EFFECT OF TRADE RECEIVABLES MANAGEMENT ON THE PROFITABILITY OF MANUFACTURING FIRMS LISTED IN THE NAIROBI SECURITIES EXCHANGE.

BY

MATHENGE KEVIN MUGO

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DECLARATION

The research project is my original work and has never been submitted in any other university or college for the award of degree, diploma or certificate.

Signed……Date…….

MATHENGE KEVIN MUGO

D61/74543/2014

The research project has been submitted for the examination with my approval as the university supervisor.

Signed…… Date…….

MR. DAN CHIRCHIR

Lecturer

Department of Finance and Accounting University of Nairobi

The research project has been submitted for the examination with my approval as the university supervisor.

Signed…… Date…….

MR. JAMES KARANJA

Lecturer

Department of Finance and Accounting

University of Nairobi

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DEDICATION

I dedicate this project to my parents Ephantus Mathenge and Cecilia Mathenge and my brother Eric Mathenge for their continued support morally, spiritually and financially during this period of study.

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LIST OF ABREVATIONS

ACP-Accounts Collection Period

ART- Accounts Receivables Turnover

BDRR-Bad Debt to Receivables ratio

CCC- Cash Conversion Cycle

CMA-Capital Markets Authority

NSE- Nairobi Securities Exchange

RBV- Resource Based View

SSE- Small scale enterprises

SPSS: Statistical Package for Social Science

TRM- Trade receivables Management

WCM- Working capital management

ROA-Return On Assets

ABSTRACT

Trade receivables arise in the day to day running of any firms. This is where firms sell goods to customers on credit with the premise that the customers will pay within an agreed period. This can lead to an increase in sales and also profits. However if the trade receivable is not collected within the agreed period it will lead to bad and overdue debt which will eventually result to reduction in profit.

This project investigated the relationship between trade receivables management and the profitability of the nine firms listed under the manufacturing and allied sector in the Nairobi Securities Exchange for the period 2011-2015. Profitability was measured using the Return on Assets. On the other hand accounts collection period, bad debt to receivables ratio and accounts receivables turnover were used to quantify the trade receivables management measures of the firms.

A descriptive research design was used in this study. The findings of the study were arrived at using the quantitative research method. The extent and nature of relationship between the various variables under study was identified using correlation and regression. Relationships among the dependent and independent variables and instances of multi-colinearity were evaluated using the Pearson correlation analysis. The study concluded that Accounts Collection period, bad debt to receivables ratio and accounts receivables turnover contribute to 24.7% of the overall profitability. The study concluded that the accounts collection period has a significant and negative effect on profitability while bad debt to receivables ratio had also a negative and but insignificant effect on profitability. However accounts receivables turnover had a positive but insignificant effect on profitability of manufacturing and allied firms listed in the NSE. The study recommended that a firm should structure its credit policy in such a way that it results to a reduction of its accounts collection period which has a significant effect on its overall profitability

CHAPTER ONE: INTRODCTION

1.1 Background of the Study

The term trade receivables refers to an amount owed to a business by its client arising from the sale of goods or provision of a service on credit terms. The goods or services are loaned to a customer and he or she is expected to pay within a specified period of time, it can be 14 days, 30 days 60 days or even more contingent to the relations between a supplier and a customer.

Trade receivables thus originate from selling goods on credit which can be defined as "a loan that is tied in both timing and value to the exchange of goods" Ferris(1981). Customers are allowed to defer their payments by suppliers for a certain agreed period. Trade credit is at the very core of business development. Tirole(2006) alludes us to the fact that empirical data shows us that credit transactions account for more than 80% of business dealings in the United Kingdom .This trend is replicated all over the world and also in Kenya. Thus for any business whether a startup or a multinational company it must consider the effect of trade credit and specifically trade receivables on its profitability. Credit sales usually result in an increase in sales volumes, a reduction of transaction costs between customers and the business but also on the other hand result to increased bad debt risk and also higher financing cost incase the trade receivables are not paid on time. This study aims to examine the effect of trade receivables on Profitability of manufacturing and allied firms listed in the Nairobi Securities Exchange.

1.1.1 Trade Receivables Management

Credit facilities are one of the most significant drivers of business growth in terms of sales volumes. Trade receivables are a direct product of Credit sales. This are current assets arising from sale of merchandise or provision of services on credit to customers Accounting Coach(2009).

They are the amounts we expect our customers to pay in the near future. Trade receivables are receivables that arise in the normal selling of goods to customers, while non-trade receivables includes items such as interest receivables, insurance claims

receivables or receivables from employees. In this study I will only concentrate on Trade receivables. Businesses must ensure proper management of trade receivables to avoid finding their liquidity under considerable strain and to remain profitable Lynch(2005). Effective accounts receivable management is important and strategic; it affects the financial performance of a firm and a firm's value. A firm's competency to synchronize cash inflows with cash outflows in formulating a cash flow management strategy is important to a firm's financial performance. The core mandate of trade receivables management lies in shareholder wealth maximization. Receivables constitute a big investment in the firm current assets. They should therefore be evaluated just like capital expenditures for their net present values. Emery et al.(2004).

Sales are stimulated by offering trade receivables since customers can assess the quality of products and services before paying for them. However we should also put into consideration the fact that trade receivables involve funds and should also be seen as an opportunity cost. These characteristics of accounts receivables such as the element of risk, futurity and economic value necessitate the need for an efficient management of trade receivables.

According to Berry and Jarvis (2006) before a firm comes up with a credit policy that will optimize the trade receivables level it has to weigh the options between the increased sales revenue and the additional administrative costs associated with the increased trade receivables. It should also consider the level of risk its ready to face while extending credit to its customers since some may be unable to pay when their debt falls due. They should also not ignore the extra investment in debt management such as extra staff.

Gill(2010) Asserts that the main task of accounts receivables management is to optimize the balance between management of cashflow components. Cashflow management is basically involved with planning and control of cash inflows and outflows in any firm. It also involves the holding of the optimal level of cash by a firm at any point in time. in time.

According to Samilogu (2008) any firm with a proper trade receivables management system is able to increase profitability due to a reduction in transactions costs involved in raising extra funds due to liquidity issues.

Ahmet (2012). Accounts receivable as a component of cash flow directly effects profitability of any firm. Cashflow management can be described as the management of cash inflows and cash outflows in and out of the firm. The main component of management of cash flow includes inventory, trade receivables, planning of cashflow and trade payables.

1.1.2 Profitability Of Firms

A firm can be described as profitable if it is able to make a profit from its activities. In other words its revenues exceed its expenses. Profitability shows to what extent the management is able to make efficient use of resources availed to it. According to Srivastava (2005) an investments ability to provide a return from its usage is known as profitability. Profit maximization is said to be the main objective of all firms. To increase its profitability a firm must determine which part of its financial strategy works and also determining the parts of its strategy that need to be improved. The firm's management is charged with a responsibility of making the right decisions that would maximize the returns of an organization.

In practice firms set profits goals and in most instances managers are paid for achieving them, however profit is only a part of a firm's overall strategy Chandra, (2002). A firm's return to its investors or financial performance is mainly measured through financial ratio analysis specifically through profitability ratios. The measures of profitability are very vital to the management and shareholders of the company. This is due to the fact that they indicate the financial performance and overall efficacy of the company. According to Petersen and Kumar (2010) there are two types of ratios this include margin ratios and return ratios. Margin ratios indicate a firm's ability to convert turnover into profits. Essentially the overall efficiency of a firm in generating returns to its owners is measured through profitability ratios Khan & Jain, (2003). The profitability of a firm is measured through margin ratios. For example the overall sales less cost of goods sold as a percentage of overall sales is referred to as the gross profit margin. The operating profit

also known as the EBIT (earnings before interest and tax) as a percentage of overall sales is referred to as the operating profit margin and indicates the manufacturing firms overall efficiency.

