ACCOUNTS RECEIVABLES MANAGEMENT AND FINANCIAL PERFORMANCE OF MANUFACTURING FIRMS IN NAKURU COUNTY, KENYA

BY

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DECLARATION

I hereby declare that this research project is my original work; it has not been submitted to any other institution of higher learning for academic purposes.

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DEDICATION

This project is dedicated to my mum Elizabeth Wamukhoma and wife Winfred Adhiambo for their support and encouragement throughout the study.

To my family for their continuous encouragement during my study I just say thanks and

God bless you.

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ABSTRACT

Accounts receivable of a firm is a legally enforceable claim for payment from a business to its customers / clients for goods supplied and / or services rendered in execution of the customers order. On the balance sheet, it is reported as a current asset and is considered part of an organization's working capital. The foundation behind accounts receivable is a firm's policies and procedures for sales. A system must be in place to track accounts receivable. This should include balance forwards, listing of all open invoices and generation of monthly statements to customers. An aging of receivables should be used to collect overdue accounts. Many organizations today are faced with the problem of having huge accumulated balances owing to accounts receivables which are sometimes written off and thus interfering with the organizations operations. The purpose of the study is to establish how Accounts receivable management tries to minimize the amounts of money tied up in form of accounts receivables and thus takes the organization back to its original set goals. This study describes target population comprising of all the manufacturing firms in Nakuru municipality which is the sample and census will be employed as the population is less than 30. There are 25 manufacturing companies within the municipality. The reason for focusing on this sector is because it constitutes a larger part of the manufacturing sector which contributes a substantial percentage of output to the gross domestic product of Kenya. The period between 2008 and 2013 is sufficient enough to enable appropriate assessment of the accounts receivable management by the manufacturing firms in the municipality. The accounts receivable will be measured using ratios such as turnover ratio which is an accounting measure used to quantify firms effectiveness in extending credit as well as collecting debts. This ratio is an activity ratio, measuring how efficiently a firm uses its assets. Measures such as days sales outstanding (DSO) which is a measure of the average number of days a company takes to collect revenue after a sale has been made will also be looked into to help in the management of the accounts receivable. A/R at year end as a percentage of total sales ratio computed by dividing the fiscal year end A/R balances by fiscal year net sales will also be used, accounts receivable aging schedule which is a periodic report used to determine the priorities of collection activities will also be helpful in the management of the accounts receivables. Bad debt expense as a percentage of total sales ratio computed by dividing year end bad debts expenses by net sales. The study will be based on theories such as trade-off theory and pecking order theory. Descriptive survey research design will be adopted.. Therefore, the study will employ a purposive sampling, thus judgment sampling to be particular. The main source of information will be the secondary. Data will be analyzed using regression analysis method in a way to form a trend analysis enabling the determination of the impact of debt to on the performance of the firms.

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ABBREVIATIONS

AIP – Aggressive Inventory Policy

CMA – Capital Markets Authority

EAC – East African Community

EOQ – Economic order quantity

GDP – Gross domestic product

JIT – Just In Time

KAM – ` Kenya Association of Manufacturers

NLB – Net Liquidity Balance

NPV – Net Present Value

NTC – Net Trade Cycle

ROA – Return on Assets

ROE - Return on Equity

TCE – Transaction Cost Economics

WCR – Working Capital Requirement

CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

According to Haris (2005), in many organizations the growth in access to credit has led to a rising level of consumer indebtedness which is having a significant impact on business profitability. Accounts receivables management is an issue for every institution offering credit to its customers and the challenge for organizations is to protect profit margins by reducing write-offs, cutting the cost to collect and maximizing the cash collected. According to Bellie et al (2000) the view of Accounts receivables management should not be limited to customers who are unable to pay; the key is for organizations to use early identification of accounts at risk to enable proactive management of a customer before they become bankrupt.

Management of accounts receivables which aims at maintaining an optimal balance between each of the accounts receivables components, that is, cash, receivables, inventory and payables is a fundamental part of the overall corporate strategy to create value and is an important source of competitive advantage in businesses (Deloof, 2003). In practice, it has become one of the most important issues in organizations with many financial executives struggling to identify the basic accounts receivables drivers and the appropriate level of accounts receivables to hold so as to minimize risk, effectively prepare for uncertainty and improve the overall performance of their businesses (Lamberson, 1995).

Many theories have been developed to explain the management of accounts receivables.. The agency theory initially put forward by Berle and Means (1932) also contributes to the

Accounts receivables management decision. Therefore, the theory will help in trying to investigate if firms that present monitoring mechanisms of managers' actions have lower level of accounts receivables requirement. According to Meigs et al (1996), in today's organizations, the management has two conflicting objectives with respect to accounts receivables. First, the management wants to generate as much sales as possible. Offering customers length credit terms with little or no interest has proven to be an effective means of generating sales revenue. Secondly, the management wants to minimize the amounts of money tied up in form of accounts receivables because every business would rather sell for cash than on credit unless the accounts receivables earn interest which is not the case. Accounts receivables are nonproductive assets because they do not produce revenue as they await collection.

1.1.1 Accounts Receivables Management

The term debtors are defined as 'debt' owned to the firm by customers arising from sale of goods or services in the ordinary course of business" (Pike and Cheng, 2001). The three characteristics of receivables the element of risk, economic value and futurity explain the basis and the need for efficient management of receivables (Jackling et al., 2004). The element of risk should be carefully analyzed. Cash sales are totally riskless but not the credit sales, as the same has yet to be received.

Accounts receivables management entails managing the firm's inventory and receivables in order to achieve a balance between risk and returns and thereby contribute positively to the creation of a firm value. Excessive investment in inventory and receivables reduces the profit, whereas too little investment increases the risk of not being able to meet commitments as and when they become due (Harris, 2005).

