the duration in years in which the firm has been in existence. Findings from the study indicated that, 133 (60%) of the firms had existed for a period of five to ten years, 55 (25%) were in operation for a period of ten to fifteen year 22 (10%) of the firms had been in operation for five years and less, and finally 11 (5%) have been in operation for a period of over fifteen years. This indicated most firms were in operation for a period of five to ten years 133 (60%). This is an implication that, a large number of the manufacturing firms were stable since operation of five years and above is considered long term (Gichaaga, 2014). The above figures imply that the stability and experience of the firm over time was good. Findings are presented in Table 3.

Table 3: Duration of Existence of the Firm

Duration of Existence	Frequency	Percentage
Less than 5 Years	22	10
5- 10 years	133	60
10-15 years	55	25
Above 15 years	11	5
Total	**221**	**100**

4.1.4 Work Duration

The respondents were required to state the number of years they had worked with the firm. This was to ascertain the experiences the employees have gained over time. The descriptive findings from the study indicated that 107 (48%) had worked for more than ten years, 88 (40%) had worked for five to ten years, and further 26 (12%) of the respondents had worked for a duration of less than five years. This implies that, most of the respondents from the sampled firms indicated that a minimum of five years' work experience was considered adequate for an employee to be considered informative on the study hence the information provided was reliable. Findings from previous studies indicates that employees stay in employment for long periods in manufacturing firms leading to lower chances of employee turnover hence higher employee retention due to permanent and pensionable employment terms in most of the firms (Gichaaga, 2014). Findings are presented in Table 4.

Table 4: Work Duration of Respondents

Duration	Frequency	Percentage
0-5 years	26	12
5- 10 years	88	40
Over 10 years	107	48
Total	**221**	**100**

4.2 Descriptive Analysis

The study sought to establish the views of credit managers of selected registered manufacturing firms in Kenya on credit management practices and financial performance. The respondents were required to indicate their level of agreement/disagreement in line with statements on a five- point Likert Scale from 1-5 representing strongly disagree to strongly agree respectively.

4.2.1 Financial Performance

This section presents the findings and discussions on descriptive analysis of the dependent variable. The study carried out a thorough scrutiny on the opinions of credit managers on financial performance of manufacturing firms in Kenya. The results are presented in Table 4.6 in which the financial performance of registered manufacturing firms in Kenya was measured and the respondents were required to indicate their level of agreement to various statements on financial performance. Majority of the respondents strongly agreed that manufacturing firms have proper marketing strategies which help in boosting their sales volume (Mean=4.83; Std. Dev=0.37). Furthermore, majority of the respondents strongly agreed that firms have adopted value-based management accounting systems to improve return on assets (Mean=4.71; Std. Dev=0.54). The findings indicate that majority of the respondents strongly agree that firms should adopt modern management tools for accounting to ensure consistency in stabilizing earnings per share (Mean=4.79; Std. Dev=0.50). In addition, it is evident from the results that manufacturing firms have adopted an improved and efficient management accounting tools in improving returns on equity (Mean=4.71; Std. Dev=0.73). The study findings are supported by Chijoriga (2007) who posited that if a high turnover means better use of assets owned by the firm and hence better efficiency, a higher profit margin means that the entity has substantial market power. Risk and growth are two other important factors that influence a firm's financial performance (Cooper & Schindler, 2018). Since market value is conditioned by the firm's results, the level of risk exposure can cause changes in its market value. Another study which supports these findings is by Hall (2011) who argues that large volume of sales achieved through extensive marketing is a necessary tool which aids in improving performance. Another study by Ameels and Sheipers (2012) argues that a sustainable higher growth rate would have a positive impact on performance for the companies listed at the stock exchange, its ability to distribute dividends is a proof of stability since the use of value-based management accounting system increases the value of shareholders by increasing firms returns in excess of its cost of capital and achievement of the firm's goals and objectives at large. Results are shown in Table 5 below.

Table 5: Financial Performance

STATEMENT	SD	D	N	A	SA	Mean	Std. D
Our firm ensures extensive marketing strategies are in place to boost its sales volume.	0%	1%	0%	7%	83%	4.83	0.37
We adopt value-based management accounting system to improve our return on assets.	0%	0%	4%	21%	75%	4.71	0.54
Our firm adopted modern management tools for accounting to ensure consistency in the stabilization of its earnings per share.	1%	0%	4%	13%	83%	4.79	0.50
Our firm has an improved efficient management accounting tools which facilitates improved return on equity.	0%	4%	4%	9%	83%	4.71	0.73
Average						**4.76**	**0.53**

4.2.2 Credit Collection Practices

Descriptive analysis of credit collection practices was conducted. The study sought to establish if manufacturing firms have in place collection of credit techniques. Most of the respondents were in strong agreement (Mean= 4.48; Std. Dev= 0.71). A large number of the respondents agreed that manufacturing firms impose size limits on credit to clients as a viable strategy in credit management (Mean= 4.31; Std. Dev= 0.86) The respondents were largely in agreement that internal credit controls applied by manufacturing firms ensure sound risk management by disclosure, and transparency requirements introducing control by the firm and customers (Mean= 3.92; Std. Dev= 1.11). Further, the study sought opinions from the respondents on the statement as to whether manufacturing firms ensure regular credit reviews are done on collection policies to improve the state of credit management (Mean= 4.00; Std. Dev= 1.10).