The other type of ratios is return ratios. Profitability of a manufacturing firm can be measured through the return on assets ratio. The ROA measures how well a company utilizes its assets to make profit. It's calculated by comparing its operating profit against its total assets. Return can also be measured by return on equity ratio. The return on equity ratio compares the total profit generated by a firm against the funds provided by shareholders or owners of the manufacturing firm. James et al, (2005).

1.1.3 Trade receivables management and profitability

Trade receivables are one of the major constituent of the working capital of a firm and are basically represented in the financial statements as a current asset. It is thus a firm's investment. The main aim of TRM is to maximize shareholders value by striking a balance between liquidity, risk and profitability Hrishikes(2002). The primary aim of TRM should not only concentrate on sales growth but should also concentrate maximization of returns Wood(1953).

Due to a change in dynamics in the market environment most firms employ new tactics and strategies to attract new customers. With the main strategy including selling products and services on credit. Their main aim being to offload Securities in the market with hope that this will translate into a successful sale transaction. In doing so retain loyal customers and thus increase their market share. The purpose of offering credit by a firm is to maximize profit Damilola(2005).

However this is not always the case such goods may not be paid in good time or they may not be paid at all. TRM is not as straightforward to manage as in inventories since it's an intangible asset and cannot be easily analyzed Brockington(1987).

Relaxing trade credit terms will result to an increase in credit sales but may also result in existing debtors not paying on time due to relaxed credit terms. Whereas the new sales attracted may not be willing to pay on time also. This can result to reduced cash flow due

to delayed payments forcing the firm to seek external financing. The firm thus will incur finance costs in form of interest. There will also be an increase in debt collection costs in terms of extra resources employed to follow up the unpaid debt. These extra costs will negatively affect the profitability of the firm. On the other hand if a firm increases its credit sales reasonably it will directly result to decreased operational costs since customers will make bulk payments for their purchases. The sales increase will result to increased profitability. Increase of sales will result to minimal inventories and thus saving on storage costs. This will also result to a favorable relationship with customers which will result to increased sales and sustained market share. From the arguments above its clear that Trade receivables directly relates with profitability.

1.1.4 Nairobi Securities Exchange

The Nairobi Securities Exchange (NSE), which was previously known as the Nairobi Stock Exchange is Kenya's principal securities exchange. It was founded in 1954 under the permission of the London Stock Exchange, Kenya still being a British colony.

NSE is the fourth largest stock exchange in Africa in relation to trading volume and fifth in relation to market capitalization taken as a GDP percentage (Iraya & Musyoki, 2013). It also has membership in the African Securities Exchanges Association.

The secretariat and trading floor of the NSE was set up In 1990 at the IPS building before being was relocated to the Nation Centre Nairobi later in 1994. Since then the NSE has witnessed numerous changes such as trade automation in September 2006. Later in 2007 it allowed remote trading negating their need to be physically present at the NSE to trade securities its trading hours were also increased from two hours to six hours.

Nairobi Securities Exchange supports trading and clearing settlement of derivatives, debts, equities and five other related securities instruments. It is tasked with the mandate to list firms on the securities exchange and therefore facilitates the trading of securities by various investors. It thus maintains the health of exchange of securities. The Capital Markets Authority regulates the NSE (Musiega et al, 2013). The structure of the Security exchange market is organized in such a way that allows buying and selling of various available securities. There are well defined regulations and rules that govern the sale and buying of securities. It is also tasked with protecting investors from unscrupulous brokers or firms so as to maintain a high investor confidence in the securities market.

Investors are availed with a platform to liquidate their investments in various securities in the market efficiently by the stock exchange. This ability to liquidate their investment efficiently and at minimal cost acts as a big incentive for investments in the NSE. (www.nse.co.ke,2014).

There are twelve classifications of sectors in the Nairobi Securities Exchange which include ;Telecommunication and technology, Manufacturing and allied, Investment services, Investment, Insurance, energy and petroleum, construction and allied , commercial services, banking, automobile and accessories, agricultural and real estate www.nse.co.ke,(2016).

1.2 Research Problem

Trade Credit is one of the main factors affecting the profitability of manufacturing firms. This is due to the fact that for any company to increase sales they have to sell it on credit. However trade credit only benefit the company only if it's collected when its due. Tang (2009) considered the association between trade receivables and profitability in the Netherlands and found that there was no direct relationship between profitability and trade receivables. Nimalthasana (2010) studied manufacturing companies in Sri Lanka to identify the effect of WCM on profitability. He concluded that their was a negative association between profitability, current ratio and cash gap; the relationship between inventory conversion and profitability was also positive. (Niresh (2012) studied 30 listed manufacturing firms in Sri Lanka between the years 2008-2011. His conclusion was that there existed no significant association between the CCC which includes TRM and financial performance measure which included ROA and return on equity.

Previous studies regarding the WCM have found different relationships among the components of WCM and profitability. Akoto et al (2013) studied thirteen listed manufacturing firms in Ghana for the five years 2005-2009. He investigated for any association between profitability and Working Capital Management practices. After correlation and regression analysis of the collected data he concluded that there exited a significant and negative association between profitability and ACP. However he found a positive and significant relationship between profitability and CCC, current asset turnover, firm size and current asset ratio. His study suggested that shareholders wealth can be optimized if accounts collection period was reduced to at least 30 days or less.

Nyabwanga et al (2012) studied 113 small scale enterprises in Kisii South District for the effect of Working Capital management practices on their finanacial performance. This 113 SSEs included 41 in the manufacturing sector and 72 in the trading sector. Using multiple regression analysis and the Pearson correlation analysis he concluded that working capital management practices were very low and minimally used among the 113 SSE's this resulted to a low average financial performance.

Gakure et al (2012) studied the association between working capital management and financial performance. His study sample included a sample of 15 companies listed in the NSE . He studied them for the five year period 2006 to 2010. He used multiple regression analysis and the Pearson correlation analysis between the independent and dependent variables. He concluded that there was a strong negative correlation between ACP and inventory holding period and profitability. On the other hand there was a positive association between CCC and profitability. In this study only the ACP was found to be of statistically significant influence while CCC and inventory conversion period were not statistically significant.. The overall WCM model was however statistically significant.. From the above studies most of the studies have focused on WCM and its effect on profitability where most of the findings are contradictory. I aim to study accounts receivables and their specific effects on trade receivables.

1.3. Research objective

The research objective of this study was to establish the effect of trade receivables management on financial performance of Manufacturing Firms Listed in the NSE.

1.4. Value of the study

This study will assist finance managers in making decisions that will assist in the overall working capital management. Credit control managers will benefit in formulating their policies and when negotiating with customers. It will also the Sales Managers in understanding the dynamics behind credit sales and its implications and finally it will assist researchers in that it will build into the existing body of knowledge to assist in additional research.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This chapter will bring forward literature available on accounts receivables management. It will highlight on the theoretical framework where theories relating to the study will be discussed. This chapter also reviews Empirical Literature where past studies by various scholars locally and globally on trade receivables will be discussed. The conceptual framework and the research gap which the study seeks to bridge.