In many organizations today, liquidity position is thus a major issue that must be put into consideration by financial managers. This liquidity state can be identified by their risk-return characteristics (Weinraub and Visscher, 1998). Therefore, risk and return tradeoffs are inherent in alternative accounts receivables management policies. High risk, high return accounts receivables investment and financing strategies are referred to as aggressive; lower risk and return strategies are called moderate or matching; still lower risk and return is called conservative (Moyer, 2005; Pinches 1991; Brigham and Gapenski, 1987). Keeping an optimal balance among each of the accounts receivables components is the main objective of accounts receivables management. Business success heavily depends on the ability of the financial managers to effectively manage receivables, inventory, and payables (Filbeck and Krueger, 2005).

1.1.2 Financial Performance

For a long time, financial performance has been perceived only through its ability to obtain profits. This has changed over time. Further, also act as a restrain in financial performance, since it does not contribute to return on equity (Rafuse, 1996). A well designed and implemented financial management is expected to contribute positively to the creation of a firm‘s value (Padachi, 2006). Dilemma in financial management is to achieve desired trade- off between liquidity, solvency and profitability (Lazaridis, 2006).The subject of financial performance has received significant attention from scholars in the various areas of business and strategic management. It has also been the primary concern of business practitioners in all types of organizations since financial performance has implications to organization‘s health and ultimately its survival.

A firm can be categorized as global performance if it can satisfy the interests of all stakeholders: managers are interested in the welfare and to obtain profit, because their work is appreciated accordingly; owners want to maximize their wealth by increasing the company's market value (this objective can only be based on profit); current and potential shareholders perceive performance as the company's ability to distribute dividends for capital investment, given the risks they take; commercial partners look for the solvency and stability of the company; credit institutions want to be sure that the company has the necessary capacity to repay loans on time (solvency); employees want a stable job and to obtain high material benefits; the state seeks a company to be efficient, to pay its taxes, to help creating new jobs, (Valentin, 2013).

A firms' management use financial indicators to measure, report and improve its performance. Analysis of the determinants of corporate financial performance is essential for all the stakeholders, but especially for investorsRisk and growth are two other important factors influencing a firm's financial performance. Since market value is conditioned by the company's results, the level of risk exposure can cause changes in its market value (Fruhan, 1979). Economic growth is another component that helps to achieve a better position on the financial markets, because market value also takes into consideration expected future profits (Varaiya, Kerin & Weeks, 1987).

1.1.3 Accounts Receivables management and Financial Performance

In the developing economies, the receivables management decision is crucial as such decisions becomes even more difficult in times when the economic environment in which these firms operates presents a high degree of instability. Firms must be equipped with a set of well defined polices to manage collections appropriately. Mian and Smith (1992,

1994), provide a systematic exploration of the determinants of accounts receivables policy, but they provided only tangible determinants due to a lack of clarification. To this end therefore, this study basically attempts to examine the effect of receivables management on the financial performance of manufacturing firms in Nakuru County.

1.1.4 Manufacturing firms in Nakuru County

Nakuru County, the former rift valley province, is well endowed with agricultural and tourism resources which have attracted several manufacturing firms. The role of the manufacturing sector in vision 2030 is to create wealth and employment. There are three caning factories; kokoto, njoro canners and kabazi canners, tea processing takes place in kiptagich tea factory, barley required for beer processing is mainly planted in molo and processed in Kenya malting factory located in molo. These among many other cash crops are manufactured and processed in companies within the municipality. Accounts receivable of a firm is a legally enforceable claim for payment from a business to its customers / clients for goods supplied and / or services rendered in execution of the customers order. On the balance sheet, it is reported as a current asset and is considered part of an organization's accounts receivables.

The foundation behind accounts receivable is a firm's policies and procedures for sales. A system must be in place to track accounts receivable. This should include balance forwards, listing of all open invoices and generation of monthly statements to customers. It therefore calls upon these firms to put systems into place to ensure that the management of these companies is manage effectively and efficiently. This study will try to establish how Accounts receivable management tries to minimize the amounts of money tied up in form of accounts receivables and thus takes the organization back to its

original set goals. This study will describes target population comprising of all the manufacturing firms in Nakuru. The reason for focusing on this sector is because it constitutes a larger part of the manufacturing sector which contributes a substantial percentage of output to the gross domestic product of Kenya.

1.2 Research Problem

The management of a firm‘s liquidity is necessary for all businesses, small, medium or large. When a business does not manage its liquidity well, it will have cash shortages and as a result experience problems paying its obligations when they fall due. Accounts receivables management is important because of its effect on the firm‘s profitability and risk, and consequently its value (Smith, 1980). Investments in current assets represent a very significant position of total assets. Additionally, there is risk-return trade off; in that the optimal level calls for a balance between profitability and solvency by minimizing the total costs of liquidity and cost of illiquidity.

This study attempts to contribute on the few empirical studies and to the debate on effects of accounts receivable management on manufacturing Sector in Kenya, specifically Nakuru county and to find out whether it influences financial performance of the very firms. The study is relevant in the Kenyan context as it gives the important role of the manufacturing sector expected to play in the growth and in an attempt to achieve the government’s vision 2030. Afza and Nazir (2007) through cross-sectional regression models on accounts receivables management policies, profitability and risk of the firms, found a negative relationship between the profitability measures of firms and degree of aggressiveness on accounts receivables policies while Padachi (2006) found that high investment in inventories and receivables is associated with lower profitability.

Similar studies, though few, done locally in Kenya have revealed relatively similar results. Biwott, (2011) found a significant negative relationship between net operating profitability and the average collection period for a sample of Kenyan firms listed on Nairobi Securities Exchange. Other studies done by Caffaso (2012), Kweri (2011), and Bett (2009) have yielded similar results. Such industry variations cannot be wished away and will require studies to be conducted in virtually all different industries in their varying context. The issue on accounts receivable management has not been widely studied, and largely missing from literature is the focus on manufacturing sectors and specifically in Nakuru County. This study intends to address the working research question, what are the effects of receivables management on the financial performance of manufacturing firms in Nakuru County?