The respondents largely agreed that manufacturing firms consider a stringent policy as more effective in debt recovery than a lenient policy (Mean= 4.11; Std. Dev= 0.84). The findings also indicate that majority of the respondents strongly agreed that manufacturing firms ensure they meet adequacy in capital to minimize shortage of finances to lend to their clients (Mean= 4.73; Std. Dev= 0.54). Respondents strongly agreed that firms enforce collateral policies to provide chances for credit recovery in case of loan defaults (Mean= 4.82; Std. Dev= 0.48).

As to whether the manufacturing firms have strong credit control mechanisms to minimize chances of credit default, most of the respondents largely agreed (Mean= 4.47; Std. Dev= 0.94). The findings also indicate that majority of the respondents agreed that manufacturing firms allow flexible repayment periods to improve on loan repayment (Mean= 4.60; Std. Dev= 0.78. Furthermore, findings indicated that firms give penalties for late repayment of loans to enhance customer commitment to credit repayment within the stipulated period (Mean= 4.73; Std. Dev= 0.62). Descriptive findings are presented in Table 6 below.

Table 6: Credit Collection Practices

STATEMENT	SD	D	N	A	SA	Mean	Std. D
Our firm has in place collection of credit techniques.	0%	0%	13%	26%	61%	4.48	0.71
We impose size limits on credit to clients as a viable strategy in credit management.	0%	0%	26%	17%	57%	4.31	0.86
Internal credit controls applied by our firm ensure sound risk management by disclosure, and transparency requirements introducing control by the firm and customers.	0%	17%	22%	12%	49%	3.92	1.11
Our firm ensures regular credit reviews are done on collection policies to improve the state of credit management.	5%	4%	26%	17%	48%	4.00	1.10
We consider a stringent policy as more effective in debt recovery than a lenient policy.	0%	0%	31%	27%	42%	4.11	0.84
Our firm ensures its adequacy in capital to minimize shortage of finances to lend to its clients.	0%	0%	4%	18%	78%	4.73	0.54
We enforce guarantee policies to provide chances for credit recovery in case of loan defaults.	0%	0%	4%	9%	87%	4.82	0.48
We ensure that we have strong credit control mechanisms.	2%	9%	5%	17%	69%	4.47	0.94
Our firm allows flexible repayment periods to improve loan repayment.	0%	4%	5%	17%	74%	4.60	0.78
Our firm gives penalties for late payment enhancing customer's commitment to credit repayment within the period.	1%	0%	9%	9%	82%	4.73	0.62
Average						**4.42**	**0.80**

4.3 Inferential Analysis

Correlation was done to test the relationship between variables and multiple regressions to determine the relationship between dependent and independent variables.

4.3.1 Correlation Analysis Results

This section presents the correlation of each independent variable and the dependent variable and later carried out an overall correlation between the independent variables and the dependent variable.

4.3.1 Relationship between Credit Collection Practices and Financial Performance

The study examined the relationship between credit collection practices and financial performance of selected registered manufacturing firms in Kenya. The correlation analysis results are presented in Table 7.

Table 7: Correlations Coefficients of Credit Collection Practices and FP

		Financial Performance
Credit Collection Practices	Pearson Correlation	.578
	Sig. (2-tailed)	.027
	N	221

Pearson correlation coefficient (R) was used to indicate the direction and strength of the relationship between credit collection practices and financial performance. The study findings indicate that the relationship was positive and significant (r=0.578; p<0.05). This is an implication that credit collection practices significantly affected financial performance.

4.3.2 Regression Analysis

The study determined a combined effect of credit collection practices, credit standards, debtor's approval and credit risk controls on financial performance. Table 8 below therefore represents the regression results of different credit management practices and financial performance.

Table 8: Regression Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.808[a]	.653	.639	.56778

a. Predictors: (Constant), Credit Collection Practices, Credit Standards, Debtor's Approval and Credit Risk Controls

b. Dependent Variable: Financial Performance

From the results obtained, an R of 0.808 (R=0.808) shows that there is a positive correlation between credit management practices and financial performance. The adjusted R square of 0.639 indicates that; credit collection practices, credit standards, debtor's approval and credit risk controls in exclusion of the constant variable explained the change in financial performance by 63.9%, the remaining percentage can be explained by factors not included in the model.

The coefficient of determination ($R^2 = 0.653$) indicates that 65.3 % of financial performance can be explained by credit collection practices, credit standards, debtor's approval and credit risk controls. The remaining percentage can be explained by other factors not investigated by the study and the error term.

4.3.3 Assessing the Fit of the Multiple Regression Model

This involved the assessment of the multiple regression model fitness for the data analysed. ANOVA was conducted which aided in identifying whether financial performance could be

predicted without relying on credit management practices analysed in the study. ANOVA results are presented in Table 9 below.

Table 9: Regression Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients			95.0% Confidence Interval for B	
		B	Std. Error	Beta	t	Sig.	Lower Bound	Upper Bound
1	(Constant)	3.332	.375		8.884	.000	2.593	4.071
	Credit collection practices	.321	.069	.417	4.674	.000	.457	.186
	Credit Standards	.202	.030	.248	2.558	.001	.458	.054
	Debtor's Approval	.212	.062	.266	2.311	.021	.107	.532
	Credit Risk Controls	.620	.091	.522	6.817	.000	.440	.799

a. Dependent Variable: Financial Performance

The t- test results proved that all the independent variables were significant at 5% significance level. All the p- values were less than 0.05 hence the resulting regression equation.