2.2 Theoretical Framework `

A theory is a coherent group of tested general propositions of so events that including clarifications of how things associate with each other. It can thus be used to predict a certain class of phenomena. A theory is formed by reviewing findings of like studies, deduction through simple logic and /or application of knowledge from hypothetical areas at hand. Zikmund(2011).This is an orderly grouping of interrelated principles and concepts that bring forward a framework to or syndicate together an important part of knowledge in order to explain relationships. Trade receivables are a component of Working capital and thus we shall mainly discuss Working capital theories relating with Trade payables and other theories on trade receivables.

2.2.1 Agency Theory

The definition of an agency relationship is a relationship in which one (or more) person hereby known as a principal(s) contracts another person known as an agent to render a service on their behalf in this case a some level of the authority to make a decision of the principal is delegated to the agent Meckling & Jensen (1976). The agency relationship comes about when two or more parties where one who is referred to as an agent, acts on behalf of, acts for, or as a representative for another hereby known as the principal which involves decision making. Ross(1973).Agency theory especially applies in the finance field as it considers issues such as conflict of interest, incentive problems and how to solve such problems. It suggests how to establish a normative relationship between the principal and agent. The establishment of a contractual relationship involving the agent

and the principal acts as an incentive for the agent to make decisions in which the principal's welfare is maximized. Meckling & Jensen(1976)

This theory relates to trade receivables management from the perspective of trade receivables managers or otherwise referred to as the Credit Control Manager. The credit control manager is the firm's shareholders agent and makes all paramount decisions that concern the receivables of the business. His decisions have a very big impact on the shareholders wealth this is due to the fact that if he might fail to sell to creditworthy customers resulting in reduced revenues due to low sales. This will in fact be favorable to the credit control manager since he will not have to follow up on debt collection whereas the sales department will be disadvantaged.

On the other hand He might decide to sell unknowingly to un-creditworthy customers, which will result in an increase in bad debt expenses and thus reducing the shareholders wealth. The agency theory seeks to find a balance between the agent (Credit Control Manager) and the Principal (Shareholders) such that the Credit Control Manager's decisions always have the top interests of the shareholders at heart.

2.2.2 Risk And Return Theory

Risk handling is the main component considered in making financial decision this includes how risks can be measured and how the required return associated with a given risk level is determined Modigliani & Pogue1(1974). For any investment in finance to be considered an analysis of both risk associated and Returns expected must be determined. There are normally two types of risk behaviors associated with trade receivables management. , that is, conservative (risk averse) trade Receivables management policy and aggressive (risk seekers) trade receivables management policy. While more aggressive trade receivables policies are associated with higher returns and risk. Where risk is underestimated while gains are overestimated. On the other hand conservative trade receivables behavior offer both lower risk and returns where risks are overestimated while gains are underestimated Gardner et al., (1986)

The risk and return theory relates to TRM in terms of decisions requiring the trade-off between profitability and liquidity. If a firm decides to go for liquidity it will have to forgo its profitability. This will result to low sales since it will prefer to sell its goods on

cash basis and avoid selling on trade credit. Improving its liquidity position but lowering its profitability.

On the other hand if a firm chooses to go for profitability it will have to forgo its liquidity resulting in increased sales and reduced liquidity. Since sales on credit will directly increase profit but will reduce cash flow associated with cash sales. A proper trade off should be maintained between the profitability and liquidity of the firm through proper management of trade receivables. Since an excess of Trade receivables will result to increased cost of collection which is associated with bad debts, high financing costs, low liquidity and ultimately low profits. A shortage of trade receivables will result to low turnover and thus low profitability which will in turn result to reduced liquidity in the long run. The credit control Manager will make decisions using this theory to enhance the firm's profitability.

2.2.3 The Resource Based View Of The Firm

The RBV of the firm puts forward the theory that resources are the main drivers of a firm's superior performance. It argues that any firm should take a look inside its processes to find the competitive advantage sources rather than observing its competitive environment which is has no control of Barney (1995). Resources in this perspective can be classified broadly into intangible and tangible resources. They consist of assets, capabilities, organizational processes and information which the firm utilizes in order to achieve profitability. The RBV of the firm emphasizes those valuable, rare imperfectly non-imitate able and non-substitutable firms' resources result in competitive advantage. It states that resources that are entirely controlled or owned by a firm should be cultivated so as to enhance their contribution to the organizations competitive advantage in its industrial context. The firm has few productive resources. Productivity requires coordination and cooperation of a number of resources so as to achieve a certain activity or task. Thus resources greatly determine a firm's capability. In context of TRM, the credit control manager has specific resources that facilitate and ensure the identification of new chance or opportunity (customer sales), effective bringing together of resources and recovery of receivables as and when they become due to ensure proper management of trade receivable and eventually the firms profitability .

2.3 Determinants Of Profitability In Manufacturing Firms

The factors that determine profitability of manufacturing firms other than TRM

2.3.1 Size Of The Firm

Various researchers have studied the association between a firm's size and its profitability their main conclusion has been that their exists a positive association between the firm's size and the firm's profitability of a firm. Serrasqueiro & Nures (2008) studied several firms of various sizes in Portugal between the years 1999-2003. They concluded that there was a positive significant association between profitability and the size of a firm. Velnampy & Nimalathasan (2010) investigated the relationship between the size of a firm and its profitability between Commercial Bank of Ceylon and banks of Ceylon in Sri Lanka between the years 1997-2006. He concluded that there was a positive relationship between size and profitability in Commercial Bank Of Ceylon Ltd.

2.3.2 The Industry

According to Brush, Brimley& Hendricks (1999) the industry in which the firm operates determines its level of profitability. Some industries operate at low costs and thus high profit margins while others operate at high costs and low profit margins. This variation affects the manufacturing firms listed in the NSE.

2.3.3 Market Share

Studies carried out on market share and profitability have generally come to the conclusion that there is a significant and positive association among the two variables. Fenny and Rodgers (1989) reviewed empirical evidence and concluded that market share has a significant effect on profitability. Schmalensee (1989) studied a sample of firms in the USA across a cross section of industries. He concluded that market share is strongly correlated with profitability of a firm although it did not apply for some manufacturing firms in specific industries.

2.3.4 Growth Rate

The growth of a firm has a significant influence on its profitability. Macmillan and Day (1987) concluded that higher profitability could be as a result of rapid growth. Based on evidence that new firms become more profitable when they enter markets quickly and on a large scale. This was due to the fact that firms that grow have benefits associated with

economies of scale which results to reduced costs and thus higher profitability. Keith (1998) conducted a study of thirty eight small firms involved in manufacturing in the Tayside region in Scotland for the relationship between the company characteristics, and growth in which he reached the conclusion that industry group, size, age and location of a firm have a limited significance in explaining profitability.

2.3.5 Capital Structure

Modigliani & Miller (1958) introduced the capital structure theory trying to explain the impact of capital structure on profitability in which they took into consideration aspects such as taxation, bankruptcy costs and agency costs as a factor in determining the optimal capital structure that will maximize profitability. The Agency theory Jensen & Meckling (1976) and the tradeoff theory Bradey et al (1984) suggest a positive relationship between profitability and leverage which is use of debt in the capital structure. Whereas Myers & Majluf (1984) pecking order theory proposes a negative association between the amount of debt (leverage) in its capital structure and profitability of a company. Lalith(1999) studied the use of leverage on several firms in Sri Lanka and came to the conclusion that there existed a negative relationship between profitability and leverage. It can therefore be concluded that the combination of equity and debt that a firm uses to finance its operations has a significant effect on its profitability. Although debt is a cheaper source of financing due to the tax debt shield if used in excess it can result to other costs such as increased risk of bankruptcy and a higher finance cost.

