

**THE IMPACT OF ACCOUNTS RECEIVABLES MANAGEMENT ON THE
FINANCIAL PERFORMANCE OF MANUFACTURING FIRMS LISTED AT
THE NAIROBI SECURITIES EXCHANGE**

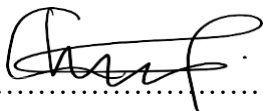
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**A RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILLMENT OF
THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF MASTER
OF SCIENCE, FACULTY OF BUSINESS & MANAGEMENT SCIENCES,
UNIVERSITY OF NAIROBI.**

OCTOBER, 2021

DECLARATION

This research paper is my original work and has never been submitted in any other institution for any academic purpose.

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This research paper has been submitted for examination purpose with my approval as the university supervisor.

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ACKNOWLEDGEMENTS

I give thanks to the Yahweh for enabling me to come this far. It has taken his Grace and Mercies. He has given me intelligence, expertise and understanding to take this course. I thank Prof Cyrus Iraya, my supervisor for the immense backing and the advice he gave me to enable me carry out this study. I am grateful to my MSC classmates for their support and to the University of Nairobi for offering me such an opportunity to be part of this amazing establishment.

DEDICATION

To my lovely husband Stephen Mutiso Mutuku for the immeasurable support and encouragement he has given me in the course of the study. I also dedicate the study to my family for their continuous words of inspiration and prayer during my study period.

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LIST OF ABBREVIATIONS

ACP	Average Collection Period
ARM	Account Receivables Management
BDRR	Bad Debts to Receivables Ratio
CCC	Cash Conversion Cycle
CMA	Capital Market Authority
KAM	Kenya Association of Manufacturers
NSE	Nairobi Securities Exchange
ROA	Return on Asset
SPSS	Statistical Package for Social Sciences
VIF	Variance Inflation Factor
WCM	Working Capital Management

ABSTRACT

Company profitability is a good measure of the internal operations that take place in an organization. This means studies to determine what can influence profitability are crucial to all firm stakeholders. This research sought to find out how the management of accounts receivable impacts on the profitability of firms as measured using the ROA. The variables used were the average collection period, the bad debts to accounts receivable ratio and the firm size. Also studied was the capital structure as measured by debt to equity ratio. The inclusion of the variables was advised by the idea that factors are intertwined and is hard for one factor to influence another independently. Time of study was for 12 years from 2009 to 2020. In total, 8 manufacturing companies were used which ensured there was adequate data for analysis. The method of analysis was multiple regression and the data used was all quantitative. SPSS software was employed. Regression results indicated that the variables studied explained 12.3% of the changes in the ROA and the model had a p-value of 0.017. The outcome also indicated that the constant of the equation which connects the independent variables and the dependent one is -0.760 with a p-value of 0.093. ACP, debt to equity ratio and firm size were the variables with a positive change on ROA with coefficients of 0.011, 0.003 and 0.084 respectively. BDRR and debt to equity ratio had p-values of 0.499 and 0.797. While firm size was significant at 0.025. ACP, BDRR, and debt to equity ratio had coefficients of 0.011, -0.19, and 0.003 respectively. This implied that ROA was affected positively by the variables except BDRR. The effect of both ACP and BDRR were found to be insignificant with p-values of 0.868 and 0.499 respectively. The positive effect of firm size was found to be significant at a 5% significance level, with a p-value of 0.025. With these findings, a conclusion was reached that management of receivables has an impact on the firm's performance. It can also be concluded that there are many other factors that dictate the firm's profitability. To improve their company performance and cause a good return to the investors, managers of manufacturing firms are encouraged to continue to take measures that would improve on their collection efficiency. In terms of bad debts, managers should take measures that would ensure that the bad debts do not occur, or they are maintained at the lowest possible level. The firms have also been found to have been impacted positively by adoption of more debt in their capital structure. Firms need then to determine optimal debt levels which do not compromise profitability of their businesses. On the relationship identified for firm size, managers in manufacturing firms should endeavor to improve the value of their assets as it has been found to affect ROA positively. The management can also concentrate on ACP, BDRR and debt to equity ratio and take measures to minimize them as this will increase ROA. There is also need for another extensive research as there are other unidentified factors that account for the 87.7% of the changes in ROA, unaccounted for by this research.

CHAPTER ONE: INTRODUCTION

1.1 Background of the Research

Accounts receivables management is a crucial aspect in management finance as an increase in access to credit has led to an increase in customer indebtedness which impacts on business profitability (Haris, 2005). A rise in accounts receivable means that short-term funds are tied up for the period over which consumers collect the credit. This therefore means that the firm will have a shortage of funds, which can lead to difficulties in fulfilling their short-term commitments and in turn decrease the company's profitability. On the other side, a decrease in accounts receivables means that the set policies are working well and the collection period is reduced hence increasing the debtor's turnover which will increase the enterprise capability of fulfilling its short-term commitments and also increase the profitability of the firm (Pandey, 2010). Some studies like Deloof (2003) and Al-Mwala (2012) pointed out that proper management of the accounts receivables promoted the ability to meet the current obligations while at the same time boosting the performance of the business through profitability. Therefore, it is important for a company to manage its accounts receivable in such a way that the payment cycle of receivables is reduced, resulting in a rise in the turnover of the debtor that has a positive effect on profitability.

This research was influenced by Agency theory, Trade off theory and Transaction cost theory. As advocated by Berle and Means (1932), Agency Theory argues that, credit control managers in a firm are entrusted as agents with the shareholders to make informed decisions in terms of offering credit to customers because their decisions have a substantial impact on the business profitability, which directly influences maximization of shareholder's wealth. The tradeoff theory by Robichek and Myers (1966) holds that, there is that excellent mix of debt and equity which will maximize the wealth of the shareholders. Managing accounts receivables involve a tradeoff between all the risks involved and the total returns. The tradeoff theory is associated with a tradeoff between liquidity and profitability. This means if they chose to go for liquidity they should therefore forgo profitability and if they chose to go for profitability then they must forgo liquidity. Both of these decisions influence the performance in a way. According to Ferris (1981), Transaction Cost Theory states that, when delivery is not known then parties are able to separate payments and delivery cycles hence reducing transaction costs of trade credit. The firm is able to save on transaction costs in cases where they have a lot of transactions on credit sales. This enables the firm to improve on their profitability and efficiency in operation.

The field of manufacturing has encountered quite many problems in the previous years. In the recent past, many companies closed down citing problems with their liquidity as the main cause of closure and even had to lay off some of the employees to be able to meet the operational costs. They face uneven growth and cash flow constraints as a result of high operating cost (Kenya Association of Manufacturers, 2016). Another major problem facing the manufacturing firms is the increment in credit sales outstanding because customers have the habit of extending the payment terms (Waithaka, 2012). For example, Mumias sugar company Limited has for the longest time struggled as a result of liquidity issues and lack of cash flows. When the Days Sales Outstanding is stretched, then the manufacturing businesses might be exposing themselves to financial constraint. Since it takes long to get cash flows from sales, the manufacturing firms are forced to purchase the stocks in advance. They therefore need to find a way of reducing their DSO to avoid the negative impact on their performance (Perkin, 2012).

1.1.1 Accounts Receivable Management

Accounts receivables are defined as amounts owed by clients to a firm for deferred payment and arise from the sale of products in the ordinary course of business (Pike & Cheng, 2001). According to Cleartax (n.d) accounts receivables management can be viewed as the general aspect of developing organizational policies and structures to ensure that debtors settle their debts in good time. Accounts receivables emerge as a result of selling on credit. These are short term assets resulting from credit sales to buyers of goods or services (Accounting Coach, 2009). Management of Accounts receivables is very significant in corporate finance because it relates directly to a firm's profitability and liquidity (Pandey, 2010). ARM is the policy and procedures put in place by a company to ensure that the customers who owe the company pay back the money owed within the shortest time possible.

Management of account receivables is a key segment in an organizations' finance, and its success, is directly correlated with the ability of the firm to realize its goals, corporate mission and objectives. It straightforwardly impacts the company's growth and liquidity. In current businesses, the management of accounts receivable has proven to be a great challenge to many. Many companies experience constraints in their liquidity because their account receivables level is not properly managed. The account receivable management is important as it improves cash flow and reduces bad debt and costs of an organization. Many businesses have not carried

out effective cash flow management activities. The state may be awful considering the criticality of cash flow in business continuity (Ahmet & Emin, 2012).

Accounts receivables management has been selected for the study based on the fact that businesses are unable to transact purely on cash basis and hence being forced to incorporate credit transactions. However, credit transactions expose the business to the risk of none repayment and hence management of accounts receivables becoming an area of key concern (Ahmet & Emin, 2012). Accounts Receivables management has been measured using various types of measurement. First is the average collection period which seeks to find out how often a firm collects its debts in a certain year (Akenga, 2017). Does it take too long to collect the receivables or it takes a shorter time period thus the ability to cover its short terms expenses as and when they fall due. It has also been measured using bad debt to debtor's ratio. It shows the proportion of debts that were not collected and ended up being written off as bad debts. A higher ratio indicates a greater risk of not receiving the credit sales made. This study will use the average collection period as it indicates directly, the efficiency of the firm in collecting debts early.

1.1.2 Financial Performance

According to Fatihudin (2018), financial performance is defined as a part of firms' general achievement which is a collection of a number of indicators of the health of a business like efficiency, liquidity, profitability and capital adequacy. The term financial performance is also a calculation of the rate of return on investment (Nyabuti & Alala, 2014). The capacity of a company to yield a return from the use of its investments is known as financial performance, (Srivastava, 2005). Financial performance is termed as the company's results of the activities of a business in a duration that involves the recovery levels and management of funds computed by many indicators of solvency, profitability and liquidity. It is the way a company is able to control and manage its resources according to IAI (2016). It shows a firm's ability to put in to use the resources it has in order to generate revenue over certain duration.

An organization can be defined as globally performing if it is able to meet the interest of all its stakeholders. The company's managers are involved in the company's wellbeing and benefits because their work is regarded accordingly (Matole, 2019). On the other hand, by growing the market value of businesses, the owners want to increase their capital. The current and potential

stake holders view performance as the ability of the company to share out dividends for the investment of capital bearing in mind the risk they take (Lalah, 2018). Credit facilities want an assurance that the firm is in a position to repay loans on time. Employees on the other side are looking forward to a steady career and to get higher material advantages. This makes it a very key aspect of an organization as different stake holders have different interests.

Financial ratios, and especially those related to profitability, are primarily used in determination of financial performance. The profitability pointer is very significant to not only the management but also the company's shareholders. This is because they illustrate the company's financial results and overall growth. According to Ganag, Kalaiselvan and Suriya (2015) financial performance measures include liquidity, solvency and efficiency. Whereas liquidity assesses the capability of the entity to comply to its maturing obligations, solvency is more to the long term position of debt against assets and equity which indicate the firm's financial stability. Profitability of a business can be determined through the ROA (Ochieng, Jagongo, & Ndede, n.d.). It tests how accurately a business employs its resources to generate profit. It is assessed by measuring its operating profit against its total assets. It is also possible to calculate return using the return on equity ratio, this ratio measures the total profit against the funds given by the manufacturing firm's shareholders.

1.1.3 Accounts Receivables Management and Financial Performance

Companies have tried to boost their performance by increasing their net sales over the trading period. Among the strategies that have been used to increase these sales has been the provision of goods and services on credit. While Credit extension to clients is a decision that is taken on the basis of the company's credit management and policy, it's management has been the key point of achievement to define the success of the business (Al-Mwala, 2012). Offering goods and services on credit boost sales but on the other hand, according to Al-Mwala (2012), are worthless if they are not collected on time and therefore the sales and accounts receivables functions walk hand in hand to achieve the objective of increasing sales in the shortest possible time. Increasing the debtor's asset in the business will result to a positive performance provided that proper management has been done to the accounts receivables (Eliots, 2009). As the customers' relationship and trust increases with credit advances, on the other side, this could be leading the firm into high risk of bad debts which over tarnishes the good motive for better performance and leads to loss of the shareholders' value.

The manner in which Accounts receivables are managed has a substantial influence on both profitability and firm liquidity (Deloof, 2003). The tradeoff between profit and solvency is also crucial as if the receivables management is not taken care of, then the firm could fall in to bankruptcy (Kargar & Bluementhal, 1994). Advancing credit which increases the accounts receivables has an opportunity cost to the company which reduces cash at disposal of the business for speculative motive and increases exposure to risk of bad debts. Again the alternative financing becomes credit financing which attracts interest which becomes an incremental cost to the business. Hence a balance should be established to ensure that the business takes advantage of the increased profitability from credit sales, while at the same time working to maximize on collection of the debt. It's only through this effort of debtor's recovery management that the accounts receivable advantage was enjoyed.