1.3 Objective of the Study

To establish the effect of accounts receivables management on the financial performance of manufacturing firms in Nakuru County

1.4 Value of the Study

This study will help the management of manufacturing firms, prospective investors in manufacturing firms, academicians and financial researchers. Managers will be able to develop accounts receivable management program that will enable them to come up with policies in regard to granting credit and processing of credit sales. It will also help them to identify customers with ability to pay on time and thus can be granted credit, to have a detailed idea of quality of debtors and to evaluate and establish credit periods, discount percentages and surcharge of late payments.

Regulatory bodies like the Kenya association of manufacturers can use this study to improve on the framework for regulation of manufacturing companies in Kenya. The results of this study will also assist policy makers and regulators to implement new set of policies and regulations regarding accounts receivables management in the manufacturing firms like Capital Markets Authority.

Accounts receivable management is a wide study area where a lot of research has been done. Yet, there is no empirical evidence that it has been exhaustively covered and that all options that relate to it have been researched and reviewed. Thus, additional information based on concrete evidence will be a welcome additive to the existing scope of knowledge.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This chapter reviews the literature that forms the basis of the study. It will highlight theoretical framework where theories relating to the study will be discussed. Also in the chapter a review of Empirical literature where past studies by various scholars locally and globally on receivables management/performance are discussed. Lastly a summary of literature review wraps up the chapter by highlighting the gap in the literature that the present study seeks to bridge.

2.2 Theoretical Review

Accounts receivables management techniques utilized by business managers aids them in effectively managing accounts receivables. Techniques such as intersection of carrying costs and shortage cost, cash budgeting, EOQ and JIT are applied to manage different components of accounts receivables like cash, inventories and accounts receivables company can be endowed with assets and be profitable but short of liquidity if its assets can not readily be converted into cash. An increase in accounts receivables indicates that the business has increased current assets. Pioneer studies of (Baumol,1952) about an inventory management model and (Miller, 1966) about a cash management model could be considered as the best-known studies in this field, with the assumptions of these models informing managers about problem related with accounts receivables management practices.

2.2.1 Transaction Cost Economics Theory

The optimum level of inventory should be determined on the basis of a trade-off between costs and benefits associated with the levels of inventory. Costs of holding inventory

include ordering and carrying costs. Ordering costs is associated with acquisition of inventory which includes costs of preparing a purchase order or requisition form, receiving, inspecting, and recording the goods received.

However, carrying costs are involved in maintaining or carrying inventory and will arise due to the storing of inventory and opportunity costs. There are several motives for lower or higher levels of inventories and highly depends on what business a company is in. The most widely and simple motive of managing inventories is the cost motive, which is often based on the Transaction Cost Economics (TCE) theory (Emery and Marques, 2011). To be competitive, companies have to decrease their costs and this can be accomplished by keeping the costs of stocking inventory to a reasonable minimum. This practice is also highly valued by stock market analysts (Sack, 2000).

2.2.2 Agency Theory

The agency theory initially put forward by Berle and Means (1932) also contributes to the Accounts receivables management decision. According to the theory, agency conflicts arise from the possible Divergence of interests between shareholders (principals) and managers (agents) of firms. The Primary duty of managers is to manage the firm in such a way that it generates returns to Shareholders thereby increasing the profit figures and cash flow. Due to a non-rational and opportunistic behavior of agents (Jensen, 1994), the interests and decisions of managers are not always aligned to the shareholders' interests, resulting in agency costs or agency problems.

Fama and Jensen (1983) suggested that the agency problems could be minimized through the separation of the ratification and monitoring of decisions from the initiation and

implementation of decisions. These decisions can be reflected in a conservative management of accounts receivables, reducing the risk involved in the business operation, such as to keep high level of inventories beyond the process cycle needs, to offer credit terms above the product turnover, to accept low payment terms not aligned to the market practices, etc. In that case, these investment decisions would be translated in excess of accounts receivables. Therefore, the theory will help us try to investigate if firms that present monitoring mechanisms of managers' actions have lower level of accounts receivables requirement.

2.2.3 Operating Cycle Theory

The concept of liquidity can be developed by extending the static balance sheet analysis of potential liquidation value coverage to include income statement measures of a firm's operating activity. In particular, incorporating accounts receivable and inventory turnover measures into an operating cycle concept provides a more appropriate view of liquidity management than does reliance on the current and acid-test ratio indicators of solvency. These additional liquidity measures explicitly recognize that the life expectancies of some accounts receivable components depend" upon the extent to which three basic activities- production, distribution (sales), and collection - are non-instantaneous and un-synchronized (Weston, 1979). Changes in credit and collection policy have a direct impact on the average outstanding accounts receivable balance maintained relative to a firm's annual sales. Granting more liberal terms to a firm's customers creates a larger, and potentially less liquid, current investment in receivables. Unless sales increase at least proportionately to the increase in receivables, this potential deterioration in liquidity will be reflected in a lower receivables turnover and a more extended receivables collection

period. Decisions that commit a firm to maintaining larger average receivables investments over a longer time period will inevitably result in higher current and acid-test ratios (Richards, 1980).

Inventory turnovers depict the frequency with which firms convert their cumulative stock of raw material, work-in-process, and finished goods into product sales. Adopting purchasing, production scheduling, and distribution strategies that require more extensive inventory commitments per dollar of anticipated sales produces a lower turnover ratio. This, in turn, reflects a longer and potentially less liquid inventory holding period. If firms cannot modify either the payment practices established with trade creditors or their access to short-term debt financing provided by non-trade creditors, decisions that create longer or less liquid holding periods will again be accompanied by a higher current ratio indicator of solvency (Weston, 1979). The operating cycle concept is deficient as a cash flow measure in that it fails to consider the liquidity requirements imposed on a firm by the time dimension of its current liability commitments. Integrating the time pattern of cash outflow requirements imposed by a firm's current liabilities is as important for liquidity analysis as evaluating the associated time pattern of cash inflows generated by the transformation of its current asset investments (Richards, 1980). Proportionately to the increase in receivables, this potential deterioration in liquidity will be reflected in a lower receivables turnover and a more extended receivables collection period.