2.4 Credit Policy

Brigham(1985) asserts that credit policy can be defined by the credit period, credit standards, the firm's policy on debt collection and any incentives awarded to customers for early payments in any firm. It can also be described as a practice and regulation that is implemented by firms to control the level and duration of credit sales. It ensures that a firm has a high quality portfolio of accounts receivables while selling to only clients with prudent risk.

It stipulates the type of customers who qualify for credit sales, exact credit limit, credit period allowed, procedures of dealing with delinquent accounts and ways of recovering bad debts. It aims to maximize credit sales at the lowest risk possible. It also includes

various ways of mitigating risks such as bank and cash guarantee, listing in the credit reference bureau and procedure of accepting personal or bankers cheques.

There are normally two types of credit policy. An expansive credit policy aims at issuing credit to as many customers as possible without assessing their level of risk. This results to increased sales but at the same time increase in customer default and bad debts. On the other hand a tight credit policy ensures that only credits worthy customers are issued credit sales. This leads to a minimal increase in sales but also reduced bad debts, high liquidity and low cost of trade debtor management which leads to increased profitability in the long term.

A credit policy is the tool that management institutes to control the level of trade receivables. Any recommendations of this study will have to be implemented to manufacturing firms through its credit policy.

2.5 Empirical Literature Review

This entails the analysis of past studies which are similar to the one being conducted with an aim of obtaining knowledge as to what information and other available materials for operational purposes. This will make it possible for the researcher to spell out his own research problem in meaningful context. Various academicians have studied trade receivable either as a separate study topic, but mostly as a part of WCM, from various view points. Bougheas et al. (2009), focused his research on the reaction of trade receivables to changes in risk, inventory cost, liquidity and profitability. Other authors survey the effect of optimal debtors management, i.e. the best way of managing trade receivables that result to maximization of a firms profit. Research conducted by Deloof(2003) where he studied 1009 large Belgian non-financial companies for the time 1992-1996 found a significantly negative relationship between accounts receivables turnover and profitability.

Lazaridis & Tryfonidis (2006) also explored the relationship between accounts receivables management and profitability for the companies listed in the Athens Securities Exchange taking into consideration a sample of one hundred and thirty one listed firms. The researcher conducted the study between the years 2001-2004. When a regression analysis was conducted on the results it showed a statistically significant association between profitability (which was measured using the gross operating profit), and the CCC. He concluded that optimization of the CCC by managers could increase

shareholder value. There was also a statistically significant relationship between the firms profitability and efficiency of its trade receivables

Gill (2010) consequently studied the association between profitability and WCM of eighty eight companies listed on the New York Securities Exchange . The study was conducted for the period 2005-2007. The author found no statistically significant association between profitability and average creditor days. He also found no statistically significant relationship between average inventory days and the company's profitability. Similarly it was observed that there was a significant relationship between the size of a firm and profitability. They also found a negative relationship between ACP and profitability. The study recommended that managers could boost the profitability of their companies by reducing the number of days for their account receivables.

However Sharma and Kumar (2011) conducted a study of 263 non-Financial firms that were listed in the Bombay Securities Exchange in India from 2000-2008 and found a positive association between ART and profitability. There have been a few studies done locally in Kenya concerning Trade receivables but mainly in context of working capital management.

Mathuva (2010) investigated thirty companies listed on the NSE for the time 1993-2008. He establishes that there was a significant negative association between ART and the firm's profitability.

Waweru (2011) carried out a study on the association between management of trade debtors and the value of firms listed at the NSE. Secondary data which was obtained from the NSE handbook and the individual companies audited annual financial reports was utilized for this study .The study sampled 22 companies that had been listed in the NSE for the seven year period 2003-2009. Correlation and regression analysis results showed that there was some association between the companies' value and trade receivables management. The study also concluded that there was a negative relationship between ACP, inventory turnover in days, CCC and the firm's value. The study results clearly pointed out to the fact that the firms with a credit policy that resulted in minimal accounts receivables had the highest profitability. There was however contradicting evidence to

this since there was a positive relationship between ROA and trade debtors. The aim of this research is to observe the effect of TRM on the profitability of the Manufacturing companies listed in the NSE during the financial period 2011-2015

2.6 Conceptual Framework

A conceptual framework can be described as a presentation model which conceptualizes or represents the relationship between variables diagrammatically. The main aim of the conceptual framework is to assist the reader to quickly visualize the proposed relationship at a glance. Figure1 shows the relationship between the independent variables and the dependent variable of the study

Figure 1 below represents a conceptual framework of the relation between the profitability of firms and trade receivables measures.

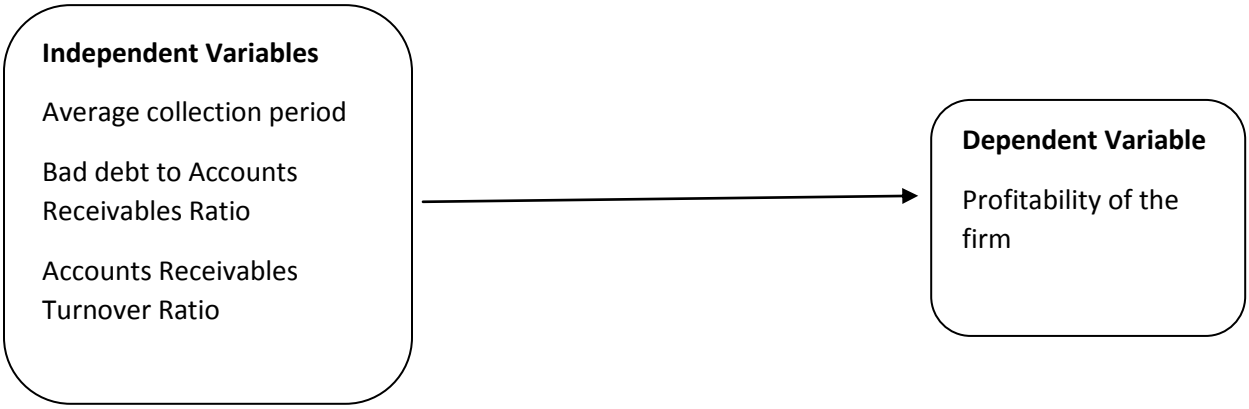

Figure 2.1

(Source**:** Author)

Independent Variables

The Average Collection Period (ACP) is also known as the Daily Sale Outstanding (DSO) and represents the mean number of days that receivables are outstanding. The ACP can be used by firms for trend analysis to compare the collection period over time , it can be used to compare with the firms set target or it can be used in comparison with the industry`s average. may be used by the firm for trend analysis to compare the collection period over time. Secondly, it may be used to compare with the set target by the firm and lastly it may be used in comparison with the industry average.

The Bad debt to Accounts Receivables Ratio expresses the percentage of Accounts Receivables that were uncollectible and were thus written off to bad debt . The higher the ratio the greater the risk that sales made on credit will not be collected.

ART can be described as the number of times per year that a firm collects its average trade debtors. This ratio evaluates the capability of a firm to efficiently collect funds from its trade debtors when the debts fall due as well as how well it grants credit to its customers. ART also helps keep track of the organizations turnover, if its falling it could be due to a reduction in sales which needs to be analyzed and advice the sales department on the matter. Incase turnover has increased the credit department may need to dedicate more resources like an extra staff to assist the debt collection effort.