1.1.4 Nairobi Securities Exchange Listed Manufacturing Firms

Manufacturing firms consist of firms engaged in mechanical, physical or chemical transformation of materials or components in to finished products. Some of the activities in the sector include agriculture, fruit and meat canning, milling of wheat flour and cornmeal and also sugar refining. Others include assembling of vehicles, production of electronics, and publishing (Baskin, 2008). The manufacturing sector is represented by the Kenya Association of Manufacturers (KAM). It serves as a common voice in the sector and provides an essential link for dialogue with the government. CMA has a regulatory obligation to keep in check the companies listed in Nairobi Securities Exchange with regards to capital and liquidity to ensure financial stability of the firms. It also analyzes the policies which are in existence and submits proposals to the government on new policies that result in the improvement and promotion of market development. It also provides guidance to market operators. Currently, there are nine manufacturing and Allied firms listed in the NSE; these are B.O.C Kenya Ltd, BAT Kenya Ltd, Mumias Sugar Co. Ltd, Kenya Orchards Ltd, Carbacid Investment Ltd, Unga Group Ltd, Flame Tree Group Holdings Ltd, East African Breweries Ltd and Eveready East Africa Ltd.

The field of manufacturing has encountered quite many problems in the previous years. According to Senzu and Ndebugri (2017) the industry has been experiencing higher challenge in the conversion cycle based on the fact that they mostly deal with wholesalers and who will expect an extended credit period. As the trade here is mostly business to business with minimal

end consumers, most of the business transactions take place on credit making them critical area of focus for the current study. The industry has recorded the highest level of failure in the NSE market pointing that 40% of the market failure has occurred within the industry (NSE, n.d). In the recent past, many companies some which are within the industry closed down citing problems with their liquidity as the main cause of closure and even had to lay off some of the employees to be able to meet the operational costs (Mweta & Kipronoh, 2019). For example, Mumias Sugar Company and ARM cement plc within the industry have for the longest time struggled with liquidity issues and lack of cash flows. Most of the companies pointed out the fact that they have fallen out as a result of harsh environmental climate. One of them being an increasing cost of energy, which is a blow to Kenya's quest to industrialize, intended to be actualized by 2030.

1.2 Research Problem

Research has been undertaken on the impact of management of trade receivables on the performance of firms with most studies concentrating on the aspect of profitability. For instance, Mathenge (2016) established that the management of trade receivables would account for approximately 24.7% of the total profitability of the business that can be seen as significant. Similar results were obtained by other researchers like Lazaridis & Tryfonidis (2006), Singh and Pandey (2008) and Waweru (2011) in different contexts who established that the accounts receivable management was healthy for a business performance. Proper management of accounts receivables was noted to allow a good relation with the customers and increase the net sales for the business and in the same line minimizing the cost of capital linked with interest, debt collection cost and the risk of bad debts. However, according to the study of Waweru (2011), it was pointed out that among the approaches for managing the accounts was making a policy that allows only credit worth customers to be given credit. This on the other hand will lead to limited number of accounts receivable and was against the notion of boosting the level of sales through credit sales.

Manufacturing firms have encountered quite many problems in the previous years. In the recent past, many companies closed down citing problems with their liquidity as the main cause of closure and even had to lay off some of the employees to be able to meet the operational costs (Mweta & Kipronoh, 2019). This is because of the customer's attitude which they seem to favor extended days' sales outstanding (DSO) due to the benefit they get from delayed settlement of credit at the expense of the supplier and which has been straining the performance

of the other businesses (Waithaka, 2012). It connotes that they have to settle payments of their stock and supplies prior, but it takes a longer time for their sales to bring in the cash flows and which was still affecting firms across the economy in the NSE stock market. Therefore, the manufacturers need to find a way to reduce their DSO as it affects their performance negatively (Perkin, 2011). They are also negatively affected by exorbitant cost of running the business that is greatly contributed to by the delayed settlements by debtors, with majority of them pointing this as their greatest challenge (Perkin 2011). For example, Mumias Sugar Company and Eveready East Africa Limited have also struggled with liquidity issues and lack of cash flows. According to Baimwera and Muriuki (2014) anything that affects the profitability of a firm was known to influence the performance and growth with debtors' management being among the factors.

Looking further, a variety of researches have revealed evidence that the accounts receivable management had no influence to the performance of firms or even negative impact. Studies like Duru et al (2015) established that the relation between trade receivables management and the performance of manufacturing firms to be non-significant. Mihajlov (2012) during the crisis period established that there is an adverse relationship between management of debtors and performance of manufacturing firms. This was attributed to the high cost of management of the debtors which reduced the profitability as well as the high number of debts that turned to be bad debts. Kilonzo, Memba and Njeru (2016) found out that there were more factors that were affecting financial performance of listed firms in the NSE market whereas Waweru (2011) in his research determined that there existed a positive influence of receivable management on financial performance of firms.

Majority of the mentioned studies were focused on WCM and its consequence on company's performance. They have not brought forth any evidence or study about the influence of accounts receivables on performance in the firms, yet trade receivable is a very fundamental component of the working capital and constitutes a substantial amount of current assets. Again the above studies indicate that there may be differing evidence in connection with accounts receivables management and the performance of firms ranging from positive significant to negative significant relationship. This calls for further studies to investigate the actual status in the context of manufacturing companies listed in the bourse. Therefore, the current study attempts to look at the trade receivables as a significant element in the firm's working capital management and answer the question; what is the influence of accounts receivables

management on the performance of manufacturing firms listed in the Nairobi Securities Exchange?

1.3 Research Objective

To determine the impact of accounts receivables management on the financial performance of manufacturing firms listed in the Nairobi Securities Exchange.

1.4 Value of the Study

This study will be of importance to the credit control managers of the manufacturing firms. They will have better knowledge on making decisions in regards to offering credit to customers, like selection of credit worthy customers to be offered credit. They will also be able to formulate policies that are efficient and that will enable them collect their accounts receivables in the shortest time possible. This will help them to improve their profitability in the long run.

It is also necessary for regulatory bodies, such as the Kenya Association of Manufacturers to use it to strengthen the system used for the regulation of Kenya's manufacturing companies. The report would also assist policy makers such as the Capital Markets Authority in introducing new accounts receivables management strategies in manufacturing companies.

The research will be important to the future researchers who wants to undertake further study on finding out the impact of account receivable management on financial performance. The results will also build in to the prevalent body of knowledge to assist in future studies.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

A number of research papers concerning this topic have been accomplished. This section forms the basis of the current study on the impact of the accounts receivables management and how they influence the performance of firms. The section shall cover the theoretical review assessing the relevant theories available for the research variables, review of the determinants of the profitability of manufacturing entities, an empirical study reviewing the existing literature both locally and globally and the research gaps and a conceptual framework with a pictorial relationship of the variables of the research.

2.2 Theoretical Literature Review

A theory can be defined as a cohesive cluster of general event suggestions tested that provide clarifications of how items relate to each other. Thus, a certain class of phenomenon can be predicted using it. A theory is developed by analyzing results from similar research, deducting from hypothetical areas by basic reasoning and/or applying information. (2011 Zikmund)

2.2.1 Tradeoff Theory

Tradeoff theory can be traced from the great works of Robichek and Myers (1966). The theory brings forth the argument that the main objective of any investor should be to maximize their wealth and the firm's value. Therefore, the business should aim at getting an optimal capital structure that will actualize this objective. It assumes that there is always an optimal point of operation where the leverage level maximizes the performance of the firm and hence the managers should target operating at that point (Okoth, 2015). Management of accounts receivables involves a tradeoff between all the risks involved and the expected returns. The managers therefore face great risk to precisely determine accounts receivables necessities and the firm has to come up with the most suitable levels of direct production levels to be accomplished (Pandey, 2011).

The tradeoff theory applies to the management of accounts receivable in terms of decisions to be taken, taking into account the tradeoff between liquidity and profitability. A firm would have to forgo its profitability if it chooses to go for liquidity (Matole, 2019). This would lead to a decrease in sales because of the decision to sell its products without giving credit thus increasing its liquidity position, but reducing its profits made by the business. On the other hand, a firm would have to forgo its liquidity if it chooses to go for profitability. This would

result in higher revenue but a drop in liquidity (Akenga, 2017). This is because goods sold on credit will improve profitability but decrease the cash flow associated with cash sales. A correct tradeoff between the company's profitability and liquidity should therefore be preserved through proper management of accounts receivables.

2.2.2 Agency Theory

Coined by the scholars Berle and Means (1932), Agency theory was defined as a relationship within which one individual hereby called a principal contract another individual who transacts on his/her behalf referred to as an agent, in which the relationship requires some control mechanism from the principal (Meckling & Jensen, 1976). Specifically, the speculation applies to the sphere of finance because it considers issues like conflicts of interest, incentive issues and the way to resolve those problems. In the course of their interaction, a harmonious way of interacting between the two parties must be established. Establishing a contractual relationship that defines the extent of representation has been seen as one of the mechanisms used to achieve this objective. The contractual terms should strike a balance between the two parties who have contradicting interest (Meckling & Jensen, 1976).

From the perspective of credit control managers, the theory relates to account receivables management. They are the firm's shareholder's agents and they make all the important decisions that concern the company's receivables (Matole, 2019). This results to either increase in sales or decrease in sales depending on the credit worthiness of the customer. Therefore, the theory tries to find a compromise between the credit control managers who are taken as agents and the shareholders who take the role of principal in such a way that the judgment of the managers still has the principal's interest at heart (Ochieng et al., n.d.).

2.2.3 Transaction Cost Theory

Ferris (1981) advanced the transaction cost theory which perceived that there was undisputable benefit that accrued to the parties who applied the trade credit terms in their operations. This is because such firms avoided or reduced the transaction cost to some extent as they are in a position to separate deliveries from payment and especially when delivery was uncertain. As payment is done after supplies, this allows the debtor to plan on the cash needs and lowers the liquid money to be held for speculative motives in purchases. It has been acceptable that the customers are given a humble time to make their payments later after the time of their

consumption based on the agreed terms of operations. In so doing, both parties can avoid the number of trips they make to the bank and reduce other transaction costs such as frequent transportation costs and bank charges (Schwartz, 1974). The level of transaction costs savings that can be realized is dependent on transaction frequency, uncertainty and the degree to which investments are transaction specific. There can be cost savings by employing trade credit where transactions are frequent (Petersen & Rajan, 1997).

The theory relates to accounts receivables in that it improves operational efficiency and economizes on transaction cost for all transacting parties (Ferris, 1981). Cash being a tempting asset has a higher exposure to misappropriation and thus the business should maintain the lowest level of cash to mitigate such risk. This is achievable through the use of the credit sales which brings into highlight the expected flow of cash before it is received for planning purposes. This will in turn increase profitability as more sales will be made on credit in order to reduce transaction costs. The delay in payments also gives an opportunity to the customer to verify the goods. This level of convenience has been purported to be healthy for the business operations as per Lee and Stowe (1993) and Emery and Nayar (1994). Again, the customer's confidence in the products is normally boosted by the trade transactions. If the supply was not sure of the products, then they would give strict cash purchase terms. This fact ensures quality production that is for the benefit of both the supplier competition and the consumer's needs.

2.3 Determinants of Performance of Manufacturing Firms

Contained in this section, the research shall concentrate on the variables that may be influencing the performance of manufacturing firms. Among the determinants that were reviewed in this section includes accounts receivables management, firm size, market share, growth rate and the capital structure.

2.3.1 Accounts Receivables Management

While it is agreeable that trade in credit terms is not avoidable, the management of accounts receivables has been viewed as a complex role and which in a way is linked to a company's mission, goals and objectives, (Sharman, 2010). For the terms of credit to be effective, they need to be frequently updated to reflect the market conditions, firm's financial status and the ability of debtors to pay so as to be able to compete in the market while mitigating the risk of irrecoverable debts, (Eliots, 2009). Giving credit exists to facilitate sales. Shushma (2007) established that even though trade receivables promoted the business outlook from the

receivables point of view, the amount of the account receivables was found to increase both the holding cost for the accounts receivables as well as the net working capital which in return decreases the firm's value.

In addition, extension of credit by Gill (2010) should be on the basis of credit worthiness. This reduces the level of default and bad debts. This results into sales increment and thus increment in profitability and the value of the firm. Firms that favor increased receivable in the attempt to boost their market share and the levels of profits may end up gaining the benefits but exposing themselves in the long run. According to the investigation by Ahmet and Emin (2012) any business performance will be at stake if proper management of accounts receivables is not got right and properly followed. This influences the cash flows of the business which is a key determinant of the health and continuity of the business. Businesses should consider a debt management policy that encourages proper screening of the customers before advancing credit and put in place policies that allow a clear follow up to ensure optimal collection of the debts (Gill, 2010).