2.3 Accounts Receivables Management Practices

Firms rather prefer to sell for cash than on credit, but competitive pressures force most firms to offer credit. Today the use of credit in the purchase of goods and services is so common that it is taken for granted. When consumers expect credit, business units in turn

expect credit from their suppliers to match their investment in credit extended to consumers. In order that the credit sales are properly managed it is necessary to determine following factors; Credit Policy, Credit Evaluation of Individual Buyers, Credit Sanction Decisions, Control and Monitoring of Receivables.

Three things will comprise manufacturing unit; machines, men and stock. Men using machines convert the materials into finished goods. The success of any business unit depends on the extent to which these are efficiently managed. Inventory is an asset to the organization like other components of current assets. Inventory constitutes a very significant part of current assets in an organization. It is essential to control inventories (physical/quantity control and value control) as these are significant elements in the costing process constituting sometimes more than 60% of the current assets. Inventory holding is desirable because it meets several objectives and needs but an excessive inventory is undesirable because it costs a lot to firms in terms of carrying costs, opportunity costs, theft and pilferage, perishability et cetera.

The uncollectible accounts are known as bad debts. The total amount of uncollectible accounts is an expense of selling on credit (Larson et al 1999). According to King et al (1997), accounts receivables are initially recorded at amount of associated sale, and are carried in accounting records at that amount until they are partially or completely paid to customers. If all customers paid their accounts, no other adjustments would be needed. Unfortunately some customers do not keep their promises to pay and their accounts are never collected. The higher the accounts receivable turnover the quicker the cash is collected and the shorter the time the use of cash is foregone. Methods to account for uncollectible accounts include; the direct write off method that is used to account for bad

debts that records the loss from uncollectible accounts receivable at the time it is determined to be collectible Sometimes an account written off is later collected. This can be done due to continual collection efforts or good fortune of a customer. Some organizations recognize the loss from an uncollectible account receivable at the time it is determined to be uncollectible by reducing accounts receivable directly and increasing uncollectible accounts expenses. Spencer (1986), contents that factors considered when carrying out valuation of debtors are: the terms of credit offered or allowed by business, the age of debt, whether account is regularly settled within terms of credit taking advantage of cash discount, whether payments are being made on account and if so whether the balance has tended to increase, whether the old balance is being carried forward to be paid off by installments whilst new goods are being supplied for cash, whether any bills and cheques have been dishonored, the ratio of bad debts to debtors in the past proposed provision account ratio to debtors.

The methods for estimating bad debts expense are; the Percentage of sales method that uses income statement relations to estimate bad debts. It's based on the idea that a given percentage of an organization's credit sales for the period are uncollectible. The income statement then reports that percentage as the amount of bad debts expense. Expressing bad debts expense as a percentage of sales in an estimate based on the past experience. This percentage rate is adjusted for future periods. Secondly, the accounts receivable methods- these methods use balance sheet relations to estimate bad debts (the relation between accounts receivable and allowance amount). Its based on the idea that a portion of end of period accounts receivable balance is not collectible. The objective for this bad

debts adjusting entry is to make allowance for doubtful accounts balance equal to portion of outstanding accounts receivable estimated as uncollectible.

Estimating balance for allowance account is done using the simple estimate of percentage uncollectible from the total outstanding accounts receivable method and the Aging of accounts receivable method. The management writes off an account when it determines that specific account is not going to be collected. Needles et al (2002), contents that the percentage of net sales method asks, how much of this year' net sales will not be collectible? The answer determines the amount of uncollectible accounts figures for the year. In many organizations net sales is understood to approximate net credit sales. If there are substantial cash sales then the credit sale should not be used.

Under aging of accounts receivable method, the year-end balance of allowance for uncollectible account is determined directly by an analysis of accounts receivable. The aging of accounts receivables is the process of listing each customer's receivables account according to the due date of the account. If the customer's account is past due date, there is a possibility that the account will not be paid. The aging of accounts receivables helps the management evaluate its credit and collection policies and alerts it to possible problems.

2.4 Empirical Review

Receivables management has become one of the most important issues in the organizations where many financial executives strive to identify the basic receivables drivers and the appropriate level of accounts receivables (Lamberson, 1995). Jose et al. (1996) examined the relationship between aggressive receivables management and

profitability of US firms using Cash Conversion Cycle (CCC) as a measure of receivables management where a shorter CCC represents the aggressiveness of receivables management. The results indicated a significant negative relationship between the cash conversion cycle and profitability indicating that more aggressive receivables management is associated with higher profitability. Firms in an industry that has less competition would focus on minimizing the receivable to increase the cash flow. For firms in industry where there are large numbers of suppliers of materials, the focus would be on maximizing the payable. One of the earlier studies done by Jose, Lancaster and Stevens(1996) for the twenty-year period from 1974 through 1993 of 2,718 firms offers strong evidence that aggressive receivables management policies indicated by shorter cash conversion cycle enhance profitability.

Lazaridis and Tryfonidis (2006) also investigated relationship between accounts receivables management and corporate profitability for the firms listed in Athens Stock Exchange for a sample of 131 listed companies. The researcher used the company financials from 2001-2004 for the study. The results of the study of regression analysis showed that there was a statistically significant relationship between gross operating profit, a measure of profitability and the cash conversion cycle. He suggested that by optimizing the cash conversion cycle the managers could create value for the shareholders. Results of empirical analysis show that there is statistical evidence for a strong relationship between the firm's profitability and its receivables management efficiency. Raheman and Nasr (2007) also investigated relationship between cash conversion cycle and its components by taking a sample of 94 firms listed on Karachi Stock Exchange for a period of six years from 1999-2004. He investigated that cash

conversion cycle is negatively related to net operating profit which is a measure of profitability. Similar relationship was observed for average collection period, inventory turnover in days, and average payment period. At company level it was observed that cash gap (cash conversion cycle) is more important as measure of liquidity than the current ratio as measure of liquidity that affects profitability. At industry level it was observed that size has significant effect on profitability.