Dependent variable

Profitability of the Firm will be measured using the Return on assets formula

Table 2.1 Variable Measurement

VARIABLE	MEASUREMENT	ABBREVIATION
Return on Asset	Net income / Total Assets	ROA
Average Collection Period	Average Accounts Receivables X 365 / Credit Sales	ACP
Bad debt to Accounts Receivables Ratio	Bad Debt net of recoveries / Average Accounts receivables	BDRR
Accounts Receivable Turnover	Net Annual Credit Sales / (Beginning Accounts Receivable + Ending Accounts Receivable) / 2	ART

2.7 Summary Of Literature Review

From the above review of relevant literature it can be concluded that research on accounts receivables has not been comprehensively exhausted. Most studies have generally focused on working capital management with only minimal focus on trade receivables. It has been studied with trade receivables and inventory.

The reviewed literature has not clearly pointed out the relationship between trade receivables and profitability of manufacturing companies some indicated a positive relationship while others indicate a negative relationship, while others indicated a negative relationship whereas others indicated no relationship at all. This study seeks to fill these gaps in literature by studying the effects of accounts receivables on profitability of manufacturing firms listed in the NSE.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This chapter provides an outline of the methodology adopted to assist in achieving the research objectives. It includes the research design, the population that will be studied, ,data collection methods, the sample design and data analysis

3.2 Research Design

This study used a descriptive design methodology to describe, explain conditions as they are as noted by Kothari (2004) the rationale of a descriptive research is to examine events that occurring at a specific place and time. The researcher had no direct control over the variables and only reported what had happened or what was happening. This methodology enabled the researcher to arrange, summarize and present data, to observe trends and relationships between variables under study.

3.3 Population

The target population was the manufacturing firms listed in the NSE. There are 10 listed firms classified under the manufacturing and Allied sector as listed in Appendix I. The study covered the said listed manufacturing firms over a period of 5 years between the years 2011-2015. A census was carried out, however data was obtained from only nine of the ten quoted manufacturing firms in the NSE. The researcher could not obtain data from A Bauman.

3.4 Data Collection Methods

Secondary data will be collected from the published financial statements of the quoted manufacturing firms for the period 2010-2015. Which are available from the respective company's websites and also from the Nairobi Securities Exchange and Capital Market Authority websites. These statements include the statement of financial position, Income statement, statement of cash flow and the director's report. The data will be tabulated, organized and summarized for analysis.

3.5 Data Analysis

The data collected will be analyzed by way descriptive statistics, correlation analysis and multiple regression analysis. The different variables in the study will be analyzed using descriptive measures such as mean, median and standard deviation. Multiple regression analysis will be used to estimate causal relationship between trade receivables management measures and profitability. Charts, graphs and tables will be used to present the findings. In order to logically put all variables together, I will use a multi-variable linear regression model to evaluate how a set of explanatory variables affect a dependent variable. I intend to use the Statistical Packages for Social sciences (SPSS) to analyze data due to its ability to simplify repetitive tasks and also to handle complex data manipulation and analysis

Equation

$ROA_{it} = \beta_1 ACPit + \beta_2 BDRRit + \beta_3 ART_{it} + \varepsilon_{it}$

Where

ROA_{it}: Return on Asset of firm i at time t

ACP_{it}: Accounts Collection Period

$BDRR_{it}$: Bad Debt to Receivables Ratio,

ART_{it}: Accounts receivable turnover,

ε_{it}: is the error term that constitutes the effect of other variables influencing profitability,

β_1, β_2& β_3: Proportionate change in the return on assets due to the respective trade receivable variable,

i: 1 to 10 firms,

t: time period 2011, 2010,…,2015.

ε_{it} is the error term.

3.5.1. Test of significance

The P test of significance will be used to test whether the change in the dependent variables $\boldsymbol{\beta_1}$**,** $\boldsymbol{\beta_2}$**&** $\boldsymbol{\beta_3}$: identified above are statistically significant.

CHAPTER FOUR DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction

This chapter presents the analysis of data collected and discusses the findings of the study. It consists of an overview of data collected and analyzed guided by the general objective of the study which was to investigate the effect of trade receivables management on the profitability of manufacturing firms listed in the Nairobi securities Exchange.

Of the ten firms listed under the manufacturing and Allied sector of the Nairobi Securities Exchange full data was obtained on nine firms. This data was obtained from the NSE handbook, CMA handbook and from the respective company websites for the five year period 2011-2015. Profitability was measured using Return on Assets.

4.2 Descriptive Statistics

In this section, descriptive analysis is performed on each variable using SPSS. This show the mean and standard deviation of the ROA, ACP,BDRR and the ART. It also shows the minimum and maximum values of the variables which assists in getting a general overview of the data analyzed as shown in Table 4.1 below.

Table 4.1 Descriptive statistics of manufacturing firms

	N	Minimum	Maximum	Mean	Std. Deviation
ROA	42	-.309	.411	.11805	.161651
ACP	42	.127	179.802	57.96546	43.894866
BDRR	42	.000	.099	.00757	.021467
ART	42	2.030	948.390	52.83283	159.554912
Valid N (listwise)	42				

Source: 2011-2015 Research data

From the table above the ROA is analyses against ACP,BDRR and ART. The ROA of the 9 listed manufacturing firms for the years 2011-2015 has a mean of 0.118 with a standard deviation of 0.161, ACP has a mean of 57.97 days with a standard deviation of 43.9.

4.3 Correlations Analysis

The study measured the extent of relationship between profitability(ROA) and the three predictor variables (ACP, BDRR and ART). Table 4. 2 shows correlation of the variables.

Table 4.2 correlation analysis of manufacturing firms

		ROA	ACP	BDRR	ART
Pearson Correlation	ROA	1.000	-.471	-.194	.414
	ACP	-.471	1.000	.077	-.396
	BDRR	-.194	.077	1.000	-.107
	ART	.414	-.396	-.107	1.000
Sig. (1-tailed)	ROA	.	.001	.109	.003
	ACP	.001	.	.314	.005
	BDRR	.109	.314	.	.251
	ART	.003	.005	.251	.
N	ROA	42	42	42	42
	ACP	42	42	42	42
	BDRR	42	42	42	42
	ART	42	42	42	42

Source: 2011-2015 Research data

The findings reveal that ACP has a negative relationship with ROA .ACP has a β coefficient of -0.471 which means that one unit increase in ACP decreases ROA by 0.471units if BDRR and ART are held at a constant. The statistical significance of ACP on ROA is 0.001 meaning that ACP predicts ROA with 99.9% probability. At the same time BDRR is also has a negative coefficient of -.194 which indicates that one unit increase in BDRR will decrease ROA by 0.194 units holding ACP and ART at a constant. The statistical significance of BDRR is 0.109 which is a sign of a relatively high significance. It implies that BDRR predicts ROA with an 89.1% probability.

On the other hand ART has a positive relationship with ROA with a **β** coefficient of +0.414. this means that a unit increase in ART will result to a corresponding increase in ROA by 0.414 holding ACP and BDRR at a constant. The statistical significance of art is 0.003 which is a sign of a relatively high significance.

The results show that ACP and BDRR have a negative a relatively significant effect on ROA with ACP having a higher significant effect on ACP than BDRR. On the other hand ART has a positive a relatively significant relationship with ROA.

4.4 Linearity Of The Model

Table 4.3 Table on Model Summary

tModelSummary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.550[a]	.302	.247	.140271	.852

a. Predictors: (Constant), ART, BDRR, ACP

b. Dependent Variable: ROA

Source: 2011-2015 Research data

From Table 4.3 above the correlation coefficient of 0.550(R=0.550) indicates that the linearity of the variables under study ROA, ACP,BDRR and ART is moderately strong.