2.3.2 The Size of the Firm

The size of the firm can be perceived as the capacity of the firm to produce either in the form of amount of products or variety of production a firm possesses (McWilliams & Siegel, 2010). As a consequence of economies of scale and diversity of risk, the size of a company has been seen to a great extent as a profit booster in most of the firms. Larger firms have this. They are able to negotiate prices for the goods they purchase and they also produce goods at lower costs than the smaller firms. This enables them to reduce their working capital costs and thus improve how much they earn. By this concept, Merozwa (2015) established that firm assets were directly related to the profitability in most cases until the point of diseconomies of scale. Velnampy & Nimalathan (2010) explored the connection between the company assets and its financial performance between the Commercial Bank of Ceylon and Sri Lanka between 1997 and 2006. He later concluded that the company assets had an incremental impact on the levels of performance for Commercial Banks of Ceylon Ltd.

Company size has been one of the major elements that impact the different aspects of profitability to a great extent (Baimwera and Muriuki, 2014). While almost every size of a firm has its own merits and demerits, the bigger firms are seen to have more merits which every

business person will dream to achieve. The bottom line here is normally the economies of scale, stability of management and the capital base that allows the firm to take advantage of existing opportunities in the market. Firms with large capital base tend to operate more securely as they can get more resources either internally or through credit advances that allows them to optimize their speculation motive while at the same time meeting their obligations as they mature without a lot of pressure (Mwangi, Makau and Kosimbei, 2014). This will all aggregate for good performance at the end unless the firms get to the point of diseconomies of scale where they become unmanageable leading to wastage of resources.

2.3.3 Market Share

The most common rationale in relation to the firm's performance has been built on two aspects which are the economies of scale and brand loyalty. Firms possessing a big market share purchase goods and services on large scale. According to Kimotho (2018), big market share leads to reduction of cost of production through higher discounts and greater recovery of the fixed cost. Therefore, firms with larger market share have larger cumulative sales compared to the ones with small market share. They in turn have lower costs and higher profitability. This is also because of quality managers who are prosperous and achieve high shares for their respective market. The managers are also skillful in managing costs, attaining ultimate productivity from workers who build up to the overall improvement of performance of the firm.

Share in the Market and Performance studies have resolved that the link between market share and profitability is substantially positive. Schmalensee (1989) conducted an analysis across a segment of sectors across many companies in the United States. He concluded that market share is strongly linked to a company's performance, although it did not extend to some manufacturing companies. Another research by Fenny and Rodgers (1999) on empirical evidence was conducted and came to a conclusion that market share has an immense impact on firm's results.

2.3.4 Growth Rate

The expansion of a company has a positive correlation with its performance. This is because as a firm grows then it is expected that the value increases and thus profitability. It is able to employ expertise who contributes to better performance of the firm. Its market share also increases and thus it enjoys economies of scale and reduced costs of operation. In relation to

this variable, several studies have been conducted and many results have been presented. Keith (1998) analyzed thirty-eight small businesses in the Tayside region of Scotland for the connection between attributes of the firm and improvement in the manufacturing sector and there after concluded that the rate of growth for any firm has a positive relationship to its performance.

The growth rate of a firm has been a key indicator that the firm gets the right things right. Growth rates are results of a combination of other factors that influence the operations of the business and which adds value to the shareholder's wealth. Mwangi, Makau, and Kosimbei (2014) in their study established that the growth of businesses influenced the performance of the business in a both positive and significant manner. The relationship may be attributable to the fact that the shareholders will not always withdraw the additional value resulting from trading activities, and which is ploughed back for investment and cushioning the risks that insert pressure on the business operations.

2.3.5 Capital Structure

Modigliani & Miller (1958) presented the research on the relevance of capital structure, attempted to clarify the effect of capital structure on the firm's profitability, considering factors such as taxes, agency cost and bankruptcy costs, as an aspect in deciding the ideal capital structure that would optimize profitability. Debt financing is a cheaper source compared to equity financing. Loans give leeway for firms to leverage the funds available, and as a result causes a high rate of growth than would have been possible. Utilization of financing by debt increases revenue that exceeds the interest payment expenses. The firms enjoy tax shield because interest payments are tax deductible thereby reducing the firms overall tax burden and increases profitability.

The Jensen & Meckling (1976) agency theory demonstrates a positive relationship between leverage and performance, which is the utilization of loans in the capital structure. Then again, the pecking order theory of Myers and Majluf (1984) presents an adverse effect between the amount of loan (leverage) in an organization's capital structure and what it earns. Subsequently, it can be concluded that the measure of loans and equity an organization uses to finance its activities has a direct influence on its profitability.

2.4 Empirical Literature Review

This segment looks at earlier studies conducted similar to the current study in order to broaden the understanding of knowledge and materials are available for operational purposes. It will enable the one undertaking the study to come up with his own research problem in a relevant context. A couple of researchers have carried out studies on Accounts receivables either as a separate study topic or under working capital management from various viewpoints.

Lazaridis & Tryfonidis (2006) did a research on the value of accounts receivables management and how this was affecting the firm's profitability. The study reviewed 131 firms that were operating in the Athens security markets between the years 2001 and 2004. The analysis report as per the regression results indicated that gross operating profits were not only affected positively by the cash conversion cycle but also statistically significant. He went on to suggest that managers' optimization of the CCC could improve shareholder value, and there was a substantial connection between the performance of the companies and the efficiency of their accounts receivables. When the accounts receivables management is efficient it means that the policies put in place are working well and therefore the day's sales outstanding is short and conversion of receivables to cash is faster thereby improving the profitability of the firm.

Gill (2010) in his study conducted using 88 firms in the New York Securities Exchange on the relationship between performance and WCM has been analyzed. For the period 2005-2007, the analysis was carried out. No substantial association between profitability and average days of creditors was found in the report. There was also no statistically relevant link between the profitability of the company and the average inventory day. A negative impact between profitability and ACP was also noticed. The study showed, on the other hand, that there was a substantial connection between profitability and the company's size. The research subsequently indicated that by lowering the number of days for their debtors, finance managers could improve the company's profitability. This would increase the sales on credit and in turn increase profitability at the end.

Duru et al (2015) who focused on establishing the effects of accounts receivables on performance of food and beverages industries organizations in Nigeria. The study was carried out between the years 2000-2011. The variables consist of balance fees, sales advancement and

financial obligation. The study used secondary source of information. The study adopted variant regression analytical tools. The study found out that the accounts receivables had non-significant connection with performance of FMCG organizations in Nigeria. It also discovered that increase in sales had an incremental effect on the success of the firm. The more the firm's sales, the more income it receives and this has a direct influence on what the firm earns.

Singh and Pandey (2008) researched on the components of operating capital and its influence on the success of the Hindalco markets for the period 1990-2007. The study focused on secondary data collected for the research study period 1990-2007 from the Hindalco financial statements reports. Analytical tools appropriate to provide robust results were utilized. To examine the significant impact on Hindalco's profitability, multiple regressions were used. The study showed that the account receivables turnover ratio had a statistical effect on the financial performance of firms'. This means that the firm's collection of accounts receivables is efficient and the customers pay their debts quickly when they fall due hence boosting profitability.

Mihajlov (2012) conducted a study examining the management of the accounts receivables of the firms publicly listed in the Serbian Republic security market. The study sampled out 108 firms in the market during the 2008 recession crisis. The policies for balance dues were studied during the crisis period of 2008-2011. The results were tested on short term basis with the aim to comprehend the relation between debt management and organization's success. The study noted that the behavior of the relationship of the variables was abnormal during the crisis period. This is because of reduction in ability to pay back the money owed to the firms. The firms may incur more collection costs and even bad debts because many customers are unable to pay back what they owe.

Waweru (2011) researched on the relationship linking the management of receivables and the value of NSE-listed companies. For this analysis, secondary data collected from the NSE handbook was used and audited annual financial reports from the individual companies. For the seven-year period 2003-2009, the study sampled 22 NSE-listed companies. Findings of the regression and correlation analysis indicated that there existed some connection between the value of the firms and the management of trade receivables. The policy that is tight means that only few customers will qualify for credit, being credit worthy and thus the firm expects to receive the money as and when the debts fall due. This will enable the firm receive payments on a timely basis because the customers are credit worthy.

While the businesses may have doubled benefits that accrue to them by the use of credit transactions in operations, proper receivables management is considered healthy for the survivorship of the business through the reduced transactional cost (Ahmet, 2012). In return, the reduced cost of transactions will boost the level of profitability of the companies. A research conducted by Munene and Tibbs (2018) to assess the link between the management of debtors and the performance of the Embu water and sanitation business in a study that chose to use a descriptive methodology in the study. Secondary data gathered from the departments of accounting and finance for the period 2012-2016 was used. To evaluate the data, descriptive statistics and inferential statistical methodologies were utilized and presented in tables. As a measure of the management of the accounts receivable, the average collection interval was utilized, plus the current ratios were found to have a strong positive connection with return on equity suggesting that the overall financial output would improve if the accounts receivables payment period were to be extended.

A research done by Mathenge (2016) to evaluate the impact of debtor's management on what was earned by manufacturing firms listed in bourse for the period 2010-2015. The research collected and analyzed data using quantitative research tools. Regression and correlation were utilized to determine the characteristic and extent of statistical relationship between the variables under consideration. The study made a conclusion that the average collection time, the ratio of bad debts to debtors, and the turnover of debtors lead to 24.7 percent of total profitability. The average collection time has a major and adverse impact on profitability. The study also concluded that the performance had an inverse relationship with the collection period as the firm would receive payments within the expected time period.

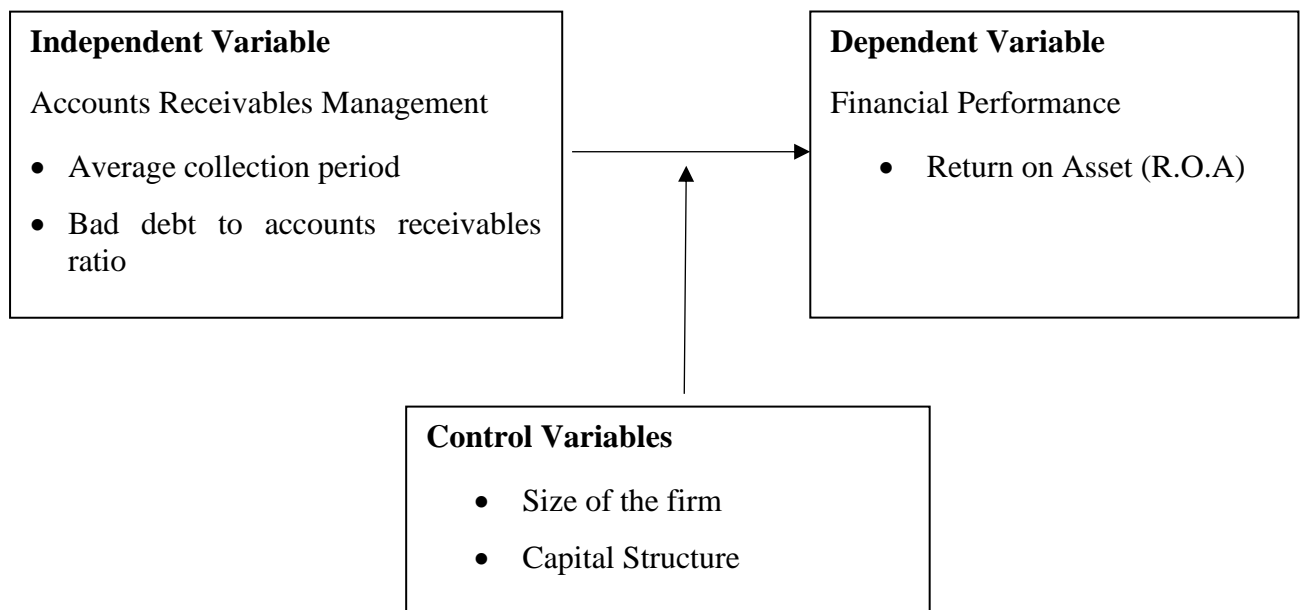
Kilonzo, Memba and Njeru (2016) Research has been conducted on the effect of account receivables on the performance of organizations and more so the parastatals in Kenya for the period 2010-2014. Owing to the limited number of parastatal firms, the study adopted the census approach. It used both descriptive and inferential analysis. Variance analysis findings and the regression indicated that there was a direct relation between the receivables management and the performance of firms under consideration. However, the relation was perceived to be weak as only 25.3% of the performance would be explained by the debtor's management meaning other factors also influenced the performance not in the study.

Paul et al (2013) conducted a study to analyze the influence of operating capital utilization and control on the performance of nine companies that were in the manufacturing industry listed in the NSE for the period 2013-2018. From the research findings, it was evident that there was a positive and statistically significant relationship. The results advocated for proper management of the receivables and more so through the reduced collection period that would allow easy operation to boost the profitability of the manufacturing firms. The research also showed that the relationship between overall profit in operating and stock in days was significant. From the above literature, it is clear that the receivables management has some influence on what the companies earned. However, based on the contradiction in terms of the direction, magnitude of the relationship and context of the studies, it makes it a requirement for the current research to be done so as to find out the link between the variables.