Afza and Nazir (2009) made an attempt to investigate the traditional relationship between receivables management policies and a firm's profitability for a sample of 204 non-financial firms listed on Karachi Stock Exchange (KSE) for the period 1998-2005.The study found significant difference among their receivables requirements and financing policies across different industries. Moreover, regression results found a negative relationship between the profitability of firms and the degree of aggressiveness of receivables investment and financing policies.

Finally, Waweru (2011) carried out a study on the relationship between receivables management and the value of companies quoted at the NSE. The study used secondary data obtained from annual reports and audited financial statements of companies listed on the NSE. A sample of 22 companies listed on the NSE for a period of seven years from 2003 to 2009 was studied. The 27 average stock price was used to measure the value of the firm. The regression models indicated that there was some relationship between receivables management and the firm‘s value while the result of the Pearson correlation indicated a negative relationship between average cash collection period, inventory turnover in days, cash conversion cycle and the value of the firm.

2.5 Summary of Literature Review

Several studies have already been conducted on the relationship between receivables management and financial performance of organizations. Most of the studies outside Kenya have concluded that there exists a negative relationship between accounts receivables management and financial performance of firms. Narware (2004) in his empirical study on Indian National Fertilizer Limited, for 1990-91 to 1999-2000 signify that receivables management and profitability of the firm disclosed both negative and positive association. He also found evidence that increase in the profitability of a firm was less than the proportion to decrease in accounts receivables.

Similar studies done locally in Kenya have revealed relatively similar results as concluded by Biwott (2011) Caffaso (2011), Kamula (2011), Kweri (2011). As earlier noted, the issue on accounts receivables have been widely studied. However, largely missing from literature is the focus on manufacturing sector and specifically on manufacturing firms in Nakuru municipality that is in significantly different industry setting compared to industries where studies have already been done locally. They are equally in significantly different context to other manufacturing firms where studies have already been done elsewhere in the world. Indeed, Biwott (2011), Caffasso (2011) and Kweri (2011) have recommended similar studies to be done in different industries and sectors. This study therefore seeks to fill this research gap by seeking to find out how evaluation is done on the accounts receivables management in manufacturing firms in Nakuru municipality.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This chapter provides a discussion of the research methodology that the researcher used in this study. It discusses the research design with respect to the choice of the design. It also discusses the population of study, data collection methods as well as data analysis methods that were employed in the study.

3.2 Research Design

Kothari (2004) defines research design as the arrangement of conditions for collection and analysis of data in a manner that aims to combine relevance to research purpose with economy in procedure: It contributes the blue print for the collection, measurement and analysis of data". Research design is the plan and structure of investigation so conceived as to obtain answers to research questions. The plan is the overall scheme or program of the research (Robson, 2002). The main purpose of this research was to determine the effect of accounts receivables management on financial performance of manufacturing firms in Nakuru County, Kenya. Therefore a descriptive research was used to study whether this relationship exists.

The research used both descriptive and quantitative research design. The major purpose of descriptive research was to provide information on characteristics of a population or phenomenon. Descriptive research was used as a pre-cursor to quantitative research designs as it provided the general overview giving some valuable pointers as to what variables were worth testing quantitatively.

3.3 Target Population

The target population of this study comprised of 18 manufacturing firms in Nakuru County for the period of six years from 2008 to 2013 although there are 25 manufacturing firms. The researcher was unable to get data from the other 7 as they didn't bring back their questionnaires.

3.4 Data Collection

The study used secondary data which was obtained from finance managers of the different manufacturing companies. The Finance managers, credit controllers and accountants of the various manufacturing companies within Nakuru County were approached for permission to conduct the research.

3.5 Data Analysis

The whole process which starts immediately after data collection and ends at the point of interpretation and processing data is data analysis (Cooper and Schindler, 2003). Chadran (2004) defines statistics as a discipline that provides the tools of analysis in research and one which refers to facts, information or data and to a system of data collection and analysis. The researcher employed the quantitative research approach to arrive at the findings of the study. Descriptive and inferential statistical techniques were used to analyze the data. Multivariate regression model based on Cross sectional pooled data from the annual reports and other financial statements to assess the effect of accounts receivables management on the financial performance of manufacturing firms in Nakuru County.

In order to test the preposition, the multivariate regression model was structured as follows:

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Where:

ROE : Return on equity (ROE) to measure the manufacturing firms financial performance

ROE it: Return on Equity of firm i at time t (i = 1, 2, 18 firms,).

, 1….8: Constants representing the direction and extent to which each variable influences performance of a firm

ACP : The average collection period

ITID : Inventory turnover period

APP : The average payment period

CCC : Cash conversion period

CR : Current ratio

DR : Debt ratio

LOS : Natural logarithm of sales

FATA : Financial assets to total assets

ε : The error term that is a surrogate for all other variables influencing performance

Xit : The different independent variables of firm _i‘ at time_t’.

t : Time = 1, 2, …….., 5 years

To complement regression analysis, correlation analysis was carried out to analyze the relationship between accounts receivables management and firm‘s financial performance. Test of significance was carried out for all variables using t-test at a 95% level of significance. To examine the relationship among these variables, Pearson correlation coefficients were calculated.

CHAPTER FOUR: DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction

This chapter presents both descriptive analysis and inferential analysis. The descriptive analysis helps the study to describe the relevant aspects of the phenomena under consideration and provide detailed information about each relevant variable. For the inferential analysis, the study used the Pearson correlation to try and infer the relationships between the dependent and the independent variables, the panel data regression analysis and the t-test statistics. While the Pearson correlation measures the degree of association between variables under consideration, the regression estimates the relationship between accounts receivables management and firms' financial performance of manufacturing firms in Nakuru County.