The study findings indicate that credit techniques are a significant predictor of financial performance in registered manufacturing firms (t=4.674; p<0.05). The study findings also indicate that credit limit is a significant predictor of financial performance in registered manufacturing firms (t=2.558; p<0.05). Further, findings indicated that internal controls is a significant predictor of financial performance in registered manufacturing firms (t=2.311; p<0.05). The study findings indicate that credit review is a significant predictor of financial performance in registered manufacturing firms (t=6.817; p<0.05).

5.0 SUMMARY CONCLUSIONS AND RECOMMENDATIONS

5.1 Summary of findings

The study was to determine the effect of credit collection practices on financial performance of selected registered manufacturing firms in Kenya. Descriptive statistics, parametric analysis and regression analysis were used to arrive at the findings of the study which revealed that manufacturing firms have set techniques which are used to collect credit and this helps in reducing chances of credit defaults. Moreover, sound risk management by disclosure and transparency requirements applied by internal credit controls helps in creating good business relationship between firms and borrowers. Findings also revealed that firms have enforced guarantee policies which aids in recovering credit. The overall mean score of responses of credit collection practices showed that majority of the respondents agreed that credit collection practices affects the financial performance of manufacturing firms. Further still, reliability analysis results showed that all the coefficients of the constructs were positive

and significant. This can be attributed to the fact that manufacturing firms are very keen when offering credit and the measures out in place to guide the administration of credit are very strict.

5.2 Conclusion

The first hypothesis of the study, $H0_1$; was credit collection practices has no significant effect on financial performance of selected registered manufacturing firms in in Kenya. When this hypothesis was tested the credit collection practices was found to have a significant statistical effect on financial performance of selected registered manufacturing firms. Therefore, it can be concluded that credit collection practices were statistically significant in explaining the financial performance of selected registered manufacturing in Kenya.

5.3 Recommendations

The study recommends that registered manufacturing firms operating in Kenya should adopt credit collection practices since it positively and significantly affects the financial performance. This can be achieved by setting techniques which are used to collect credit and this helps in reducing chances of credit defaults. Credit management practices also help in ensuring sound risk management by disclosure and transparency requirements applied by internal credit controls which help in creating good business relationship between firms and borrowers. The study further recommends that manufacturing firms should enforce guarantee policies which aids in recovering credit when defaulted hence ensuring a sound financial performance of firms.

References

Abbas, N. (2015). Use of Lean Accounting Techniques to Support Lean Production Systems and Evaluate the Performance of Economic Units. *Journal for Economic and Administrative Development Science, 2*(6), 23-43.

Acharya, V. V., & Nagvi, H. (2012). The Seeds of a Crisis. A theory of Bank- Liquidity and Risk- Taking Over the Business Cycle in Ghana. *Journal of Financial Economics, 106*(2), 349- 366.

Acharya, V., & Nagvi, H. (2012). The Seeds of a Crisis: A Theory of Bank-Liquidity and Risk -Taking Over the Business Cycle in Ghana. *Journal of Financial Economics, 2*(106), 349-366.

Adam, K., & Albert, M. (2010). *Booms and Busts in Asset Prices* (8 ed.). New York: Prentice Hall.

Admati, A., Peter, M. D., Martin, R. H., & Paul, P. (2011). Fallacies, Irrelevant Facts and Myths in the Discussion of Capital Regulation. Why Bank Equities is not Expensive? *Stanford Graduate School of Business Research Paper, 2065*(10), 20-31.

Ahmed, N., Zeng, M., Sinha, I., Flavell, R., & Massoumi, R. (2011). An Empirical Analysis of Remittances, Growth Nexus in Pakistan using Bounds Testing Approach. *Academic Journal, 52*(2), 187-196.

Akerlof, G. A. (1970). The Market for Lemons. Quality Uncertainty and the Market Mechanism. *Journal of Economics, 488*(10), 25- 32.

Akerlof, G. A. (1976). The Market for Lemons. Quality Uncertainty and the Market Mechanism. *Journal of Economics, 12*(22), 12- 23.

Akerlof, G. A. (1982). The Market for Lemons. Quality Uncertainty and the Market Mechanism. *International Journal of Economics, 6*(3), 34- 42.

Alchian, A., & Woodward, S. (1988). The Firm is dead, Long Live the Firm. A Review of Oliver E. Williamson. The Econmic Institutions of Capitalism. *Journal of Economic Literature, 26*(1), 165- 179.

Altunbas, Y. L., & David, M. (2010). Does Monetary Policy Affect Bank Risk Taking? *Journal of Economics and Business, 1166*(10), 35- 53.

Ameels, A. B., & Scheipers, G. (2012). Value Based Management Control Process to Create Value through Integration. *International Journal of Management Accounting, 18*(1), 64-82.

Angaine, F., & Waari, D. N. (2014). Factors Influencing Loan Repayment in Microfinance Institutions in Kenya. *Journal of Business and Management, 16*(9), 66-72.

Arnold, G. (2003). *Corporate Financial Management* (2 ed.). New Jersesy: Prentice Hall.

Arnold, G. (2005). *Corporate Financial Management* (3 ed.). Bath: Prentice Hall.

Aubuchon, C. P., & Wheelock, D. C. (2010). The Geographic Distribution and Characteristic of US Bank Failures, 2007- 2010. Do Bank Failures Still Reflect Local Economic Conditions? *Federal Reserve Bank of St. Louis Review, 92*(5), 395- 415.