2.5 Conceptual Framework

It is possible to define a conceptual framework as a model for presentation that diagrammatically puts across the link between variables. The major purpose of the structure is to allow the reader to imagine at a glance the proposed relationship easily. The relation between the variables are shown below.

Figure 2.1 Conceptual Framework



2.6 Summary of Literature Review

It can be inferred from the above analysis of the related literature that studies on account receivables have not been comprehensively covered. In general, most studies have concentrated on operating capital with only a limited emphasis on debtors. Trade receivables and inventory have been studied but in variant economic structures. However, the current concern of management of the debtors and how they influence profitability of manufacturing companies has not been clearly figured out in the previous literature because some assume that the study indicates a positive relationship, while others say that it indicates an adverse relationship while others show no connection at all. By looking at the impact of account receivables on the performance of NSE-listed manufacturing companies, this study seeks to fill the void in the previous studies.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

Contained in this section is the methodology to be followed to help achieve the objectives of the study. The population to be analyzed, data gathering methods, sample design and data analysis were included.

3.2 Research Design

As indicated by Panke (2018), quantitative, qualitative and mixed designs are principally the common designs in social sciences. Each design is appropriate in certain conditions and a choice is also impacted by the research question to be answered. Based on the nature of the variable and the results that are expected to clearly point out the relation between debtor's management and the profitability of firms, a quantitative research design was used. Quantitative data was collected and analyzed using mathematical models. Panke (2018) noted that, quantitative design would be very appropriate when many study participants are included. This study involved all manufacturing firms listed at the Nairobi Securities Exchange in Kenya which makes it a good number to apply the study.

3.3 Population of the Study

The term population in a research is used to denote all members with the common desired characteristic. The population for this research was all manufacturing organizations which are catalogued at the bourse. In total, there are 9 manufacturing firms in the NSE as at December 2020 but with the inactivity of Mumias Sugar Ltd causing 8 companies to be studied. As the data was readily available, and considering that there are only 8 firms, no sampling was done and the population would be researched in totality. It also helped in avoiding some of the disadvantages associated with sampling like subjectivity and biasness in sample selection.

3.4 Data Collection

For the period 2009-2020, the data related to the debtor's management and the profitability of the manufacturing firms listed at the bourse was obtained from the published financial statement that are available in the capital market authority, NSE and the firms site investors relations portal. This data was readily available from these secondary sources as it is a requirement for every public traded firm to publish and hence data was collected for the twelve-year period to be able to observe the trends over time. It also provided high level of accuracy when the trends or patterns change. It enhances validity and reliability of data. Panel data was

preferred for the study as it constitutes both time series and cross sectional data that has both the features of time series and cross sectional data for better deduction (Greene, 2008).

3.5 Data Analysis

Data analysis represents a major tool of achieving the research objectives through the quantification of the link between the variables being researched. Statistical tools of analysis were used to establish the link between the variables so as to give a meaningful interpretation and understanding of the variables. Data was for 12 years across 8 firms, regression technique was used. The study ensured an elaborate analysis by taking in to account possible differences which may arise between the different panels.

3.5.1 Diagnostic Test

Diagnostic tests were utilized in the research so as to ensure that the results were reliable. Autocorrelation, Multi collinearity, Heteroscedasticity, and linearity tests were mainly used. Autocorrelation test was done to check on serial correlation. The data was expected to be free from the serial correlation for the purpose of relying on the findings of the research as an indication that data is independent and is not influenced by past observations. The test was undertaken by adopting the Durbin-Watson test. In this test, the assumption of the null hypothesis was that there is no serial correlation.

To boost the confidence in the set of data that it is not biased or one independent variable has not been contributing to the effects of others on the dependent variable, multicollinearity test was conducted. In case there would have been multicollinearity among some of the independent variables, this was to be cured through the elimination of one of the variables which may be automatically dropped by the SPSS in the subsequent tests. The VIF was used to test multicollinearity. To qualify the data to be free from multicollinearity, the study considered the VIF to be expected to lie between 1 and 10 otherwise the treatment of the multicollinearity would have been required. For Heteroscedasticity test the study applied the graphical method where residual values were plotted against predicted values and the nature of the resulting plot noted. Heteroscedasticity occurs in scenarios which the variance of the error term is not the same across the observation. This can cause a biased estimation. Heteroscedasticity would exist if the distribution of the plot is not fairly distributed around the mean.

Linearity, which is a key assumption in regression, was tested by designing graphs of the dependent variable against each of the independent variables. A line of best fit was also included in addition to observing the trend in the plot diagram. Correction would have been needed through use of log values or changing the analytical model if linearity was not observed in any of the study variables.

3.5.2 Analytical Model

For the objective of the research to be accomplished, the gathered data was computed by means of descriptive statistics, correlation analysis and multiple regression analysis. In order to estimate the causal correlation between account receivables management measures and profitability measures, multiple regression analysis was utilized. To show the findings, charts, graphs and tables were used. The study utilized the SPSS software to conduct the tests due to its stability and reliability in provision of results from both complex and large data sets in study. The regression equation is as follows;

$$ROA_{it} = \beta_1 ACP_{it} + \beta_2 BDRR_{it} + \beta_3 CS_{it} + \beta_4 FS_{it} + \epsilon_{it}$$

Where,

ROA_{it} = Return on Asset of the firm i at time t , measured as a change in net income to total assets

ACP_{it} = Average Collection Period, measured as a change in average accounts receivable to credit sales.

$BDRR_{it}$ = Bad debts to receivables ratio, measured as a change in bad debts net of recoveries to average accounts receivable.

CS_{it} = Capital Structure, measured by a change in debt to equity

FS_{it} = Firm size, measured by total assets

ϵ_{it} = Error term constituting effects of other variables influencing profitability

i = 1 to 8 companies

t = time period 2009 to 2020

3.5.3 Test of Significance

The test for significance is intended to test the significance in the research hypothesis that focused on the link between the variables of the research. The basic test to assess the correctness of the null hypothesis that the management of accounts receivable does not affect the profitability of listed manufacturing companies at the bourse. For the purpose of achieving this objective, P test of significance was utilized to test whether the variation in dependent variables β_1 , β_2 and β_3 are statistically significant. The test was conducted at the 95% confidence level with the decision criteria being any variable that recorded a significance level below 0.05 was inferred to be statistically significant in the current study.

According to Obilor and Amadi (2018) among the different methods that could be used in testing the test for significance included the T-distribution, the SPSS method and Fishers z-transformation approaches. According to their recommendation, it was observed that SPSS which was initially doubted as to whether it provides a reliable test for significance was found to be giving the best results as per the study. It is in lieu of their recommendation that the current study used the SPSS tools to test the significance.

CHAPTER FOUR: DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction

In this section, the findings of data analysis are reviewed. The chapter starts by discussing some descriptive statistics of the data collected. These descriptive statistics give a clear picture of the data collected and help in understanding some features of the variables being studied. The descriptive statistics discussed are those of central tendency and those related with variability of the data. Specifically, mean, standard deviation, minimum and maximum values are determined. The chapter also discusses the results of the several data validity tests done and finally discusses the regression results established.

4.2 Descriptive Statistics

8 firms were studied for a duration of 12 years, from 2009 to 2020. The expected data points were 96 for every variable studied. Of the 96 expected data points, all data points were collected. The data was considered adequate for analysis as the data points were all above 40 which is recommended for linear regression. The tabulation is as shown in Table 4.1.

Table 4.1: Response Rate Table

	Expected Data	Available Data	Response Rate
ROA	96	96	100%
ACP	96	96	100%
BDRR	96	96	100%
Debt/ Assets T.	96	96	100%
Firm Size	96	96	100%

Source: Author (2021)

For ROA, the average return was 0.0477 which translates to 4.77% return. The implication is that, investors willing to invest in manufacturing firms in NSE should expect a 4.77% ROA. This value was however observed to be less variable as the standard deviation was established to be 0.1665, which was low. The minimum and maximum returns were -1.221 and 0.3457 respectively. These results show that at the worst, an investor should expect to have a negative ROA of -122% and at best, a return 34.57%.

Average bad debts to receivables ratio was established to be 0.0605 and the standard deviation was 0.0653. This deduces that 6.053% of sales on credit may turn out to be bad debts which is acceptable for the industry. Since there were some firms without bad debts, the minimum ratio was 0 while the highest was 0.31148. Another variable studied, was capital structure which was calculated by the debt to equity ratio. The average debt to equity ratio was found to be 1.3644 which indicates that most companies in the manufacturing firms listed with the NSE are financed through debt financing. The standard deviation was low at 1.5079 indicating that manufacturing firms in NSE adopt relatively similar financing means. The minimum and maximum values were 0.0552 and 8.3427 which shows that some firms have more debt than equity which indicates insolvency. This may have been an indicator of deteriorating conditions in the industry. The summary of descriptive statistics is as shown in Table 4.2.

Table 4.2: Table for Data Summary Statistics

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
ROA	96	-1.22138	0.34579	0.047706	0.166586
ACP	96	0.628	2.791	1.80848	0.415645
BDRR	96	0	0.31148	0.060529	0.065342
D/E	96	0.0552	8.3427	1.364402	1.507898
Firm Size	96	8.0345	10.9477	9.4457	0.784156
Valid (listwise)	N 96				

Source: Author (2021)

4.3 Data Validity and Reliability Tests

Diagnostic tests were undertaken on the data gathered to confirm its fitness before being used in analysis. This section shows those tests conducted.

4.3.1 Test for Heteroscedasticity

Heteroscedasticity was tested by plotting a graph of standardized predicted and residual values. The distribution of the scatter points around zero were then noted. As can be deduced in figure 4.1, the plots are uniformly distributed. This shows that the data does not suffer from heteroscedasticity.

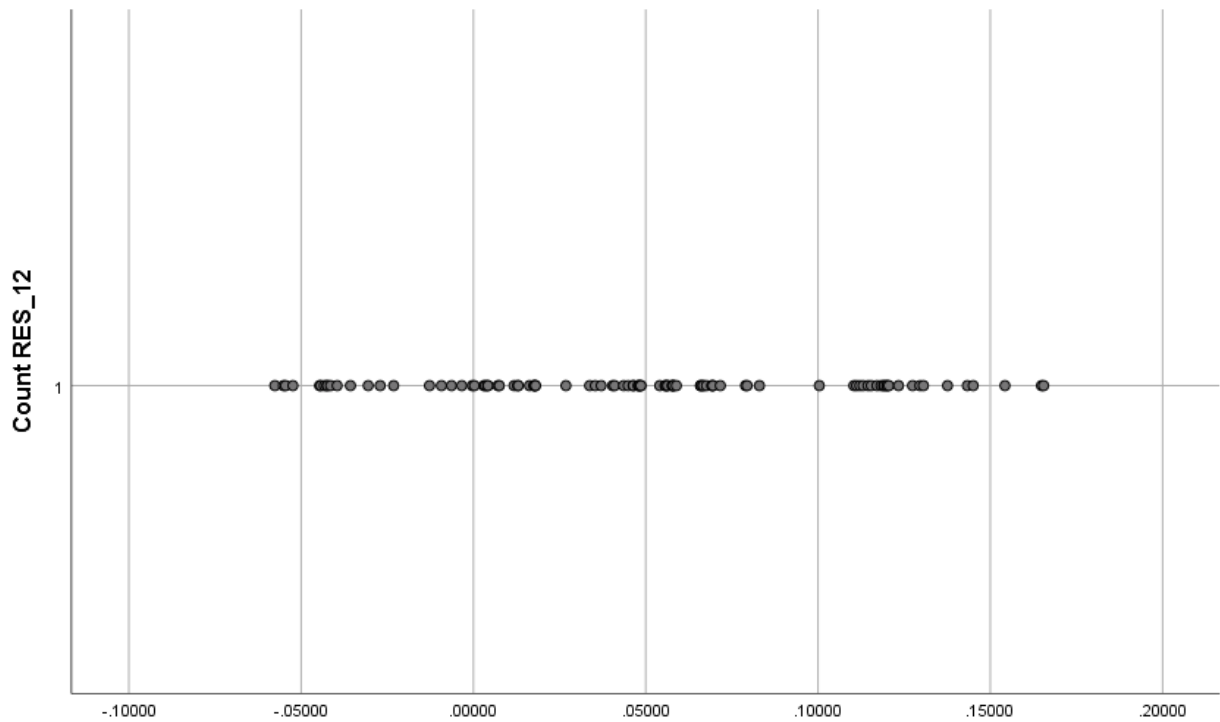


Fig 4.1: Heteroscedasticity test graph

4.3.2 Linearity Test

Test for linearity was undertaken since the assumption of regression is that the variables have a linear relationship. This test was done by plotting scatter graphs and noting any pattern and linearity in the plots. This was assisted by fitting a line of best fit. All independent variables were found to be linearly related with the dependent variable, but with different magnitudes as indicated by the slope of the plotted lines.