4.2 Data Analysis and Findings

Secondary data on 18 manufacturing companies was considered in the analysis. The study provided two types of data analysis; namely descriptive analysis and inferential analysis. In descriptive statistics mean, standard deviation, minimum and maximum of the sample characteristic variables were determined. The study also carried out inferential statistics to determine in depth relationship between the variables i.e. correlation, regression and tested the hypothesis using Pearson correlation coefficient.

4.2.1 Descriptive Statistics

The study first found it necessary to evaluate the performance of the firm's financial performance variables under consideration i.e. Inventory Turnover period (in Days), Average Payment Period (in Days), Cash Conversion period, Debt Ratio, Average collection period, Current Ratio, Financial assets to total assets and Return on equities.

Their mean, standard deviation, minimum and maximum values were determined as indicated in Table 4.1.

Table 4.1: Summary Statistics of Financial Performance Variables

Variables	**Mean**	**Std deviation**	**Minimum**	**Maximum**	
Inventory Turnover period (Days)	29.16	28.003	0.001	112.83	
Average Payment Period (Days)	107.30	97.230	8.055	595.292	
Cash Conversion period	28.78	76.945	390.561	190.209	
Debt Ratio	0.539	0.588	0.091	6.623	
Average collection period	39.7	0.399	0.042	4.847	
Current Ratio	1.696	1.450	0.142	12.063	
Natural log of sales	0.563	0.452	0.323	0.2430	
Financial assets to total assets	0.112	0.105	-0.353	0.437	
Return on Equities	0.246	0.293	-1.429	2.157	

Source: Research Findings

The above table 4.1 shows the results of summary statistics of all the taken variables in the analysis. It provides the information about number of observation included and mean its dispersion and variability in the data. From the findings inventory turnover period and average payment period is averagely 29.16 days and 107.30 days respectively, cash conversion period had a mean of 28.78, debt ratio (0.54), average collection period (39.7) current ratio (1.696) financial assets to total assets (0.112) and the overall return on equity recorded a mean of 0.246. Furthermore the maximum inventory turnover period is 112.9 with average payment period of 595.3 recording the highest.

4.2.2 Correlation Analysis

In this section, the study measured the degree of association between the accounts receivables management and the firms‘ financial performance (Inventory Turnover period (in Days), Average Payment Period (in Days), Cash Conversion period, Debt Ratio, Average collection period, Current Ratio, Financial assets to total assets and Return on equities) will increase financial performance of listed firms. From the a priori stated in the previous chapter, a positive relationship is expected between the accounts receivables management and firm‘s financial performance. Table 4.2 presents the correlation coefficients for all the variables considered in this study.

Table 4.2: Correlation Analysis

Variables		Return on Equity
Inventory Turnover period (in Days)	Correlation p- Value	-0.288** (0.00)
Average Payment Period (in Days)	Correlation p- Value	-0.205** (0.00)
Cash Conversion period	Correlation p- Value	-0.281** (0.00)
Debt Ratio	Correlation p- Value	-0.172* (0.00)
Average collection period	Correlation p- Value	(0.001) (0.00)
Current Ratio	Correlation p- Value	0.577 (0.00)
Natural log of sales	Correlation p- Value	0.042 (0.00)
Financial Assets to total Assets	Correlation p-Value	0.161 (0.00)

Source: Research Findings

Table 4.2 displays the correlation analysis among the firms 'financial performance variables. The result shows that firms 'financial performance variable Return on Equity was significantly affected on Current Ratio with positive correlation of 0.577 and Inventory Turnover with negative correlation of 0.288. Net collection period is also negative correlated by Return on Equity. The firms' Return on Equity is also found to be negatively associated by significant correlation with two most important dimensions accounts receivables management, i-e, Cash Conversion period and average payment period in Days with the value of 0.281 and 0.205 respectively.

4.2.3 Regression Analysis

The researcher conducted a multivariate regression analysis so as to determine whether there exists a relationship between the accounts receivables management and financial performance of manufacturing firms in Nakuru County. The regression equation after estimations was as shown below:

$$= 11.132 + 0.231 + 0.321 + 0.553 + 0.734 + 0.633 + 0.612 + 0.543 + 0.613 +$$

Table 4.3: Regression Coefficients

Unstandardized Coefficients			Standardized Coefficients		
	Beta	Std. Error	Beta	T	Sig.
(Constant)		11.132	0.332	2.311	0.023
Inventory Turnover period (in Days)	0.231	0. 65	0.002	1.532	0.081
Average Payment Period (in Days)	0.321	0.332	0.076	1.256	0.022
Cash Conversion period	0.553	0.273	0.063	1.599	0.053
Debt Ratio	0.734	0.281	0.025	2.145	0.013
Average collection period	0.633	0.263	0.033	1.412	0.033
Current Ratio	0.612	0.271	0.022	1.223	0.022
Natural log of sales	0.543	0.239	0.024	0.302	0.042
Financial assets to total assets	0.613	0.224	0.032	0.412	0.061

Source: Research Findings

According to the regression equation established, taking all factors into account (Inventory Turnover period (in Days), Average Payment Period (in Days), Cash Conversion period, Debt Ratio, Average collection period, Current Ratio, Financial assets to total assets and Return on equities financial performance measured by ROE will be 11.132. The Standardized Beta Coefficients give a measure of the contribution of each variable to the model. A large value indicates that a unit change in this predictor variable

has a large effect on the criterion variable. The t and Sig (p) values give a rough indication of the impact of each predictor variable – a big absolute t value and small p value suggests that a predictor variable is having a large impact on the criterion variable. At 5% level of significance and 95% level of confidence, interest rate spread had a 0.082 level of significance, regulated saving had a 0.023 level of significance, operating efficiency had a 0.054 level of significance and liquidity risk had a 0.014 level of significance. Further the study carried out the hypothesis testing between accounts receivables management and firms‘ financial performance. The study findings are as shown below.