Beltratti, A., & Rene, M. S. (2012). The Credit Crisis Around the Globe. Why Did Some Banks Some Banks Perform Better? *Journal of Financial Economics, 105*(1), 1- 17.

Bessis, J. (2013). Risk Management on the Financial Performance of Commercial Banks in Kenya. *DBA Africa Management Review, 3*(1), 22- 37.

Bond, E. W. (1982). A Direct Test of the Lemons Model. The Market for Used Pickup Trucks. *72 AM Economic Review, 836*(15), 836- 837.

Bowman, G. W. (2010). Thinking Outside the Border. Homeland Security and Forward Deployment of the US Border. *44 Hous. L. Review, 189*(1), 196- 197.

Brunnermeier, M. K., & Martin, O. (2013). The Maturity Rat Race of Egyptian Firms. *Journal of Finance, 68*(2), 83- 97.

Bryman, A., & Cramer, D. (2012). *Quantitative Data Analysis with SPSS for Windows* (5 ed.). Routledge, London, United Kingdom: Prentice Hall.

Burkat, M., & Ellingsen, T. (2004). In- Kind Finance. A theory of Trade Credit. *American Economic Review, 94*(3), 569- 590.

Burkat, M., & Ellingsen, T. (2012). In- Kind Finance. A theory of Trade Credit. *American Economic Review, 2*(10), 52- 61.

Burns, E. A., Duffet, M., Kho, P. T., Meade, O. M., Adhikari, K. J., Sinuff, D., & Cook, J. D. (2008). A Guide for the Design and Conduct of Self-Administered Surveys of Clinicians. *Canadian Medical Association Journal, 179*(3), 245-252.

Cadsby, C. B., Frank, M., & Maksimovic, V. (1990). Pooling, Separation and Semi Separating Equilibria in Financial Markets. Some Experimental Evidence. *Review of Financial Stusies, 3*(5), 315- 342.

Central, B. K. (2011). *Risk Management Survey for Banking Sector.* Nairobi: CBK.

Charles, W. T. (2009). How to Improve Collection of Credit. *International Journal of Finance, 15*(8), 35- 47.

Chen, K., & Pan, C. (2012). An Empirical Study of Credit Risk Efficiency of Banking Industry in Taiwan. *Web Journal of Chinese Management Review, 15*(1), 1- 16.

Cheptum, F. J., & Otuya, R. I. (2016). The Relationship between Employee Relations and Performance of Supermarkets in Kenya. *Global Journal of Advanced Research, 3*(11), 1023-1030.

Cheruiyot, F. K. (2010). The Relationship Between Corporate Social Responsibility and Financial Performance of Companies Listed at the Nairobi Stocks Exchange. *Journal of Management and Finance, 5*(3), 12- 20.

Chijoriga, M. M. (2007). *Application of Credit Scoring and Financial Distress Prediction Models to Commercial Banks Lending* (2nd ed.). London: Sage.

Chittenden, F., Poutziouris, P., & Michaels, N. (1988). Financial Management and Working Capital Prices in UK SMEs, Manchester. *Manchester Business School, 6*(3), 235- 240.

Cho, H., & Pucik, V. (2005). Relationship Between Innovativeness, Quality, Growth, Profitability and Market Value. *Strategic Management Journal, 26*(6), 555- 575.

Denzil, N. K. (2010). *The Sage Handbook of Qualitative Research* (1st ed.). Carlifonia, USA: Sage Publications.

Deyoung, R., & Gokhan, T. (2013). Non- Traditional Banking Activities and Bank Failures During the Financial Crisis. *Journal of Financial Intermediation, 12*(10), 342- 354.

Dignam, A., & Galanis, M. (2008). Corporate Governance and the Importance of Macroeconomic Context. *Journal of Financial Economics, 28*(3), 201- 213.

Dignam, A., & Galanis, M. (2012). Corporate Governance and the Importance of Macroeconomic Context. *Journal of Economics, 4*(6), 19- 36.

Dobson, P. (2012). Critical Realism and Information Systems Research. Why Bother with Philosophy? *Information Research, 7*(2), 23- 35.

Dogan, M. (2013). Comparison of Financial Performance of Domestic and Foreign Banks. The Case of Turkey. *International Journal of Business and Social Sciences, 4*(2), 233-240.

Eckbo, B. E., & Norli, O. (2004). The Choice of Seasoned Equity Selling Mechanisms. Theory and Evidence. *International Journal of Science and Management, 5*(3), 8- 19.

Edem, D. (2017). Liquidity Management and Performance of Deposit Taking Banks in Nigeria; An Investigation. *International Journal of Economics, Finance and Management Sciences, 5*(3), 146-161.

Ejoh, N. O., & Sackey, J. A. (2014). The Impact of Market Share on Deposit Money Banks Profitability in Nigeria. *European Journal of Business and Management, 6*(19), 243-257.

Ejoh, N., Okpa, I., & Inyanga, E. (2014). The Relationship and Effect of Credit and Liquidity Risk on Bank Default Risk among Deposit Money Banks in Nigeria. *Research Journal of Accounting and Finance, 5*(16), 14- 151.

Eljelly, A. M. (2004). Liquidity- Profitability Trade- off. An Empirical Investigation in an Emerging Market. *International Journal of Commercial and Management, 14*(2), 48- 61.

Evans, M., Hastings, N., & Peacock, B. (2000). *Statistical Distribution* (3 ed.). New York, New York, United States of America: Wiley.