As shown in Figures 4.2, ROA and ACP had a negative relationship with a linear relationship coefficient. Hence an increment of the period in which data was collected averagely lead to a decrease in ROA.

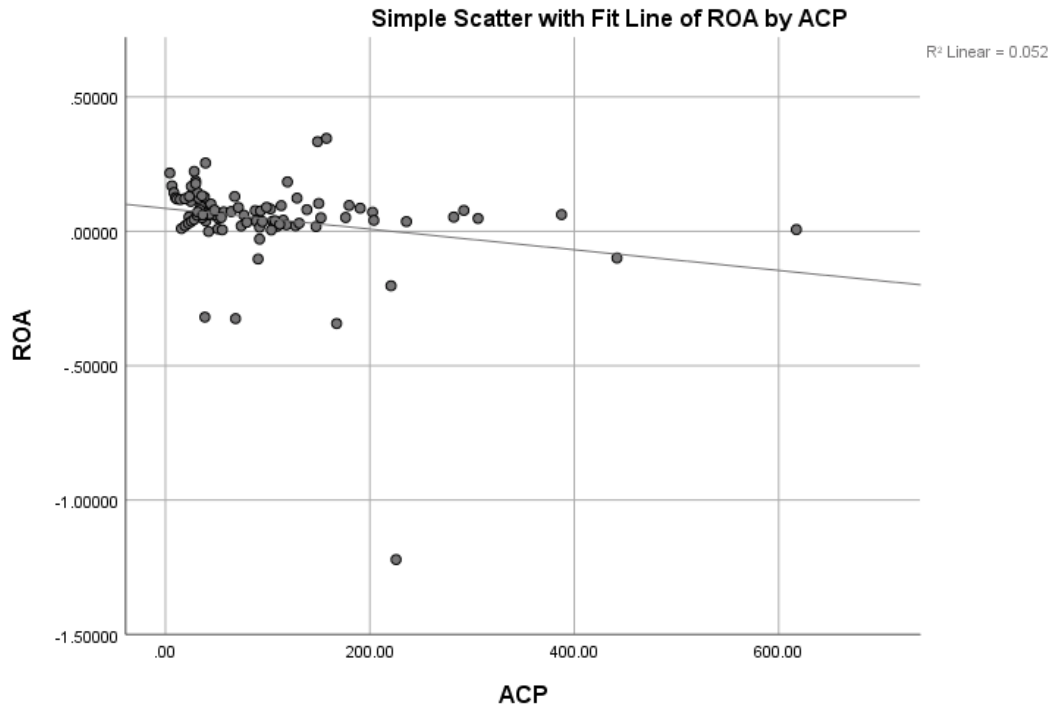


Fig 4.2. Average collection period linearity test

Bad debts to accounts receivables ratio showed a positive relationship with ROA hence showing an increase in BDRR leads to an increase in ROA and vice versa.

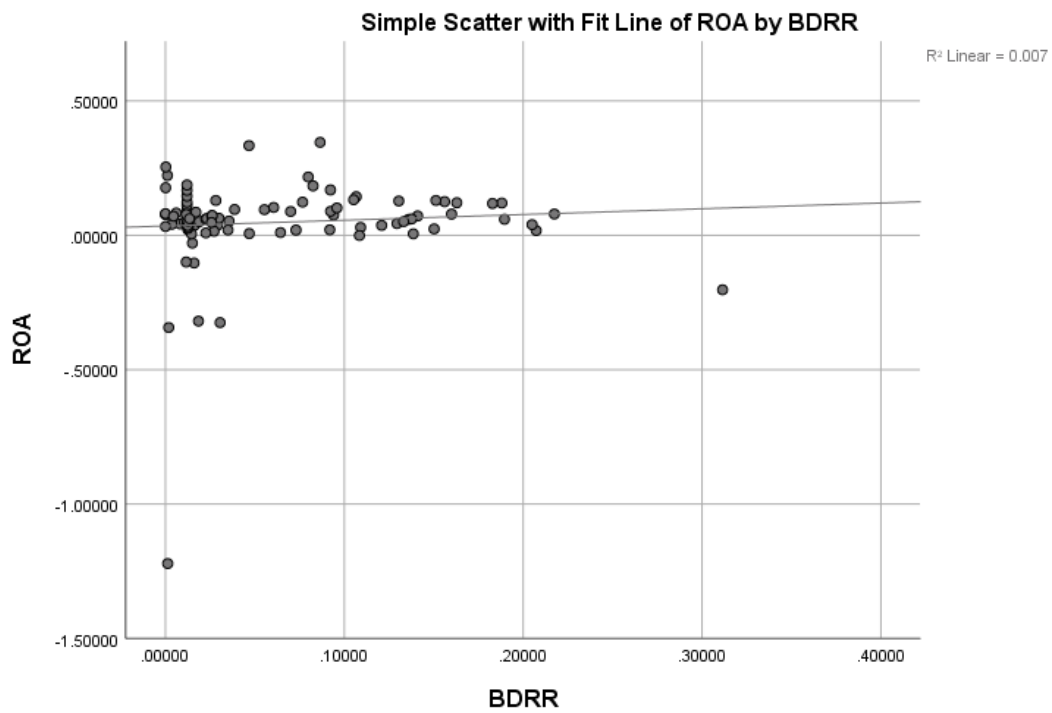


Fig 4.3. Bad debts to accounts receivable ratio linearity test

Debt to equity ratio showed a slight positive relationship with ROA hence showing an increase in debt leads to a slight increase in ROA though debt and ROA had the least linear relationship coefficient.

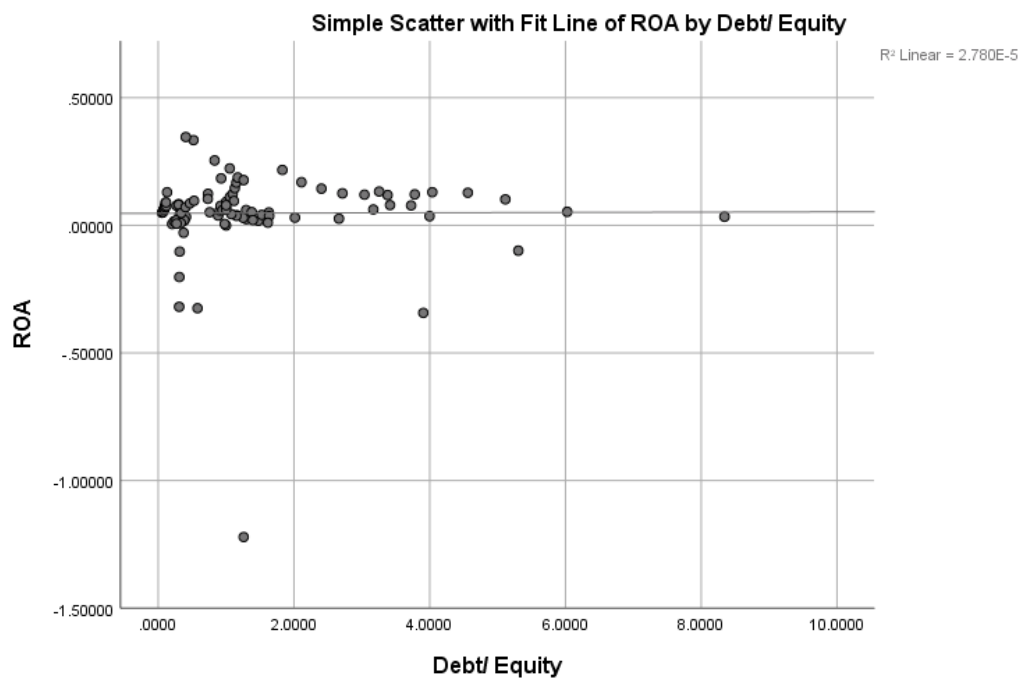


Fig 4.4. Capital structure linearity test

Firm size showed a positive relationship with ROA hence showing the expansion of an organization leads to an increase in ROA and firm size and ROA had the highest linear relationship coefficient hence the ROA had the greatest change for every unit change in firm size.

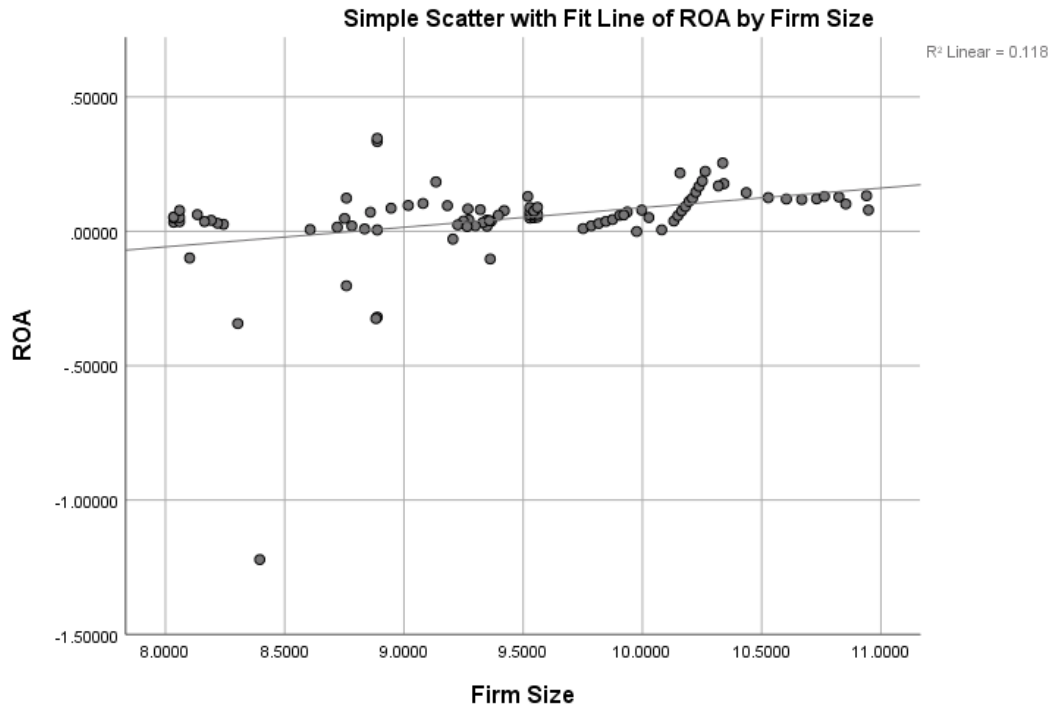


Fig 4.5. Firm size linearity test

4.3.3 Test for Multicollinearity

Multicollinearity was tested to determine if there were any independent variables which were closely related with each other. The test was done using VIF where a score of 10 was used as a cutoff. All variables were found to have a very low VIF score, with the highest being 2.22 and hence within the threshold. The low VIF levels led to the conclusion that the variables were not closely related with each other and they could all be included in the final regression model. The test results are as summarized in Table 4.3.

Table 4.3: Multicollinearity Test Results Table

Model		Collinearity	
		Tolerance	VIF
1	(Constant)		
	ACP	0.512	1.95
	BDRR	0.798	1.25
	Debt/ Equity	0.956	1.05
	Firm Size	0.45	2.22
a Dependent Variable: ROA			

Source: Author (2021)

4.3.4 Test for Autocorrelation

In testing for autocorrelation, Durbin-Watson test for first order autocorrelation was used. The null hypothesis was tested and found out that there was no autocorrelation in the residuals. The results were interpreted by comparing with 2 to determine if no autocorrelation existed, or if it existed, whether it was positive or negative. The test returned a score of 1.425 which led to the conclusion that there was a slightly positive autocorrelation but was not severe enough to cause an alarm. No adjustment was made based on that. The results are as shown in the table below.

Table 4.4: Durbin-Watson test results table

Model Summary		
Model	Std. Error of the Estimate	Durbin- Watson
1	0.15942969	1.425
a Predictors: (Constant), Firm Size, Debt/ Equity, BDRR, ACP		
b Dependent Variable: ROA		

Source: Author (2021)

4.4 Correlation Analysis

Pearson correlation coefficient was utilized to establish the correlation between different variables in the research. The test was done to understand how the variables were related, and therefore, could influence each other. It showed both the magnitude and the direction of change for each pair of variables. The analysis also showed those correlations which are significant at both 5% and 1% significance level. Return on assets (ROA) was found to be positively correlated with debt to equity ratio with a coefficient of 0.005, ROA also positively correlated with bad debts to accounts receivable ratio (BDRR) whose coefficient was 0.084. It was also positively correlated with firm size whose coefficient was 0.343. However, found to be negatively correlated with Average Collection Period. The negative correlation score from Average Collection Period (ACP) was -0.227.