Table 4.4: Accounts receivables Management Vs Firms Financial Performance

Accounts receivables management	Firms financial performance
Pearson Correlation	0.782
Sig. (2-tailed)	0.000
N	18

Source: Research Findings

A Pearson coefficient of 0.782 and p-value of 0.000 shows a strong, significant, positive relationship between accounts receivables management and firms‘ financial performance

of manufacturing firms in Nakuru County, Kenya. Therefore basing on these findings the study rejects the null hypothesis that there is no relationship between accounts receivables management and firm‘s financial performance of manufacturing firms in Nakuru county in Kenya and accepts the alternative hypothesis that there exists a relationship between accounts receivables management and firm‘s financial performance of manufacturing firms in Nakuru county, Kenya.

4.3 Summary of Findings and Interpretations

The study provided two types of data analysis; namely descriptive analysis and inferential analysis. The descriptive analysis helped the study to describe the relevant aspects of the phenomena under consideration and provide detailed information about each relevant variable. For the inferential analysis, the study used the Pearson correlation, the panel data regression analysis and the Chi-square statistics. The study first evaluated the performance of the financial performance variables under consideration i.e. Inventory Turnover period (in Days), Average Payment Period (in Days), Cash Conversion period, Debt Ratio, Average collection period, Current Ratio, Financial assets to total assets and Return on equities. Their mean, standard deviation, minimum and maximum values were determined.

The findings showed that inventory turnover period and average payment period is averagely 29.16 days and 107.30 days respectively, cash conversion period had a mean of 28.78, debt ratio (0.54), average collection period (39.7) current ratio (1.696) financial assets to total assets (0.112) and the overall return on equity recorded a mean of 0.246. Furthermore the maximum inventory turnover period is 112.9 with average payment period of 595.3 recording the highest. The study further measured the degree of

association between the accounts receivables management and the firms‘ financial performance (Inventory Turnover period (in Days), Average Payment Period (in Days), Cash Conversion period, Debt Ratio, Average collection period, Current Ratio, Financial assets to total assets and Return on equities) will increase financial performance of listed firms. The result showed that the firms‘ financial performance variable Return on Equity has significantly affected on Current Ratio with positive correlation of 0.577 and Inventory Turnover with negative correlation of 0.288. Net collection period is also negative correlated by Return on Equity. Firms‘Return on Equity is also found to be negatively associated by significant correlation with two most important dimensions accounts receivables management, i.e. Cash Conversion period and average payment period in Days with the value of 0.281 and 0.205 respectively.

From the Chi-square results, the better financial performing companies recorded a mean of 0.07217while the poor financial performing companies recorded a mean of 0.033454. However, the variance for the better financial performing companies and poor financial performing companies are 0.0042 and 1.52485E-08 respectively. Furthermore, at two-tailed, the t- calculated of 3.162 is seen to be greater than the t-tabulated of 2.770. From testing if accounts receivables management have a relationship with firm‘s financial performance, a Pearson coefficient of 0.782 and p-value of 0.000 shows a strong, significant, positive relationship between accounts receivables management and firms‘ financial performance of manufacturing firms in Nakuru county Kenya. Therefore basing on these findings the study rejected the null hypothesis that there is no relationship between accounts receivables management and firms‘ financial performance of manufacturing firms in Nakuru county Kenya and accepted the alternative hypothesis that

there exists a relationship between accounts receivables management and firms‘ financial performance of manufacturing firms in Nakuru county.

CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter summarizes the study and makes conclusions based on the results of the study. The implications from the findings and areas for further research are also presented. This section presents the findings from the study in comparison to what other scholars have said as noted under literature review.

5.2 Conclusions

The objective of this study was to determine the effect of accounts receivable management on the financial performance of manufacturing firms in Nakuru County. Data was been analyzed by applying both descriptive and inferential statistics for the time period of 2008 to 2013. It was found that inventory turnover in days has negative relationship with Return on Equity which means that companies financial performance can be increased by reducing inventory in days. ACP is found to be significant positive association with Return on Equities, indicating that if time period of debtor‘s payment is increased then overall firm‘s financial performance also improves. Cash Conversion period and Net payment period shows significant negative relation with Return on Equities showing that firms‘ financial performance can be increased with short size of both of them. Lastly liquidity (Current Ratio) is positively associated with ROE.

5.3 Recommendations

This study recommends that there should be proper inventory management system in manufacturing firms to avoid over stock of inventory resulting efficient outcome of investment. Management of manufacturing firms should also make sure certain standards

and levels which will stop piling up of inventory. The study further recommends that companies should engage in relationship with those suppliers who allow long credit time period and those customers who allow short payment period. There is also still need in the future to identify the sector wise relationship between accounts receivables management and firms‘ financial performance among manufacturing firms in Nakuru County.

5.4 Limitations of the Study

Since the main purpose of this study was to determine the effect of accounts receivables management and financial performance of manufacturing firms in Nakuru county, some firms considered some information sensitive and confidential and thus the researcher had to convince them that the purpose of information is for academic research only and may not be used for any other intentions.

The findings of this study may not also be generalized to all manufacturing companies but can be used as a reference to manufacturing companies in developing countries since they face almost the same challenges due to the same prevailing economic situations as opposed to manufacturing companies in developed countries.

Accounts receivables keeps on changing from period to period depending on prevailing economic situations and product market demand. The findings therefore may not reflect the true effect of accounts receivables on financial performance of manufacturing firms for a period considered.

5.5 Suggestions for Further Research

There is need for further studies to carry out similar study for a longer time period. A similar study should also be carried out on the accounts receivables management and financial performance of manufacturing firms in Kenya incorporating more financial and accounting variables and also taking into account the prevailing macroeconomic situation in the country.