Fan, L., & Shaffer, S. (2004). Efficiency versus Risk in Large Domestic US Banks. *Journal of Managerial Finance, 30*(1), 1- 19.

Garmaise, M. J., & Moskowitz, T. J. (2015). Confronting Information Asymmetries. Evidence from Real Estate Market. *Center for Research in Security Markets, 507*(5), 45- 63.

Ghoshal, S., & Moran, P. (1996). Bad for Practice. A Critique of the Transaction Cost Theory. *Academy of Management Review, 21*(1), 13- 47.

Giannetti, M. (2015). Do Better Institutions Mitigate Agency Problems? Evidence from Corporate Finance Choices. *Journal of Financial and Quantitative Analysis, 38*(1), 185- 212.

Gichaaga, P. M. (2014). Effects of Management Accounting Practices on Financial Performance of Manufacturing Companies in Kenya. *Journal of Financial Economics and Accounting, 4*(11), 13-22.

Ginevicius, R., & Askoldas, P. (2011). A Framework of Evaluation of Commercial Banks. In the Case of Lithuanian Commercial Banks. *Intellectual Economics, 5*(37), 54- 68.

Gisemba, P. N. (2010). The Relationship between Credit Risk Management Practices and Financial Performance of SACCOs in Kenya. *International Journal of Finance and Management, 6*(4), 52- 68.

Gitau, R., & Gathiaga, J. (2017). The Moderating Effect of Firm Size on the Relationship between Capital Structure and Financial Dsitress of Non-Financial Companies Listed in Kenya. *Journal of Finance and Accounting, 5*(4), 151-158.

Glick, W. H., Washburn, N. T., & Miller, C. C. (2005). The Myth of Firm Performance. *American Academy of Management, 12*(3), 15- 32.

Gorton, G., & Metrick, A. (2009). Securitized Banking and the Run on Repo. *Academy of Management Review, 140*(3), 68- 79.

Graeber, D. R. (2015). *Debt in the First 5000 Years* (4 ed.). Brooklyn, New York, United States of America: Melville House.

Gramedia, A. (2012). Effect of Credit Default on Financial Performance of Manufacturing Firms. *International Journal of Management, 3*(6), 237-252.

Granovetter, M. (1985). Economic Action and Social Structure. The Peoblem of Embeddedness. *American Journal of Sociology, 3*(1), 481- 510.

Gujarati, D. N., & Sangeetha, S. (2007). *Basic Econometrics* (4 ed.). New Delhi, New Delhi, India: McGraw Hill Education Books.

Hair, J. F., Black, B., Babin, B., Anderson, R. E., & Tatham, R. L. (2006). *Multivariate Data Analysis* (6th ed.). Harlow, England: Pearson Education.

Hall, J. A. (2011). *Accounting Information System* (2nd ed.). Mason: Mason Centage Learning Publishers.

Halov, N., & Heider, F. (2004). Capital Structure, Risk and Asymmetric Information. *Journal of Finance, 16*(5), 82- 98.

Harris, M., & Raviv, A. (1991). The Theory of Capital Structure. *Journal of Finance, 46*(5), 297- 356.

Heal, G. (1976). Do Bad Products Drive Out Good? *Quantitative Journal of Economics, 499*(1), 500- 501.

Hendel, I., & Lizzeri, A. (1999). Adverse Selection in Durable Goods Markets. *AM Economic Review, 89*(3), 1097- 1099.

Hermann, A. M. (2008). Choosing and Successfully Sustaining Competitive Strategies in The European Pharmaceutical Industry. *Max Planck Institute for The Study of Societies Cologne, 12*(5), 15- 32.

Hgokcehan, D., & Waseem, A. (2014). Factors Affecting the Financial Performance of the Firms During the Financial Crisis. Evidence from Turkey. *Ege Strategic Research Journal, 5*(1), 65- 80.

Howorth, C., & Reber, B. (2003). Habitual Late Payment of Trade Credit. An Empirical Examination of UK Small Firms. *Managerial and Decision Economics, 24*(6), 471- 482.

Huber, J. (2014). The Case for Sovereign Money. *American Journal of Economics and Finance, 17*(5), 23- 34.

Hudon, M. (2010). Management of Microfinance Institutions. Do Subsidies Matter? *Journal of Interventional Development, 905*(1), 890- 905.

Iacoviello, M. (2015). Financial Business Cycles. *Review of Economic Dynamics, 18*(1), 140- 164.

Ifurueze, M. S. (2013). Determinants of Financial Performance. *Global Journal of Management and Business Research, 13*(2), 2249- 2288.

Jackling, B., Raar, J., Wigg, R., Williams, B., & Wines, G. (2004). *Accounting. A Framework for Decision Making* (6 ed.). Sydney, Sydney, Australia: McGraw Hill.

Jackson, P., Perraudin, W., & Saporta, V. (2012). Regulatory and Economic Solvency for Internationally Active Banks. *Wiley Journal, 161*(2), 53- 66.

Jain, N. (2014). Monitoring Costs and Trade Credit. *Quarterly Review of Economics and Finance, 41*(1), 89- 110.

Kagoyire, A., & Shukla, J. (2016). Effects of Credit Management on Performance of Commercial Banks in Rwanda. A Case Study of Equity Bank Rwanda. *International Journal of Business and Management Review, 4*(4), 1- 12.