Apart from the ROA, it was discovered that the average collection period was positively correlated with debt to equity ratio. This shows that debt financing has no positive influence on the capacity of the organization to collect credit sales. Increase in average collection period (ACP), ROA and BDRR were found to affect debt to equity ratio positively. This meant that a decrease in debt to equity ratio could be achieved if those variables were decreased. ACP was found to be positively correlated with debt to equity ratio with a coefficient of 0.104. This implies that as it took longer for companies to collect receivables, the levels of debt financing of the company would increase. This could be improved if companies took measures to reduce the amount of accounts receivable, which is the contributing factor to an increase in BDRR. The highest correlation was found to be firm size with BDRR showing that firm size can greatly determine the ability of a firm to collect receivables.

BDRR was found to be negatively correlated with the ACP while the remaining variables had a positive correlation with bad debts to receivables ratio. BDRR's negative correlation with ACP showed that it is not a key factor in bad debt occurrence. In terms of significance of correlations, correlation between BDRR and firm size, firm size and ROA and Firm size and BDRR were all positive. The results summary is as shown in Table 4.5.

Table 4.5: Correlation coefficients summary table

	ROA	ACP	BDRR	Debt/ Equity	Firm Size
ROA	1	-0.227	0.084	0.005	0.343
ACP	-0.227	1	-0.203	0.104	-0.689
BDRR	0.084	-0.203	1	0.157	0.409
Debt/ Equity	0.005	0.104	0.157	1	-0.019
Firm Size	0.343	-0.689	0.409	-0.019	1

Source: Author (2021)

4.5 Regression Analysis and Hypotheses Testing

Regression was done to know the exact equation which links the independent variables to the dependent variable. It was done alongside ANOVA test used to identify significance of the model. R square was utilized to determine the degree of influence the independent variables had on the dependent variable.

As shown in the summary in Table 4.6, the R square of the model was established as 0.123. This shows that the variables under study affect only 12.3% of the changes in the ROA. This shows that there are other variables that constitute the portion 87.7% of the changes in ROA.

Table 4.6: Model summary results table

Model Summary

Model	R	R Square	Adjusted Square	R Std. Error of the Estimate
1	.350 ^a	0.123	0.084	0.15942969

a. Predictors: (Constant), Firm Size, Debt/ Equity, BDRR, ACP

Source: Author (2021)

Significance in the model was tested by use of ANOVA. The test had a p-value of 0.017 which was significant. This shows the predictor variables can reliably be utilized to predict ROA. The results are as shown in Table 4.7.

Table 4.7: ANOVA test results table

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	0.323	4	0.081	3.18	.017 ^b
	Residual	2.313	91	0.025		
	Total	2.636	95			

a. Dependent Variable: ROA

b. Predictors: (Constant), Firm Size, Debt/ Equity, BDRR, ACP

Source: Author (2021)

Regression results indicate that the constant of the equation linking the dependent and independent variables is -0.76. The regression results also show that both debt to equity ratio and firm size have positive coefficients. Firm size coefficient is 0.084 showing a slight impact on ROA if a company's asset size changed. The rest of the variables had small coefficient concluding that they have a small impact on ROA but not small to be ignored. Looking at their

p-values, they have a very high p-value and therefore their effect is insignificant. ACP, BDRR and debt to equity ratio have coefficients of 0.011, -0.19 and 0.003 respectively as shown in Table 4.8. This deduces that for every unit increment in ACP, there is a similar increment in ROA by 0.011 units while a unit increment in BDRR leads to a 0.19 decrease in ROA. On debt to equity ratio, a unit increase in debt to equity ratio causes a corresponding increase in ROA by 0.003 units. To boost ROA, then there is need for management to keep ACP, BDRR and debt to equity ratios at the lowest possible levels.

As regards to their significance, both ACP, BDRR and debt to equity are insignificant at 95% confidence level. Their p-values are 0.868, 0.499 and 0.797 for ACP, BDRR and debt to equity respectively as shown in Table 4.8. These significance levels show that the three factors have insignificant relationships with ROA and are not very critical in influencing the levels of ROA in firms.

The coefficients arrived at indicate that BDRR had the top absolute effect while debt to equity had the least effect. It can also be noted that firm size is significant while the rest of the variables had an insignificant effect on ROA. These results indicate that, for firms to improve on their ROA, they need to improve on their efficiency in collections, reduce their average collection periods and also reduce their bad debts as a proportion of accounts receivable. They also need to reduce their use of debt and also increase their sizes through amassing more assets. Highest level of focus however, needs to be directed on BDRR, as it has the top absolute coefficient.

Table 4.8: Regression test results table

Coefficients						
Model		Unstandardized Coe		Standard	t	Sig.
		B	Std. Error	Beta		
1	(Constant	-0.76	0.448		-1.696	0.093
	ACP	0.011	0.066	0.028	0.167	0.868
	BDRR	-0.19	0.28	-0.075	-0.679	0.499
	D/E	0.003	0.011	0.026	0.258	0.797
	Firm Size	0.084	0.037	0.396	2.274	0.025
a Dependent Variable: ROA						

Source: Author (2021)

4.6 Discussion of Research Findings

The research has established that, indeed average time taken to collect debts, proportions of bad debts to receivables levels, capital structure and size of firms affects the return on assets of manufacturing firms. The results are in agreement with the tradeoff theory. As use of debt has been found to affect ROA slightly positively, it can be concluded that in Kenya, the benefits of debt do match their costs, at least for such levels used by manufacturing firms. Its use should still be done with caution and optimal levels should be determined to avoid a negative effect. It should however not cause an alarm as the effect was found to be insignificant. The findings however do conform to the Transaction Cost Theory since longer credit periods have been found to affect ROA negatively.

The study has established that almost all manufacturing firms use trade credit. This finding agrees with that of Sharman (2010) that trade credit is not avoidable and its management is complex. This is because apart from managing the average credit period, it is also important to manage the proportions of bad debts and efficiency in collection. As negative influences of trade credit have been established, the study agrees with the findings by Gill (2010) that decision to lend out funds should be based on the ability to repay the loan. This would ensure that they do not take long to pay, or turn out to be bad debts.

There existed also a positive, though small, connection between firm size and ROA. It can therefore be noted that the sizes of manufacturing firms in Kenya have reached a point in time where economies of scale are occurring. It has been discovered that use of more loans in the capital structure affect ROA positively though insignificant. As the effect is positive, the results tend to disagree with the Modigliani and Miller hypothesis that the capital structure has no effect on ROA. The insignificant positive effect may be due to adherence to the ideal conditions needed in MM hypothesis. The findings therefore support the pecking order theory as it puts debt before equity.

On effect of ACP on ROA, the study agrees with the findings by Gill (2010) that there exists a negative impact of ACP on profitability. The study also confirms the findings by Mathenge (2016) who found that management of receivables in terms of ACP and BDRR affected profitability, as the independent variables have been found to affect 12.3% of the changes in ROA. The study findings also show that there are many other factors, apart from management of receivables and firm size that dictate firm profitability. It is therefore important that firm

stakeholders engage in extensive research to determine those factors which can affect the profitability of their investments.

CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

The realization of the study objectives was the key drive of the study. This chapter tries to establish the findings of the study, its summary and recommendations. It lastly covers the limitations and suggestions for future studies.

5.2 Summary of Findings

The research objective was to establish whether the management of accounts receivables affected the financial performance of manufacturing firms listed in the Nairobi Security Exchange. The dependent variable was ROA while the independent variable was accounts receivable management measured by average collection period and bad debt to receivables ratio. In order to achieve the research objective, other variables were considered for the study that included the size of the firm as calculated by total assets and capital structure that was arrived at using the debt to equity ratio.

The research obtained secondary data that was analyzed using the SPSS software to establish different relationships between the study variables. From the NSE listed manufacturing firms that were initially 9 with Mumias sugar limited that was under receivership being eliminated. The data that was collected for a period from 2009 to 2020 and was expected to give 96 data points of which 100% of the data was collected. From the summary statistics ROA indicated a mean score of 0.0477 indicating that on an average every shilling invested gave a return of 4.77 cents in the manufacturing industry. The debt to equity ratio indicated a mean of 0.0605 showing over reliance of debt financing in the industry while firm size indicated an average mean of 9.445.

From the multicollinearity tests results VIF indicated a range between 1.05 for debt to equity and 2.22 for firm size. From the regression findings the research deduced that the bad debts-receivable ratio, debt to equity ratio and firm size were positively related to ROA with coefficients of 0.084, 0.005 and 0.343 respectively while ACP was negatively related to the performance of the manufacturing organizations as indicated by the regression coefficients. The coefficient for average collection period was -0.227. From the significance levels established by the regression outcomes, firm size indicated a 0.025 significance level while all

the other variables indicated values greater than 0.05. R^2 value of 0.123 was recorded and a Durbin Watson value of 1.425 was also noted.

5.3 Conclusions

Some conclusions can be derived on the study findings discussed above. The response rate was 100% for all variables above the required 60% threshold hence we can conclude that the study results were reliable to form conclusive findings in the field of study. Linearity and normality test were conducted indicating that a normally distributed data was studied. The multicollinearity VIF test indicated values between 1.05 and 2.22 that are at the range of 1 and 10 which is enough evidence that multicollinearity did not exist. The variables were found to be having a relatively low VIF hence making the conclusion that there was no high correlation between the variables.

From the regression results an R^2 value of 0.123 was computed that led to the conclusion that 12.3% of the variation in financial performance for manufacturing firms was as a consequence of the independent and controlling variables. From the coefficient of BDRR, it leads to the conclusion that an adverse relationship existed between BDRR and financial performance of manufacturing firms but was statistically insignificant. Average collection period was positively correlated with the profitability which was statistically insignificant at 95% confidence level while also positive but statistically significant results were concluded for firm size. The other controlling variable resulted in a positive but insignificant relationship to ROA.

5.4 Recommendations

The researcher comes up with several recommendations arrived at from the study findings and in tandem with the objectives of the research. On the bad debts recovery ratio that was found to be having a slight positive impact on the performance, the research proposes that the management should be very cautious with debt recovery procedures as this may be consuming the resources for the business and at the same time may strain the relationship with the debtors affecting future sales. Again, average period used for collection had an adverse relationship with the dependent variable hence a recommendation was made to the managers to develop policies that minimize on the collection period as this lowers the operating cost for the business and hence boosting the firm's performance.

The study makes a recommendation on capital structure to be considered by the firms that the managers should ensure a balance between equity and debt for financing the business projects with more preference for debt funding based on the positive relationship to performance. On organization size that was established to be have a positive impact on profitability, firms are encouraged to make the necessary investment strategies that will allow the growth of firms' assets as they will boost the performance of manufacturing entities. Improving on the asset base allow the firms to enjoy economies of scale that may be beneficial to the future growth of the business.

5.5 Limitations of the Study

A number of limitations that constrained the research results were brought to the light of the researcher. As the study was undertaken on the manufacturing firms listed at the bourse, the results may not be extended to the non-manufacturing firms which comprises a greater percentage of the firms listed in the NSE. Also the study was conducted in the Kenyan context and may be limited to the Kenyan market and any other countries that have similar economic structures as that of Kenya. Countries with different economic structure from that of Kenya may find the relationship not in line with that of the current study hence should not be used for generalization purposes in such countries.

The study results as indicated by the R squared value indicated that the entire model only explained 12.3% of the variation in financial performance indicating that there may be other crucial factors that might be influencing the profitability of manufacturing companies listed at the bourse. Factors considered to be internal factors in the business could be a limitation to the study scope as more external factors may be influencing the financial performance of firms like the Corona Virus Pandemic hence calling for more diverse consideration of variables when applying the results of the current study in different contexts of the field.

5.6 Suggestions for Further Research

For the future researches, the study makes a number of suggestions in the attempt to enrich the field of study. Future researchers should consider establishing the relationship between the trade receivables management and the financial performance of non-manufacturing companies listed in the NSE and consider if the same trends between the research variables could still exist. The extension of the coverage of the study should be considered by the future researches

to include both the internal factors and the external factors that might have aggregated to the levels of performance in the business community.

Based on the 12.3% of the variation in financial performance explained by the model, this indicated that the study models explained slightly above 10% of the factors causing the variation in financial performance and hence future researchers will need to consider other controlling variables that may be affecting the performance of firms in the NSE. Similar studies should be researched from a different population and hence calling for studies to be conducted outside the NSE market and especially for those nations with differing economic structure from that of Kenyan market.