This implies that the point of these variables along the line of best fit is moderately close. The adjusted R also indicates the results after the error has been reduced.

The table also presents the figure of the whole equation. R^2represents the prediction level of variance in ROA by ACP, BDRRand ART which is R^2=0.302. This means that 30.2% of ROA can be predicted by ACP, BDRR and ACP.

4.5 ANOVA Analysis

Table 4.4 Table on ANOVA Analysis

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	0.324	3	0.108	5.483	.003[b]
	Residual	0.748	38	0.02		
	Total	1.071	41			

a. Dependent Variable ROA

b: predictor: (Constant), ART, BDRR.ACP

Source: Research data

From the above table 4.4, the sum of squares due to regression is 0.324 with three degrees of freedom while the sum of squares residual due to 38 degrees of freedom is 0.748.The means square gives a more accurate level of relationship and influence with the three variables i.e. ACP, BDRR & ART having better results than the remaining 38 due to the residual effect.

The statistic value of F is 5.483. Furthermore, the P-value (significance) is 0.003, which also indicates that ROA is predicted with 99.97% probability by ACP, BDRR and ART together and shows a statistically significant relationship among them. Therefore the F-value, associated with P-value proves that there is a significant relationship between the profitability measured as ROA and trade receivables management measured as ACP, BDRR and ART.

4.6 Regression Results

Table 4.5 Table on regression results

.Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients			95.0% Confidence Interval for B		Correlations		
		B	Std. Error	Beta	t	Sig.	Lower Bound	Upper Bound	Zero-order	Partial	Part
1	(Constant)	.189	.042		4.483	.000	.104	.274			
	ACP	-.001	.001	-.359	-2.428	.020	-.002	.000	-.471	-.366	-.329
	BDRR	-1.048	1.027	-.139	-1.020	.314	-3.127	1.032	-.194	-.163	-.138
	ART	.000	.000	.257	1.733	.091	.000	.001	.414	.271	.235

a. Dependent Variable: ROA

Source: 2011-2015 Research data

Table 4.5 present regression results for the profitability for the 9 manufacturing firms studied in the years 2011 to 2015 where return on assets is the dependent variable. Theresults show that accounts collection period (ACP) affects return on assets (ROA) negatively. ACP β coefficient is -0.359 which means that one unit increase in ACP decreases ROA by 0.359 units while bad debt to receivables ratio (BDRR) and accounts receivables (ART) turnover is held constant. BDRR also has a negative β coefficient of –

0.139. This indicates that one unit increase in BDRR will decrease ROA by 0.139 units ,holding ACP and ART constant. ARThas a positive β coefficient of 0.257. This indicates that one unit increase in ART will increase ROA by 0.257 units, holding ACP and BDRR constant. According to the model, only ACP is significant as its P- value(0.02) is less than 0.05. Whereas BDRR (P-0.314) and ART(P- 0.091) were not significant since their P value is more than 0.05.

4.7 Collinearity

Table 4.6 :Table On Collinearity Diagnostics

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	ACP	.842	1.188
	BDRR	.987	1.013
	ART	.837	1.195

a. Dependent Variable: ROA

Source: 2011-2015 Research data

Another test performed on the data was to test the presence of collinearity. Collinearity diagnostics were performed using variance Inflation Factor (VIF). The collinearity diagnostics indicated a low VIF of 1.188,1.013 and 1.195 for ACP, BDRR and ART respectively indicating that there was a relatively low correlation between these three variables.

An additional, test was done to ascertain if the observations were independent as shown in table 4.3 above. Nevertheless in time series its normally very hard to prove this since performance of one year is normally affected by the previous year's performance. However the Durbin-Watson was 0.852 which is within the acceptable range of 1.5-2.5 this confirmed that errors in the data did not have any autocorrelation. The errors and observations were thus independent.

4.8 Interpretations Of The Findings

From the findings above, the study found out that accounts collection period, Bad Debt to Receivables ratio had a negative effect on profitability while the accounts receivables turnover had a negative effect on profitability.

The independent variables under study in the model (BDRR,ACP AND ART) explain a small portion (24.7%) of profitability of manufacturing firms listed in the NSE as represented by R^2 (0.247). this therefore means the three variables contribute to 24.7% of profitability , while other factors not studied in this research contribute 75.3% of profitability.

The Standardized Beta coefficients give a measure of how each variable in the model contributes to the overall profitability. Accounts Collection period has the highest contribution (β=-0.359) indicative of the fact that a unit increase in the ACP would lead to a decrease in ROA by 0.359 units. A unit increase in BDRR would result in a decrease in ROA by 0.139 units. A units increase in ART would result to an increase in ROA of 0.257 units.

This means that any change in the independent variables, that is Accounts Collection period , Bad Debt to Receivables Ratio and Accounts Receivables Turnover do not have a significant impact on profitability of manufacturing firms as measured by Return on assets. These findings are consistent with Akoto et al (2013) who studied thirteen listed manufacturing firms in Ghana for the five years 2005-2009. He investigated for any association between profitability and Working Capital Management practices. After correlation and regression analysis of the collected data he concluded that there exited a significant and negative association between profitability and ACP. This result also agree with studies done by Gakure et al (2012) who studied the association between working capital management and financial performance. His study sample included a sample of 15 companies listed in the NSE . He studied them for the five year period 2006 to 2010. He used multiple regression analysis and the Pearson correlation analysis between the independent and dependent variables. He concluded that there was a strong negative correlation between ACP and inventory holding period and profitability. This shows that shortening the ACP increases profitability. Since the firm will reduce its financing costs and cost of collecting debts will be much lower.

There is an inverse relationship between Bad debts Receivables Ratio and Returns on Assets . When BDRR increases by one unit ROA reduces by 0.139 units. This can be explained by the fact that as bad debts increase the BDRR also increases. An increase in bad debts means that bad debt expenses will do up which in turn reduces profitability. A firm that is not able to manage its Trade receivables will end up having a high number of defaulting customers which in turn reduces the profitability of the firm. Manufacturing firms should manage their trade receivables and credit sales in such a way that customer creditworthiness is determined before any sale is made. This will reduce the instances of Bad debts in a firm and thus increase profitability

Finally there is a positive relationship between Accounts Receivables Turnover and Return On Assets. When ART increases by one unit ROA also increases by 0.257 which is a more proportionate increase in profit compared to the reduction in ROA caused by an increase in BDRR (0.139)? This can be explained by the fact that for ART to increase there must be an increase in turnover .it can also be as a result of reduction of average debtors. An increase in sale with a corresponding efficient management of overall trade receivables will result to an increase in profitability.

We can infer from the data analyzed accounts receivables turnover , accounts collection period and Bad Debt to Receivables ratio have a relationship with the firms overall profitability as measured by returns on assets though not significant. An increase in Bad debts or an increase in the number of das it takes to collect a debt is an indication of poor trade receivables management which in turn results to a direct increase in profits. On the other hand an increase in Accounts receivables turnover is an indication of proper trade receivables management which in turn results to an increase in profitability.

CHAPTER FIVE: SUMMARY, FINDINGS AND RECOMMENDATIONS

5.1 Introduction

This study aimed at analyzing the effect of trade receivables management on the profitability of manufacturing firms listed at the Nairobi Securities Exchange. The following is a summary of my research findings upon which the conclusions and recommendations of my study were made.