Kalunda, E. N., & Kabiru, J. (2012). Pharmaceutical Manufacturing Companies in Kenya and Their Credit Risk Management Practices. *Research Journal of Finance and Accounting, 3*(5), 159- 167.

KAM. (2016). *Kenya Association of Manufactures Annual Report.* Nairobi: KAM.

Kaplan, S. N., & Bernadette, A. M. (2008). How Has CEO Turnover Changed? University of Chicago Booth School of Business. *Wiley Journal, 25*(3), 10- 16.

Kargi, H. S. (2011). *Credit Risk and Performance of Nigerian Banks* (5 ed.). Lagos, Zaria, Nigeria: Ahmadub Bello University.

Kariuki, J. N. (2010). *Effective Collection Policy* (1 ed.). Nairobi, Nairobi, Kenya: KASNEB Publishers.

Kateera, C. (2009). Microfinance Intervention, Entrepreneurial Skills and Rural Poverty Reduction. A Case of MFI's Performance in Mubende and Wakiso Districts. *Makerere University Journal, 5*(12), 12- 32.

Katz, A. (2007). Pharmaceutical Lemons. Innovation and Regulation in the Drug Industry. *Mich Telecommunications and Technological Review, 14*(1), 32- 51.

Katz, A. (2015). Pharmaceutical Lemons. Innovation and Regulation in the Drug Industry. *Mich Telecommunications and Technological Review, 14*(1), 32- 51

Kilonzo, J. M., Memba, S. F., & Njeru, A. (2016). Effects of Accounts Receivable on Financial Performance of Firms Funded by Government Venture in Kenya. *Journal of Economics and Finance, 7*(1), 62- 69.

Kithinji, A. M. (2010). *Credit Risk Management and Profitability of Commercial Banks in Kenya* (1 ed.). Nairobi, Nairobi, Kenya: University of Nairobi.

Kljelly, M. A. (2004). Liquidity Profitability Trade Off. An Empirical Investigation in an Emerging Market. *International Journal of Commerce and Management Indiana, 14*(2), 48- 61.

KNBS. (2016). *Kenya National Bureau of Statistics Economic Survey.* Nairobi: KNBS.

Kubo, I., & Saka, A. (2002). An Inquiry into the Motivations of Knowledge Workers in the Japanese Financial Industry. *Journal of Knowledge Management, 6*(3), 262- 271.

Lei, A. C., & Song, Z. (2013). Liquidity Creation, Bank Capital and Bank Performance in China. *Global Finance Journal, 24*(3), 188- 202.

Long, M. S., & Ravid, S. A. (2016). Trade Credit, Quality Guarantees and Product Marketability. *Financial Management Journal, 22*(4), 17- 27.

Lown, C. S., & Morgan, D. P. (2006). The Credit Cycle and the Business Cycle. New Findings Using the Loan Officer Opinion Survey. *Journal of Money, Credit and Banking, 38*(6), 1575- 1597.

Ludwig, S. M. (2000). *Accounts Payable. A Guide to Running an Efficient Department Somerset* (2 ed.). New York, New York, United States of America: John Wiley and Sons Inc.

Mahour, M. P., & Elham, H. F. (2010). The Effects of Productivity and Quality on Profitability in US Airline Industry. An Empirical Investigation. Managing Service and Quality. *An International Journal, 20*(5), 458- 474.

Maina, J. M. (2011). Relationship Between Credit Risk Management Practices and Financial Performance of Microfinance Institutions in Kenya. *International Journal of Financial Management, 4*(6), 32- 43.

Makori, J., Muturi, W., & Munene, C. (2013). The Challenges Facing Deposit- Taking Savings and Credit Cooperative Societies Regulatory Compliance in Kenya. A Case of Gusii Region. *Interdisciplinary Journal of Contemporary Research in Business, 4*(12), 54- 67.

Malik, M. F., Obiakor, R. T., & Okwa, A. T. (2011). Investigating Liquidity- Profitability Relationship in Business Organisations of the Tunisian Banking Industry Profitability. *Financial Business Review, 2*(3), 12- 21.

Mann, B., & Holdych, T. J. (2014). When Lemons are Better than Lemonade. The Case Against Mandatory Used Car Warranties. *Yalel and Pol'y Review, 15*(1), 143- 162.

Marotta, G. (2015). Is Trade Credit More Expensive than Bank Loans? Evidence from Italian Firm Level Data. *Universita Di Modena e Reggio Emilia Review, 4*(1), 12- 34.

Marsh, I. W. (2008). The Effects of Lenders' Credit Risk Transfer Activities on Borrowing Firm's Equity Returns. *Cass Business School Review, London, 1*(2), 24- 35.

Mendes, A., Gudoski, D. C., Cargnelutti, A. F., Silva, E. J., Carvairo, E. H., & Morello, G. M. (2014). Factors that Impact the Financial Performance of Broiler Production in Southern State Parana Brazil. *Technological Federal University of Parana Review, 16*(1), 32- 45.

Mian, A., & Sufi, A. (2009). The Consequences of Mortgage Credit Expansion. Evidence from US Mortgage Default Crisis. *Quarterly Journal of Economics, 3*(4), 11- 49.

Michael, E. R., Mumtaz, A., Derek, M. P., & Rop, D. V. (2015). A Theory of Relativity Setting Priorities and Goals for Financial Performance Improvement. *Delloite Review, 17*(10), 12- 23.

Miller, M. H. (1977). Dabt and Taxes. *Journal of Finance, 32*(1), 261- 276.