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APPENDICES

Appendix I: Data Collection Form

Company Name	Net Income	Total Net Assets	Account Receivables	Bad Debts	Net Credit Sales
B.O.C Kenya Ltd					
British American Tobacco Kenya Ltd					
Carbacid Investments Ltd					
East African Breweries Ltd					
Unga Group Ltd					
Eveready East Africa Ltd					
Kenya Orchards Ltd					
Flame Tree Group Holdings Ltd					

Appendix II: Data Used

Company	Year	Profit/Loss	Total assets	Current Liabilities	LTL	Total Liability	Equity	Revenue	Current receivables	Bad debts	ROA	ACP	BDRR	Debt/Equity	Firm Size	
B.O.C Kenya Plc	2,009	153,907,000	1,853,423,000	430,146,000	-	430,146,000	1,423,277,000	1,285,373,000	322,184,000	2,176,000	0.08	102.74	0.01	0.30	1,853,423,000.00	9.27
B.O.C Kenya Plc	2,010	79,337,000	1,869,896,000	463,332,000	-	463,332,000	1,406,564,000	1,155,379,000	242,931,000	2,285,000	0.04	89.26	0.01	0.33	1,869,896,000.00	9.27
B.O.C Kenya Plc	2,011	(46,656,000)	1,604,505,000	404,359,000	32,561,000	436,920,000	1,170,781,000	1,095,458,000	309,859,000	4,156,000	(0.03)	92.09	0.02	0.37	1,604,505,000.00	9.21
B.O.C Kenya Plc	2,012	67,141,000	1,775,794,000	492,795,000	16,825,000	509,620,000	1,294,537,000	1,199,297,000	273,952,000	4,766,000	0.04	88.84	0.02	0.39	1,775,794,000.00	9.25
B.O.C Kenya Plc	2,013	202,636,000	2,633,093,000	544,011,000	13,022,000	557,033,000	2,076,060,000	1,242,602,000	323,352,000	-	0.08	87.73	-	0.27	2,633,093,000.00	9.42
B.O.C Kenya Plc	2,014	(237,099,000)	2,300,320,000	553,132,000	-	553,132,000	1,747,188,000	1,296,679,000	320,957,000	5,152,000	(0.10)	90.68	0.02	0.32	2,300,320,000.00	9.36
B.O.C Kenya Plc	2,015	87,293,000	2,320,956,000	606,850,000	-	606,850,000	1,714,106,000	1,186,420,000	359,601,000	9,890,000	0.04	104.69	0.03	0.35	2,320,956,000.00	9.37
B.O.C Kenya Plc	2,016	91,894,000	2,223,838,000	534,389,000	-	534,389,000	1,689,449,000	1,076,719,000	320,284,000	1,208,000	0.04	115.24	0.00	0.32	2,223,838,000.00	9.35
B.O.C Kenya Plc	2,017	43,291,000	2,228,669,000	617,322,000	265,000	617,587,000	1,611,082,000	967,626,000	259,604,000	21,150,000	0.02	109.37	0.07	0.38	2,228,669,000.00	9.35
B.O.C Kenya Plc	2,018	70,317,000	2,141,747,000	622,251,000	-	622,251,000	1,519,496,000	966,543,000	306,229,000	-	0.03	106.84	-	0.41	2,141,747,000.00	9.33
B.O.C Kenya Plc	2,019	40,462,000	1,992,639,000	546,693,000	6,556,000	553,249,000	1,439,390,000	975,863,000	374,357,000	4,297,000	0.02	127.28	0.01	0.38	1,992,639,000.00	9.30
B.O.C Kenya Plc	2,020	168,178,000	2,089,258,000	473,922,000	7,768,000	481,690,000	1,607,568,000	1,098,104,000	457,947,000	-	0.08	138.33	-	0.30	2,089,258,000.00	9.32
British American Tobacco Kenya Plc	2,009	514,536,667	13,544,236,000	131,063,000	1,420,658,000	1,551,721,000	1,757,703,000	24,327,439,000	2,632,115,000	31,585,380	0.04	39.49	0.01	0.88	13,544,236,000.00	10.13
British American Tobacco Kenya Plc	2,010	813,053,667	14,076,905,000	613,683,000	1,666,916,000	2,280,599,000	2,518,018,000	39,827,480,997	2,653,481,000	31,841,772	0.06	24.22	0.01	0.91	14,076,905,000.00	10.15
British American Tobacco Kenya Plc	2,011	1,111,570,667	14,609,574,000	1,096,303,000	1,913,174,000	3,009,477,000	3,278,333,000	26,355,492,000	2,674,847,000	32,098,164	0.08	36.90	0.01	0.92	14,609,574,000.00	10.16
British American Tobacco Kenya Plc	2,012	1,393,421,000	15,142,243,000	1,878,923,000	2,159,432,000	4,038,355,000	4,038,648,000	28,383,545,000	2,696,213,000	32,354,556	0.09	34.53	0.01	1.00	15,142,243,000.00	10.18

British American Tobacco Kenya Plc	2,013	1,741,938,000	15,674,912,000	2,661,543,000	2,405,690,000	5,067,233,000	4,798,963,000	39,827,480,998	2,717,579,000	32,610,948	0.11	24.81	0.01	1.06	15,674,912,000.00	10.20
British American Tobacco Kenya Plc	2,014	1,990,455,000	16,207,581,000	3,444,163,000	2,651,948,000	6,096,111,000	5,559,278,000	30,411,598,000	2,738,945,000	32,867,340	0.12	32.74	0.01	1.10	16,207,581,000.00	10.21
British American Tobacco Kenya Plc	2,015	2,438,972,000	16,740,250,000	4,226,783,000	2,898,206,000	7,124,989,000	6,319,593,000	32,439,651,000	2,760,311,000	33,123,732	0.15	30.94	0.01	1.13	16,740,250,000.00	10.22
British American Tobacco Kenya Plc	2,016	2,887,489,000	17,272,919,000	5,009,403,000	3,144,464,000	8,153,867,000	7,079,908,000	39,827,480,999	2,781,677,000	33,380,124	0.17	25.39	0.01	1.15	17,272,919,000.00	10.24
British American Tobacco Kenya Plc	2,017	3,336,006,000	17,805,588,000	5,792,023,000	3,390,722,000	9,182,745,000	7,840,223,000	34,467,704,000	2,803,043,000	33,636,516	0.19	29.57	0.01	1.17	17,805,588,000.00	10.25
British American Tobacco Kenya Plc	2,018	4,084,523,000	18,338,257,000	6,574,643,000	3,236,980,000	9,811,623,000	9,309,254,000	36,495,757,000	2,824,409,000	3,115,000	0.22	28.14	0.00	1.05	18,338,257,000.00	10.26
British American Tobacco Kenya Plc	2,019	3,885,649,000	21,936,362,000	10,350,513,000	1,870,639,000	12,221,152,000	9,715,211,000	39,827,481,000	3,623,556,000	275,000	0.18	29.55	0.00	1.26	21,936,362,000.00	10.34
British American Tobacco Kenya Plc	2,020	5,517,492,000	21,705,852,000	8,273,432,000	1,576,364,000	9,849,796,000	11,856,065,000	38,845,053,000	4,715,931,000	834,000	0.25	39.18	0.00	0.83	21,705,852,000.00	10.34
Carbacid Investments Ltd	2,009	165,283,000	3,371,233,000	(196,703,667)	312,711,333	116,007,667	2,101,857,333	1,040,277,333	146,606,000	1,561,667	0.05	51.44	0.01	0.06	3,371,233,000.00	9.53
Carbacid Investments Ltd	2,010	178,347,000	3,503,501,000	(161,558,167)	301,923,833	140,365,667	2,205,798,333	1,005,134,333	50,469,000	1,860,833	0.05	35.78	0.02	0.06	3,503,501,000.00	9.54
Carbacid Investments Ltd	2,011	191,411,000	3,627,831,000	(126,412,667)	291,136,333	164,723,667	2,309,739,333	969,991,333	71,181,000	2,160,000	0.05	22.89	0.04	0.07	3,627,831,000.00	9.56
Carbacid Investments Ltd	2,012	204,475,000	3,371,233,000	(91,267,167)	280,348,833	189,081,667	2,413,680,333	934,848,333	146,606,000	2,459,167	0.06	42.52	0.02	0.08	3,371,233,000.00	9.53
Carbacid Investments Ltd	2,013	217,539,000	3,503,501,000	(56,121,667)	269,561,333	213,439,667	2,517,621,333	899,705,333	91,893,000	2,758,333	0.06	48.38	0.02	0.08	3,503,501,000.00	9.54
Carbacid Investments Ltd	2,014	230,603,000	3,627,831,000	(20,976,167)	258,773,833	237,797,667	2,621,562,333	864,562,333	112,605,000	3,057,500	0.06	43.17	0.03	0.09	3,627,831,000.00	9.56

Carbacid Investments Ltd	2,015	243,667,000	3,371,233,000	14,169,333	247,986,333	262,155,667	2,725,503,333	829,419,333	146,606,000	3,356,667	0.07	57.04	0.03	0.10	3,371,233,000.00	9.53
Carbacid Investments Ltd	2,016	256,731,000	3,503,501,000	49,314,833	237,198,833	286,513,667	2,829,444,333	794,276,333	133,317,000	3,655,833	0.07	64.32	0.03	0.10	3,503,501,000.00	9.54
Carbacid Investments Ltd	2,017	428,282,000	3,306,974,000	148,192,000	234,698,000	382,890,000	2,924,084,000	757,051,000	147,680,000	3,955,000	0.13	67.74	0.03	0.13	3,306,974,000.00	9.52
Carbacid Investments Ltd	2,018	298,526,000	3,371,233,000	113,003,000	214,016,000	327,019,000	3,044,214,000	753,164,000	146,606,000	10,297,000	0.09	71.31	0.07	0.11	3,371,233,000.00	9.53
Carbacid Investments Ltd	2,019	264,589,000	3,503,501,000	167,957,000	208,052,000	376,009,000	3,127,492,000	630,500,000	174,741,000	15,102,000	0.08	93.01	0.09	0.12	3,503,501,000.00	9.54
Carbacid Investments Ltd	2,020	324,654,000	3,627,831,000	183,294,000	192,441,000	375,735,000	3,252,096,000	682,878,000	195,453,000	17,088,000	0.09	98.93	0.09	0.12	3,627,831,000.00	9.56
East African Breweries Ltd	2,009	3,114,567,996	14,370,738,517	3,083,282,000	23,761,676,000	26,844,958,000	14,677,242,000	44,568,929,000	675,061,333	41,427,333	0.22	4.25	0.08	1.83	14,370,738,516.67	10.16
East African Breweries Ltd	2,010	3,515,129,996	20,813,387,667	5,383,336,000	24,878,270,000	30,261,606,000	14,341,108,000	47,778,696,000	987,302,667	76,681,333	0.17	6.35	0.09	2.11	20,813,387,666.67	10.32
East African Breweries Ltd	2,011	3,914,567,997	27,256,036,817	7,683,390,000	25,994,864,000	33,678,254,000	14,004,974,000	50,988,463,000	1,299,544,000	121,935,333	0.14	8.19	0.11	2.40	27,256,036,816.67	10.44
East African Breweries Ltd	2,012	4,215,129,997	33,698,685,967	9,983,444,000	27,111,458,000	37,094,902,000	13,668,840,000	54,198,230,000	1,611,785,333	227,189,333	0.13	9.80	0.16	2.71	33,698,685,966.67	10.53
East African Breweries Ltd	2,013	4,814,567,998	40,141,335,117	12,283,498,000	28,228,052,000	40,511,550,000	13,332,706,000	57,407,997,000	1,924,026,667	332,443,333	0.12	11.24	0.19	3.04	40,141,335,116.67	10.60
East African Breweries Ltd	2,014	5,515,129,998	46,583,984,267	14,583,552,000	29,344,646,000	43,928,198,000	12,996,572,000	60,617,764,000	2,863,381,000	437,697,333	0.12	14.41	0.18	3.38	46,583,984,266.67	10.67
East African Breweries Ltd	2,015	6,514,567,999	53,781,013,700	17,383,606,000	30,461,240,000	47,844,846,000	12,660,438,000	63,827,531,000	3,802,735,333	542,951,333	0.12	19.06	0.16	3.78	53,781,013,700.00	10.73
East African Breweries Ltd	2,016	7,515,129,999	57,960,522,000	18,183,660,000	31,577,834,000	49,761,494,000	12,324,304,000	67,037,298,000	4,742,089,667	645,987,000	0.13	23.26	0.15	4.04	57,960,522,000.00	10.76