5.2 Summary Of Findings

A descriptive research design was used in this study where a quantitative research approach employed to arrive at the findings of this study. Correlation and regression analysis were also applied to arrive at the nature and extent of relationship and to find out the effect on trade receivables management variables on the profitability measures. The statistical analyses were performed. The Pearson correlation analysis was performed in order to examine relationships among variables and check for multi-collineality problem among the independent variables. The study found out that the accounts collection period, bad debt to receivables ratio and accounts receivables turnover contribute to 24.7% of profitability of manufacturing firms listed in the NSE.

From the study findings the accounts collection period negatively (r= -0.359)and significantly(p=0.02)affects the level of profitability of manufacturing and allied firms listed in the NSE for the period of this study(2011-2015).This means that the higher the ACP the higher the receivables management costs and thus a reduction in profits.

The bad debt to receivables ratio also affects the level of profitability of manufacturing and allied firms negatively (r= -.139) but not significantly (p=0.314) . The reason that its not significant could be due to the fact that a firm with a low ACP will have a low BDRR due to proper management of trade receivables.

On the other hand accounts receivables turnover affects the level of profitability of a manufacturing and allied firms listed in the NSE positively (r=0.257) but not significantly (p=0.091) . This means that an increase or decrease in ART would not have a significant effect on ROA.

The study thus recommends that manufacturing firms should concentrate on managing their trade receivables such that they reduce their accounts collection period since it has a very significant effect on their profitability. Once they concentrate on the ACP it will greatly improve the BDRR and ART of the firm which do not affect profit significantly.

5.3 Conclusions

This study has shown that the accounts collection period has a very significant effect on the return on assets of listed manufacturing and allied firms in Kenya. Therefore management of ACP should be used as part of best practices among manufacturing and allied firms listed at the NSE. The study concluded that ACP negatively and significantly influence the profitability of manufacturing and allied firms listed in the NSE. This agrees with Organdie, Idowu and Ogundipe (2012) who found that working capital management has a negative relationship with market valuation as well as performance. Taking into perspective that trade receivables management is a component of working capital management. This is also agrees with Ahmet(2012) who concluded that efficient accounts receivables management assists a firm to increase its profitability by reducing transaction costs of raising funds in case of liquidity crisis.

Whereas bad debts receivables ratio and accounts receivables turnover had an insignificant effect on the overall profitability of listed manufacturing and allied firms in Kenya.

However trade receivables management contributes to only 24.75% of the overall profit of listed manufacturing and allied firms. The listed manufacturing and firms should use trade receivables management as part of their overall profitability strategy to enhance profitability. Trade receivables management also enhances the liquidity position of a firm and thus it can easily avoid financing costs associated with lack of funds. The availability of funds also assists the firm take advantage of profitable opportunities in the market.

We can therefore conclude that trade receivables management should be part of the overall profitability strategy of any manufacturing firm. It is not an end to profitability by its self but part of a means to an end. It should thus be combined with other components of profitability such as working capital management, liquidity management, capital structure, size and growth rate.

5.4 Recommendations For Policy And Practice

According to these findings, the manufacturing companies should come up with a well defined credit control policy framework which should encompass ways of the reducing accounts collection period. This can include prompt sending of customer statements, assessing ability of new and existing customers to pay, maintaining an accurate customer data base, setting of appropriate credit terms. It should also set the procedure for collection of overdue accounts according to agreed payment terms, setting a high quality portfolio for accounts receivables and identifying high risk marginal accounts and taking necessary action to safeguard the company against such risks. Setting and adherence to such a credit policy will ensure that the Accounts collection period is reduced and maintained at the optimum days thus enhancing both sales and maximizing collections. This will have a positive effect on the profitability of manufacturing firms.

5.5 Limitations Of The Study

Time allocated to the study was limited whilst holding a full time job and studying part time. This was especially encountered during collection of the required data to complete the project successfully. However the researcher conducted the study within the required time frame.

There was also limited literature available in both Kenya and the rest of the world on trade receivables management where most of the available literature is on working capital management. There are only ten firms listed under the manufacturing and allied sector in the NSE of which I obtained data from only 9 of them this limited my area and scope of study . Most of the manufacturing firms in Kenya are privately owned and are very skeptical about releasing their financial data to third parties. I would have included them in this study however it would have been very expensive, difficult and time consuming to obtain their financial data. The different listed companies also have different reporting periods which made it difficult to compare their financial results accurately.

The study also faced limitation of the model as it only consisted of one measure of profitability (return on assets) other measures of profitability were left out.

The study also relied on secondary data collected from audited financial statements prepared according to the International Financial Reporting standards (IFRS) and

Generally Accepted Accounting Principles (GAAPS). Nevertheless there is a possibility that the companies under study used different accounting policies on areas such as depreciation which resulted to different incomes reports.

5.6 Suggestions For further Study

Further research can be conducted on the relation between trade receivables management and the profitability of private manufacturing entities in Kenya. This would lead to a more generalized conclusion on this study.

Further study can also be conducted on the relation between trade receivables management and the profitability of other entities listed in the NSE that are not in the manufacturing and allied industry for example those that are in the service industry. This would expand our knowledge and provide a comparison between the manufacturing and service industry.

There is also need for further study on the effect of trade receivables management on other measures of profitability and financial performance other that return on assets. We can include such other measures as liquidity.

Finally there exists a need to carry out the same study over a longer period say 10-20 years since this study only took into scope the five years between 2011-2015.

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Appendix I Manufacturing and Allied Firms listed at the NSE as at 30th August 2016

1	**B.O.C Kenya Ltd Ord 5.00**
2	**British American Tobacco Kenya Ltd Ord 10.00**
3	**Carbacid Investments Ltd Ord 5.00**
4	**East African Breweries Ltd Ord 2.00**
5	**Mumias Sugar Co. Ltd Ord 2.00**
6	**Unga Group Ltd Ord 5.00**
7	**Eveready East Africa Ltd Ord.1.00**
8	**Kenya Orchards Ltd Ord 5.00**
9	**A.Baumann CO Ltd Ord 5.00**
10	**Flame Tree Group Holdings Ltd Ord 0.825**

source: www.nse.co.ke

Appendix II: Research Data

BOC GAS	**2015**	**2014**	**2013**	**2012**	**2011**
EBIT	234,518.0	279,746.00	417,345.00	356,579.00	214,948.00
TOTAL NET ASSETS	2,310,956	2,300,320.0	2,633,093.0	1,994,865.0	1,358,013.0
ROA	0.10	0.12	0.16	0.18	0.16
AVERAGE RECEIVABLES	323808	247120	232776	208800	
TURNOVER	1186420	1296679	1242602	1294550	
ACP	87.82249	67.5425606	64.8539274	58.8714225	
BAD DEBT	12362	23729	4766	2169	
AVERAGE RECEIVABLES	323808	247120	232776	208800	
BDRR	0.043304	0.09889226	0.02158631	0.01038793	
TUNOVER	1186420	1296679	1242602	1294550	
AVERAGE RECEIVABLES	323808	247120	232776	208800	
ART	4.156110	5.40400003	5.62803232	6.19995210	