Modigliani, F., & Miller, M. H. (1958). The Cost of Capital, Corporate Finance and The Theory of Investment. *American Economics Review, 48*(5), 261- 297.

Mungai, J. N., Maingi, J., & Muathe, S. M. (2015). Loan Repayment and Sustainability of Government Funded Micro- Credit Initiatives in Murang'a County, Kenya. *International Journal of Business and Social Science, 10*(1), 11-23.

Munir, S., Muhammed, R., Rao, Q., Muhammad, A., & Ali, R. (2012). Financial Performance Assessment of Banks. A Case of Pakistan Public Sector Banks. *International Journal of Business and Social Sciences, 3*(14), 134- 155.

Mwangi, P. G., & Muriuki, M. M. (2013). Credit Risk Management Practices by Oil Companies in Kenya. *International Journal of Business, Humanities and Technology, 3*(2), 72- 80.

Myers, C. S. (2003). *Principles of Corporate Finance* (1 ed.). New York, New York, United States of America: McGraw Hill.

Myers, J. (2012). *Assessing the Cost of Fractional Reserve Banking. A Theoretical Exposition and Examination of Post- Meiji Japan* (2 ed.). Columbia, Columbia, United States of America: QMSS Columbia University.

Myers, S. C. (2015). The Capital Structure Puzle. *Journal of Finance, 39*(1), 575- 592.

Naser, K., & Mokhtar, M. Z. (2004). Firm Performance, Macro- Economic Variables and Firm Size. *Journal of Finance, 4*(5), 543- 579.

Nassiuma, D. K. (2000). *Survey Sampling. Theory and Methods* (1 ed.). Nairobi, Nairobi, Kenya: University of Nairobi Press.

Nilsen, J. H. (2002). Trade Credit and the Bank Lending Channel. *Journal of Money, Credit and Banking, 34*(1), 226- 253.

Nilsen, J. H. (2009). Trade Credit and the Bank Lending Channel. *Journal of Monetary Management, 12*(5), 78- 92.

Nilsen, J. H. (2016). Trade Credit and the Bank Lending Channel. *Journal of Developmkent, 5*(6), 14- 26.

Njoroge, I. (2015). Effects of Liquidity Management on the Security Market Performance of Companies Listed at the NSE. *IOSR Journal of Applied Physics, 6*(6), 58-61.

Noe, T. (1988). Capital Structure and Signalling Game Equilibria. *Review of Financial Studies, 1*(7), 321- 355.

NSE. (2017). *Nairobi Securities Exchange Annual Report.* Nairobi: NSE.

Nyabwanga, R. N. (2013). An Empirical Analysis of the Liquidity, Solvency and Financial Health of Small and Medium Sized Enterprises in Kisii Municipality, Kenya. *Journal of Business and Management, 5*(8), 222- 283.

Odhiambo, M., & Waiganjo, E. (2014). Role of Human Capital Management Strategies on Employee Mobility in Kenya's Public Universities. *International Journal of Business and Social Science, 5*(6), 185-189.

Ojeka, S. A. (2012). Credit Policy and Its Effects on Liquidity. A Study of Selected Manufacturing Companies in Nigeria. *The Journal of Commerce, 3*(3), 10- 19.

Ojilo, F. (2012). The Impact of Credit Risk Management on the Financial Performance of Commercial Banks in Kenya. *DBA Africa Management Review, 3*(1), 22- 37.

Olweny, T., Namusonge, G., & Onyango, S. (2012). The Influence of Socio- Cultural Background on Individual Investor Risk Tolerance at Nairobi Securities Exchange. *International Journal of Arts and Commerce, 1*(4), 87-106.

Ongore, V. O., & Kusa, G. B. (2013). Determinants of Financial Performance of Commercial Banks in Kenya. *International Journal of Economics and Financial Issues, 3*(1), 237- 252.

Oyadonghan, K. J., & Bingilar, P. F. (2014). The Impact of Effective Credit Policy on Liquidity of Manufacturing Companies in Nigeria. *European Journal of Accounting, Auditing and Finance, 2*(7), 88- 100.

Pandey, I. M. (2011). *Financial Management* (9th ed.). New Delhi, New Delhi, India: Vikas Publishing House.

Peacock, R., Martin, P., Burrow, M., Petty, J. W., Keown, A. J., & J, R. (2003). *Financial Management* (3th ed.). Beijing, Beijing, China: Prentice Hall.

Raeisi, M., Gavara, M., & Dnarehzershk, I. A. (2014). Bank Liquidity and its Determinants in Iran. *International Journal of Management Sciences and Economics, 1*(5), 30- 36.

Rajan, R. G. (2010). *Fault Lines* (2nd ed.). New York, New York, United States of America: Princeton University Press.

Rajangam, P., & Solavaraj, V. (2015). Evaluating the Financial Health of West Coast Paper Mills Limited Using z Score Model. *Primax International Journal of Commerce and Management Research, 1*(1), 1- 12.

Ramond , A., Ezejiofor, P., Adigwe, P. K., & John, A. R. (2012). The Credit Management on Liquidity and Profitability Positions of a Manufacturing Company in Nigeria. *The Journal of Commerce, 3*(5), 10- 19.

Reddy, N., & Reddy, V. (2012). Financial Status of Selected Sugar Manufacturing Firms. *International Journal of Marketing, Financial Services and Management Research, 1*(4), 64- 79.