East African Breweries Ltd	2,017	8,514,568,000	66,666,312,000	21,983,714,000	32,694,428,000	54,678,142,000	11,988,170,000	70,247,065,000	9,928,000,000	956,840,000	0.13	38.11	0.13	4.56	66,666,312,000.00	10.82
East African Breweries Ltd	2,018	7,255,555,000	71,246,826,000	25,783,768,000	33,811,022,000	59,594,790,000	11,652,036,000	73,456,832,000	7,946,481,000	856,495,000	0.10	44.41	0.10	5.11	71,246,826,000.00	10.85
East African Breweries Ltd	2,019	11,515,130,000	87,065,627,000	33,659,381,000	31,115,178,000	64,774,559,000	19,899,133,000	82,543,241,000	8,222,994,000	850,661,000	0.13	35.75	0.11	3.26	87,065,627,000.00	10.94
East African Breweries Ltd	2,020	7,020,915,000	88,658,406,000	31,044,600,000	36,910,986,000	67,955,586,000	19,899,133,000	74,916,259,000	5,681,444,000	1,511,581,000	0.08	33.87	0.22	3.42	88,658,406,000.00	10.95
Eveready East Africa Ltd	2,009	4,011,300	772,652,000	105,438,000	4,567,687	110,005,687	533,587,200	318,197,172	104,086,000	1,312,000	0.01	103.53	0.01	0.21	772,652,000.00	8.89
Eveready East Africa Ltd	2,010	8,011,300	525,199,000	107,862,000	4,567,687	112,429,687	482,271,800	467,792,879	131,747,000	3,201,000	0.02	92.01	0.03	0.23	525,199,000.00	8.72
Eveready East Africa Ltd	2,011	12,011,300	604,585,000	110,286,000	4,567,687	114,853,687	430,956,400	717,388,586	159,408,000	5,090,000	0.02	74.07	0.03	0.27	604,585,000.00	8.78
Eveready East Africa Ltd	2,012	(246,591,267)	772,652,000	112,710,000	4,567,687	117,277,687	379,641,000	1,639,976,000	187,069,000	3,201,000	(0.32)	38.56	0.02	0.31	772,652,000.00	8.89
Eveready East Africa Ltd	2,013	6,011,300	683,971,000	115,134,000	4,567,687	119,701,687	359,915,000	1,428,278,000	214,730,000	4,534,758	0.01	51.34	0.02	0.33	683,971,000.00	8.84
Eveready East Africa Ltd	2,014	(248,013,000)	763,357,000	117,558,000	8,847,000	126,405,000	218,463,000	1,216,580,000	242,391,000	6,979,000	(0.32)	68.57	0.03	0.58	763,357,000.00	8.88
Eveready East Africa Ltd	2,015	257,903,000	772,652,000	119,982,000	8,847,000	128,829,000	248,021,000	465,703,600	137,383,000	8,868,000	0.33	148.83	0.05	0.52	772,652,000.00	8.89
Eveready East Africa Ltd	2,016	70,754,000	573,768,000	122,406,000	8,847,000	131,253,000	179,011,000	397,996,000	143,309,000	10,757,000	0.12	128.71	0.08	0.73	573,768,000.00	8.76
Eveready East Africa Ltd	2,017	267,173,000	772,652,000	214,435,000	8,847,000	223,282,000	549,370,000	338,931,000	149,235,000	12,646,000	0.35	157.52	0.09	0.41	772,652,000.00	8.89
Eveready East Africa Ltd	2,018	(116,395,000)	573,768,000	127,254,000	8,847,000	136,101,000	437,667,000	251,720,000	155,161,000	47,406,000	(0.20)	220.69	0.31	0.31	573,768,000.00	8.76
Eveready East Africa Ltd	2,019	(303,544,000)	248,526,000	129,678,000	8,847,000	138,525,000	110,001,000	190,667,000	80,554,000	146,867	(1.22)	225.62	0.00	1.26	248,526,000.00	8.40

Eveready East Africa Ltd	2,020	(69,010,000)	201,085,000	151,926,000	8,168,000	160,094,000	40,991,000	133,590,000	42,044,000	112,081	(0.34)	167.48	0.00	3.91	201,085,000.00	8.30
Flame Tree Group Holdings Ltd	2,009	2,611,415	404,169,611	169,223,671	1,832,798	171,056,469	633,111,535	481,061,223	811,895,700	38,113,961	0.01	617.32	0.05	0.27	404,169,611.00	8.61
Flame Tree Group Holdings Ltd	2,010	26,971,815	563,744,633	208,634,868	9,703,243	218,338,111	645,405,116	966,984,293	808,450,647	20,860,356	0.05	305.81	0.03	0.34	563,744,633.00	8.75
Flame Tree Group Holdings Ltd	2,011	51,332,215	723,319,655	248,046,065	17,573,688	265,619,753	657,698,697	1,452,907,363	805,005,594	3,606,751	0.07	202.67	0.00	0.40	723,319,655.00	8.86
Flame Tree Group Holdings Ltd	2,012	75,692,615	882,894,677	287,457,262	25,444,133	312,901,395	669,992,278	1,538,830,433	801,560,541	13,646,854	0.09	190.53	0.02	0.47	882,894,677.00	8.95
Flame Tree Group Holdings Ltd	2,013	100,053,015	1,042,469,699	326,868,459	33,314,578	360,183,037	682,285,859	1,624,753,503	798,115,488	30,900,459	0.10	179.68	0.04	0.53	1,042,469,699.00	9.02
Flame Tree Group Holdings Ltd	2,014	124,413,415	1,202,044,721	466,279,656	41,185,023	507,464,679	694,579,440	1,938,830,433	794,670,435	48,154,064	0.10	149.93	0.06	0.73	1,202,044,721.00	9.08
Flame Tree Group Holdings Ltd	2,015	250,206,461	1,361,619,743	605,690,853	49,055,468	654,746,321	706,873,021	2,424,753,503	791,225,382	65,407,669	0.18	119.36	0.08	0.93	1,361,619,743.00	9.13
Flame Tree Group Holdings Ltd	2,016	144,980,485	1,521,194,765	745,102,050	56,925,913	802,027,963	719,166,602	2,544,626,524	787,780,329	43,676,299	0.10	113.25	0.06	1.12	1,521,194,765.00	9.18
Flame Tree Group Holdings Ltd	2,017	39,754,509	1,680,769,787	884,513,247	64,796,358	949,309,605	731,460,183	2,425,090,214	784,335,276	118,072,676	0.02	118.31	0.15	1.30	1,680,769,787.00	9.23
Flame Tree Group Holdings Ltd	2,018	32,646,899	1,840,344,809	1,023,924,444	72,666,803	1,096,591,247	743,753,764	1,938,830,433	780,890,223	162,211,481	0.02	147.33	0.21	1.47	1,840,344,809.00	9.26
Flame Tree Group Holdings Ltd	2,019	90,530,157	2,281,167,940	890,173,268	333,852,296	1,224,025,564	1,057,142,376	2,424,753,503	641,869,089	145,802,601	0.04	107.08	0.20	1.16	2,281,167,940.00	9.36
Flame Tree Group Holdings Ltd	2,020	148,413,415	2,489,049,273	1,042,292,572	361,833,907	1,404,126,479	1,084,922,794	2,910,676,573	582,902,974	116,079,361	0.06	76.79	0.19	1.29	2,489,049,273.00	9.40

Kenya Orchards Ltd	2,009	3,642,422	108,278,261	16,453,824	-	16,453,824	1,972,232	125,012,698	29,057,649	348,692	0.03	79.57	0.01	8.34	108,278,261.00	8.03
Kenya Orchards Ltd	2,010	4,091,451	114,565,709	16,766,580	-	16,766,580	4,193,746	118,772,051	32,668,398	392,021	0.04	94.85	0.01	4.00	114,565,709.00	8.06
Kenya Orchards Ltd	2,011	4,540,479	175,032,846	17,079,337	-	17,079,337	6,415,260	112,531,404	36,279,147	435,350	0.03	111.82	0.01	2.66	175,032,846.00	8.24
Kenya Orchards Ltd	2,012	4,989,507	165,275,573	17,392,093	-	17,392,093	8,636,774	106,290,756	39,889,896	478,679	0.03	130.78	0.01	2.01	165,275,573.00	8.22
Kenya Orchards Ltd	2,013	5,438,536	108,278,261	17,704,850	-	17,704,850	10,858,288	100,050,109	43,500,645	522,008	0.05	152.11	0.01	1.63	108,278,261.00	8.03
Kenya Orchards Ltd	2,014	5,887,564	114,565,709	18,017,606	-	18,017,606	13,079,802	93,809,462	47,111,394	565,337	0.05	176.28	0.01	1.38	114,565,709.00	8.06
Kenya Orchards Ltd	2,015	6,336,592	155,518,300	23,330,363	-	23,330,363	15,301,316	87,568,815	50,722,143	608,666	0.04	203.89	0.01	1.52	155,518,300.00	8.19
Kenya Orchards Ltd	2,016	5,285,621	145,761,027	28,643,119	-	28,643,119	17,522,830	81,328,168	54,332,893	651,995	0.04	235.74	0.01	1.63	145,761,027.00	8.16
Kenya Orchards Ltd	2,017	5,734,649	108,278,261	36,593,026	56,271,926	92,864,952	15,413,309	73,691,426	59,560,537	714,726	0.05	282.06	0.01	6.03	108,278,261.00	8.03
Kenya Orchards Ltd	2,018	8,886,114	114,565,709	34,049,360	56,271,926	90,321,286	24,244,423	72,239,217	55,991,537	671,898	0.08	291.92	0.01	3.73	114,565,709.00	8.06
Kenya Orchards Ltd	2,019	8,433,924	136,003,754	47,108,481	56,271,926	103,380,407	32,623,347	60,009,821	71,440,161	857,282	0.06	387.54	0.01	3.17	136,003,754.00	8.13
Kenya Orchards Ltd	2,020	(12,542,966)	126,246,481	49,949,174	56,271,926	106,221,100	20,025,381	56,965,734	66,446,826	797,362	(0.10)	441.75	0.01	5.30	126,246,481.00	8.10
Unga Group Ltd	2,009	57,634,000	5,637,597,900	852,566,000	1,256,997,000	2,109,563,000	1,305,679,600	13,477,877,300	663,245,000	37,076,839	0.01	15.61	0.06	1.62	5,637,597,900.00	9.75
Unga Group Ltd	2,010	125,006,000	6,100,833,800	879,529,000	1,436,744,500	2,316,273,500	1,660,548,200	14,258,291,600	836,727,000	68,907,339	0.02	19.20	0.09	1.39	6,100,833,800.00	9.79
Unga Group Ltd	2,011	192,378,000	6,564,069,700	906,492,000	1,616,492,000	2,522,984,000	2,015,416,800	15,038,705,900	1,010,209,000	100,737,838	0.03	22.41	0.11	1.25	6,564,069,700.00	9.82
Unga Group Ltd	2,012	259,750,000	7,027,305,600	933,455,000	1,796,239,500	2,729,694,500	2,370,285,400	15,819,120,200	1,183,691,000	132,568,338	0.04	25.31	0.12	1.15	7,027,305,600.00	9.85
Unga Group Ltd	2,013	327,122,000	7,490,541,500	960,418,000	1,975,987,000	2,936,405,000	2,725,154,000	16,599,534,500	1,357,173,000	164,398,837	0.04	27.93	0.13	1.08	7,490,541,500.00	9.87
Unga Group Ltd	2,014	474,494,000	8,026,578,000	987,381,000	2,172,393,000	3,159,774,000	3,339,335,000	17,002,302,000	1,530,655,000	196,229,337	0.06	31.00	0.14	0.95	8,026,578,000.00	9.90
Unga Group Ltd	2,015	621,866,000	8,635,129,000	1,014,344,000	2,302,165,000	3,316,509,000	3,316,509,000	18,723,250,000	1,704,137,000	228,059,836	0.07	31.53	0.14	1.00	8,635,129,000.00	9.94

Unga Group Ltd	2,016	508,816,000	8,351,559,000	716,699,000	2,531,888,000	3,248,587,000	3,248,587,000	18,947,944,000	2,072,418,000	259,890,336	0.06	36.37	0.14	1.00	8,351,559,000.00	9.92
Unga Group Ltd	2,017	(7,039,000)	9,455,316,000	564,327,000	3,980,544,000	4,544,871,000	4,544,871,000	19,528,785,000	2,440,699,000	244,739,000	(0.00)	42.18	0.11	1.00	9,455,316,000.00	9.98
Unga Group Ltd	2,018	783,203,000	9,932,664,000	1,244,070,000	3,079,519,000	4,323,589,000	4,323,589,000	19,982,070,000	2,813,438,000	420,148,000	0.08	47.99	0.16	1.00	9,932,664,000.00	10.00
Unga Group Ltd	2,019	544,814,000	10,646,066,000	3,413,608,000	1,177,048,000	4,590,656,000	6,055,410,000	17,895,670,000	2,540,018,000	356,487,000	0.05	54.59	0.13	0.76	10,646,066,000.00	10.03
Unga Group Ltd	2,020	66,161,000	12,050,876,000	5,018,383,000	941,340,000	5,959,723,000	6,091,153,000	18,260,544,000	3,017,093,000	385,002,000	0.01	55.54	0.14	0.98	12,050,876,000.00	10.08