BRITICH AMERICAN TOBACCO	**2015**	**2014**	**2013**	**2012**	**2011**	**2010**
EBIT	7,672,448	6,371,694	5,771,159	5,104,229	4,662,416.00	
TOTAL NET ASSETS	18,681,184	18,246,354.00	16,985,923.00	15,176,495.00	13,750,545.00	
ROA	0.41	0.35	0.34	0.34	0.34	
AVERAGE RECEIVABLES	131370	140318	60039	64989	7031	35437
TURNOVER	22257182	21032333	19618716	19409000	20138122	
ACP	2.2277	1.7385	1.1631	1.2222	0.1274	
BAD DEBT	0	0	0	0	0	
AVERAGE RECEIVABLES	131370	140318	60039	64989	7031	35437
BDRR	0	0	0	0		
TUNOVER	22257182	21032333	19618716	19409000	2013812	
AVERAGE RECEIVABLES	131370	140318	60039	64989	7031	35437
ART	163.843	209.9486	313.8292	298.6505	2864.1903	

CARBACID	**2015**	**2014**	**2013**	**2012**	**2011**
EBIT	580,467	597,262	634,686	535,444	374,210
TOTAL NET ASSETS	2,968,727	2,533,163	2,204,399.00	2,012,816	1,739,985.00
ROA	0.20	0.24	0.29	0.27	0.22
AVERAGE RECEIVABLES	137,379	103,365	161,576	175,304	129,211
TURNOVER	809,719	826,360	952,836	921,753	576,092
ACP	54.261	58.512	64.524	69.418	81.865
BAD DEBT	752	0	0	0	0
AVERAGE RECEIVABLES	137379	103365	161576	175304	129211
BDRR	0.0062473	0	0	0	
TUNOVER	809719	826360	952,836	921,753	576092
AVERAGE RECEIVABLES	137379	103365	161576	175304	129211
ART	6.727	6.238	5.657	5.258	4.459

EABL	**2015**	**2014**	**2013**	**2012**	**2011**	**2010**
EBIT	14,151	10,389	14,999	14,977	12,422	
TOTAL NET ASSETS	66,939.78	62,865.94	57,720.46	54,171.27	49,712.13	49,712,130.00
ROA	0.21	0.17	0.26	0.28	0.25	
AVERAGE RECEIVABLES	9,114	7,717	5,462	4,595	3,603	2,598
TURNOVER	64,420	60,749	59,062	55,522	44,895	
ACP	47.6817	39.5918	31.0758	26.9467	25.2073	
BAD DEBT	0	0	10	3	18	
AVERAGE RECEIVABLES	9114	7717	5462	4595	3603	2598
BDRR	0	0	0.0020	0.0007	0.0050	
TUNOVER	64420	60749	59062	55522	44895	
AVERAGE RECEIVABLES	9114	7717	5462	4595	3603	2598
ART	7.6549	9.2191	11.7455	12.0831	12.4604	

EVEREADY	2015	2014	2013	2012	2011	2010
EBIT	-98,912	-248,013	60,113	68,914	-173,208	
TOTAL NET ASSETS	1,511,665.	930,057.0	941,797.0	1,150,729.	1,010,864.	
ROA	-0.07	-0.27	0.06	0.06	-0.17	
AVERAGE RECEIVABLES	210,012	222,219	193,146	161,550	169,534	233,842
TURNOVER	1,132,136.0	1,216,580.00	1,415,395	1,374,78	1,374,847.	
ACP	69.676	62.309	45.734	42.891	45.009	
BAD DEBT	0	0	0	0	0	
AVERAGE RECEIVABLES	210012	222219	193146	161550	169534	233842
BDRR	0	0	0	0		
TUNOVER	1132136	1216580	1415395	1374789	1374847	
AVERAGE RECEIVABLES	210012	222219	193146	161550	169534	233842
ART	5.239	5.858	7.981	8.510	8.110	

Flame Tree Group	2015	2014	2013
EBIT	198,387,446.00	144,798,997.00	173,236,259.00
TOTAL NET ASSETS	1,372,229,753.00	1,054,454,805.00	875,809,375.00
ROA	0.14	0.14	0.20
AVERAGE RECEIVABLES	414,690,983	358,271,524	378,304,328
TURNOVER	2,283,151,865	1,764,847,673	1,601,356,664
ACP	61.785	76.168	43.114
BAD DEBT	0	0	0
AVERAGE RECEIVABLES	414690983	358271524	378304328
BDRR	0	0	0
TUNOVER	2283151865	1764847673	1601356664
AVERAGE RECEIVABLES	414690983	358271524	378304328
ART	5.908	4.792	8.466

KENYA ORCHARDS	**2015**	**2014**	**2013**	**2012**	**2011**	**2010**
EBIT	4,328,873.0	1,471,448.	997,828	1,273,301	780,294	
TOTAL NET ASSETS	78,731,223	50,202,177	70,597,300	68,936,272	70,372,491	
ROA	0.05	0.03	0.01	0.02	0.01	
AVERAGE RECEIVABLES	36,208,542	23,864,376	23,864,376	11,748,470	9,589,967	10,664,328
TURNOVER	60,974,312	58,062,204	47,090,526	26,684,494	26,894,182	
ACP	179.802	150.020	138.018	160.700	137.443	
BAD DEBT	0	0	0	0	0	
AVERAGE RECEIVABLES	36208542	23864376	23864376	11748470	9589967	10664328
BDRR	0	0	0	0		
TUNOVER	60974312	58062204	47090526	26684494	26894182	
AVERAGE RECEIVABLES	36208542	23864376	23864376	11748470	9589967	10664328
ART	2.030	2.433	2.645	2.271	2.804	

UNGA GROUP LTD	**2015**	**2014**	**2013**	**2012**	**2011**	**2010**
EBIT	635,695	567,735	389,458	512,569	631,070	
TOTAL NET ASSETS	8,671,788	7,475,611	8,108,379	6,399,829	5,708,897	
ROA	0.07	0.08	0.05	0.08	0.11	
AVERAGE RECEIVABLES	1,696,496	1,465,844	1,091,128	1,151,838	587,727	563,583
TURNOVER	18,723,250	17,002,302	15,142,017	15,976,763	13,214,442	
ACP	30.824	27.446	27.033	19.871	15.900	
BAD DEBT	0	0	585	4,620	0	
AVERAGE RECEIVABLES	1696496	1465844	1091128	1151838	587727	563583
BDRR	0	0	0.00052	0.00401		
TUNOVER	18,723,250	17,002,302	15,142,017	15,976,763	13,214,442	
AVERAGE RECEIVABLES	1696496	1465844	1091128	1151838	587727	563583
ART	11.841	13.299	13.502	13.871	22.484	

MUMIAS SUGAR	**2015**	**2014**	**2013**	**2012**	**2011**	**2010**
EBIT	-6,307,257.00	-3,405,046.00	-2,222,699.00	1,764,029.00	2,646,575.00	
TOTAL NET ASSETS	20,403,564	23,563,086	27,281,993	27,400,113	23,176,516	
ROA	-0.31	-0.14	-0.08	0.06	0.11	
AVERAGE RECEIVABLES	1,132,707	1,963,635	2,608,274	2,467,824	827,741	449,669
TURNOVER	5,531,357	13,075,912	11,957,823	15,542,686	15,795,300	
ACP	102.160	63.810	77.471	57.954	14.759	
BAD DEBT	0	206174	73342	0	2441	
AVERAGE RECEIVABLES	1132707	1963635	2608274	2467824	827741	449669
BDRR	0	0.0902	0.0289	0.0000	0.0029	
TUNOVER	5531357	13075912	11957823	15542686	15795300	
AVERAGE RECEIVABLES	1132707	1963635	2608274	2467824	827741	449669
ART	3.573	5.720	4.711	6.298	19.082	

SOURCE: RESEARCH FINDINGS