Reeve, J. M., & Warren, C. (2018). *Principles of Accounting and Finance* (2nd ed.). Jakarta, Indonesia: Salemba Empat.

Remenyi, D., Williams, B., Money, A., & Swartz, E. (1998). *Doing Research in Business and Management. An Introduction to Process and Method* (1st ed.). London, Britain, United Kingdom: Sage.

Schwartz, R., & Whitcomb, D. (1978). Implicit Transfers in the Extension of Trade Credit. *The Channels of Redistribution Through the Financial System, 2*(14), 191- 208.

Sekaran, U., & Bougie, R. (2011). *Research Methods for Business. A Skill Building Approach* (5th ed.). New Delhi, New Delhi, India: Aggarwal Printing Press.

Shleifer, A., & Vishny, W. R. (2010). Unstable Banking. *Journal of Financial Economics, 97*(3), 306- 318.

Siro, R. O. (2013). Effects of Capital Structure on the Financial Performance of Firms Lited in Nairobi Securities Exchange. *Journal of Economics and Financial Management, 4*(7), 52- 65.

Suka, J. N. (2012). The Impact of Capital Adequacy on the Financial Performance of Commercial Banks Quoted at the Nairobi Securities Exchange. *Journal of Finance, Money and Bank, 4*(5), 12- 26.

Sunarti, W. (2008). *System Management* (1st ed.). Malang, Perbankan, Indonesia: NN Press.

Swamy, V. (2014). Banking Stability for Financial Stability. *Journal of Financial Economics, 115*(2), 15- 26.

Taylor, J. (2010). Globalization and Monetary Policy. Missions Accomplished in University of Chicago. *International Dimensions of Monetary Policy, 21*(12), 609- 624.

Thirlwall, A. P. (2017). Monetarism in Post Depssion Crisis. *Encyclopaedia of Political Economy, 21*(6), 750- 753.

Tucker, M., & Miles, G. (2004). Financial Performance of Microfinance Institutions. A Comparison to Performance of Regional Commercial Banks by Geographical Regions. *Journal of Microfinance Review, 6*(1), 41- 54.

Turyahebwa, A. (2013). Financial Performance in the Selected Microfinance Institutions in Uganda. *International Journal of Commerce and Management, 2*(5), 43- 53.

Upagade, V., & Shende, A. (2012). *Research Methodology* (2 ed.). New Delhi, Ram Nagar: Chad and Company Limited.

Vodova, P. (2011). Liquidity of Czech Commercial Banks and its Determinants. *International Journal of Mathematical Models and Methods in Applied Sciences, 6*(4), 1060- 1067.

Wei, K., & Zhang, Y. (2008). Ownership Structure, Cash Flow and Capital Investment. Evidence from East Asian Economies Before the Financial Crisis. *Journal of Corporate Finance, 14*(2), 118- 132.

Were, A. (2016). Manufacturing in Kenya. Features, Challenges and Opportunities. *International Journal of Science, Management and Engineering, 4*(6), 15-26.

Werner, R. (1997). Towards a New Monetary Paradigm. A Quantity Theorem of Disaggregated Credit. *Evidence from Japan Review, 30*(1), 276- 309.

Werner, R. (2009). *Applying the Quantity Theory of Credit* (1st ed.). New York, New York, United States of America: Free Press.

Werner, R. (2012). Towards a New Research Programme on Banking and the Economy Implications of a Quantity Equation Model for the Prevention and Resolution of Banking and Debt Crises. *International Review of Financial Analysis, 25*(5), 94- 105.

Werner, R. (2015). *Applying the Quantity Theory of Credit* (2nd ed.). New York, New York, United States of America: Free Press.

Werner, R. A. (1992). Towards a Quantity Theorem of Disaggregated Credit and International Capital Flows. *Royal Economic Society Annual Conference* (pp. 1- 15). York: York Publishers.

White, H., & Graffith, B. (1981). Author Co- Citation. A Literature Measure of Intellectual Structure. *Journal of the American Society for Information Science, 32*(13), 163- 171.

Wijaya, K. (2010). Analysis of Indonesian Firms. *Alex Media Journals, 6*(4), 18-37.

Williamson, O. (1975). *Markets and Hierarchies Analysis and Antitrust Implications. A Study in the Economics of Internal Organization* (2nd ed.). New York, New York, United States of America: Free Press.

Williamson, O. (1979). Transaction Cost Economics. The Governance of Contractual Obligations. *Journal of Law and Economics, 22*(2), 233- 261.

Williamson, O. (1981). The Economics of Organisation. The Transaction Cost Approach. *American Journal of Sociology, 87*(3), 548- 577.

Williamson, O. (1985). The Economic Institutions of Capitalism. Firms, Markets and Relational Contracting. *Journal of Law and Economics, 46*(3), 548- 601.

Wilner, B. S. (2016). The Exploitation of Relationships in Financial Distress. The Case of Trade Credit. *Journal of Finance, 55*(1), 153- 178.

Wray, R. (2004). The Credit Money and State Money Approaches. *University of Missouri- Kansas Paper Review, 3*(2), 52- 63.

Yamane, T. (1967). *Statistics, an Introductory Analysis* (2nd ed.). New York, New York, United States of America: Harper and Row Publishers.

Yasuda, H. (2005). Firm's Growth and Finance Strategy. *Journal of Finance, 27*(1), 30- 45.

Yilmaz, A. A. (2013). Profitability of Banking System. Evidence from Emerging Market. *WEI International Academic Review, 12*(6), 105- 111.