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APPENDICES

Appendix I: Manufacturing Firms in Nakuru County

1. Alimton industry ltd	2. Nakuru milling corporation
3. Bidco oil company	4. Kapi limited
5. chemical industries	6. Polythene industries limited
7. Kenya cooperative creameries	8. Guan candle company
9. Spin-knit thread company	10. Palmal limited
11. Njoro caning factory	12. Bobmil industries limited
13. board of Kenya	14. Nakuru tanners
15. Nakuru blankets	16. Menengai oil company
17. Unga limited-animal feeds	18. Lamsons fabrics

Appendix II: Raw Data Analysis

Lamsons Fabrics

Company/ variables	2008	2009	2010	2011	2012	2013
The average collection period demands	40	30	30	28	28	35
Inventory turnover period	30	28	30	28	30	30
The average payment period	590	620	612	620	590	586
Cash conversion period	28	30	30	28	28	30
Current ratio	1.5	1.4	1.5	1.6	1.8	1.6
Debt ratio	0.53	0.61	0.54	0.73	0.75	0.53
Natural logarithm of sales	0.56	0.57	0.53	0.39	0.63	0.54
Financial assets to total assets	0.33	0.34	0.35	0.42	0.45	0.33

Unga Limited-Animal Feeds

Company/ variables	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**
The average collection period	35	28	35	40	30	30
Inventory turnover period	30	30	30	30	28	30
The average payment period	640	612	586	590	620	612
Cash conversion period	28	28	30	28	30	30
Current ratio	1.6	1.8	1.6	1.5	1.4	1.5
Debt ratio	0.73	0.75	0.53	0.53	0.61	0.54
Natural logarithms of sales	0.39	0.63	0.54	0.56	0.57	0.53
Financial assets to total sales	0.42	0.45	0.33	0.33	0.34	0.35

Menengai Oil Company

Company/ variables	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**
The average collection period	30	30	28	29	29	36
Inventory turnover period	28	30	28	30	31	28
The average payment period	620	612	620	580	595	586
Cash conversion period	30	30	28	31	29	30
Current ratio	1.4	1.5	1.6	1.5	1.6	1.6
Debt ratio	0.61	0.54	0.73	0.62	0.75	0.53
Natural logarithms of sales	0.57	0.53	0.39	0.40	0.63	0.54
Financial assets to total sales	0.34	0.35	0.42	0.52	0.45	0.33

Nakuru Blankets

Company/ variables	2008	2009	2010	2011	2012	2013
The average collection period	35	29	32	28	28	35
Inventory turnover period	30	33	29	28	30	30
The average payment period	360	320	594	620	590	586
Cash conversion period	28	29	30	28	28	30
Current ratio	1.4	1.5	1.7	1.8	1.8	1.6
Debt ratio	0.43	0.52	0.42	0.65	0.75	0.53
Natural logarithms of sales	0.40	0.74	0.34	0.33	0.63	0.54
Financial assets to total sales	0.52	0.43	0.34	0.45	0.45	0.33

Nakuru Tanners

Company/ variables	2008	2009	2010	2011	2012	2013
The average collection period	40	30	35	29	32	28
Inventory turnover period	30	28	30	33	29	28
The average payment period	590	620	360	320	594	620
Cash conversion period	28	30	28	29	30	28
Current ratio	1.5	1.4	1.4	1.5	1.7	1.8
Debt ratio	0.53	0.61	0.43	0.52	0.42	0.65
Natural logarithms of sales	0.56	0.57	0.40	0.74	0.34	0.33
Financial assets to total sales	0.33	0.34	0.52	0.43	0.34	0.45

Pyrethrum Board of Kenya

Company/ variables	2008	2009	2010	2011	2012	2013
The average collection period	45	35	35	26	24	37
Inventory turnover period	25	24	29	29	30	30
The average payment period	590	620	612	625	590	586
Cash conversion period	28	30	30	29	28	30
Current ratio	1.5	1.4	1.5	1.3	1.8	1.6
Debt ratio	0.53	0.61	0.54	0.64	0.75	0.53
Natural logarithms of sales	0.56	0.67	0.53	0.41	0.63	0.54
Financial assets to total sales	0.43	0.24	0.45	0.51	0.45	0.33

Bobmil Industries Limited

Company/ variables	2008	2009	2010	2011	2012	2013
The average collection period	40	30	45	35	35	26
Inventory turnover period	30	28	25	24	29	29
The average payment period	590	620	590	620	612	625
Cash conversion period	28	30	28	30	30	29
Current ratio	1.5	1.4	1.5	1.4	1.5	1.3
Debt ratio	0.53	0.61	0.53	0.61	0.54	0.64
Natural logarithms of sales	0.56	0.57	0.56	0.67	0.53	0.41
Financial assets to total sales	0.33	0.34	0.43	0.24	0.45	0.51

Njoro Caning Factory

Company/ variables	2008	2009	2010	2011	2012	2013
The average collection period	35	26	35	26	28	35
Inventory turnover period	29	29	29	29	30	30
The average payment period	612	625	612	625	590	586
Cash conversion period	30	29	30	29	28	30
Current ratio	1.5	1.3	1.5	1.3	1.8	1.6
Debt ratio	0.54	0.64	0.54	0.64	0.75	0.53
Natural logarithms of sales	0.53	0.41	0.53	0.41	0.63	0.54
Financial assets to total sales	0.45	0.51	0.45	0.51	0.45	0.33

Palmal Limited

Company/ variables	2008	2009	2010	2011	2012	2013
The average collection period	26	35	26	26	28	28
Inventory turnover period	29	29	29	29	30	30
The average payment period	625	612	625	625	590	586
Cash conversion period	29	30	29	29	28	30
Current ratio	1.3	1.5	1.3	1.3	1.8	1.6
Debt ratio	0.64	0.54	0.64	0.64	0.75	0.53
Natural logarithms of sales	0.41	0.53	0.41	0.41	0.63	0.54
Financial assets to total sales	0.51	0.45	0.51	0.51	0.45	0.33

Spin-Knit Thread Company

Company/ variables	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**
The average collection period	40	30	30	28	28	28
Inventory turnover period	30	28	30	28	30	30
The average payment period	590	620	612	620	590	586
Cash conversion period	28	30	30	28	28	30
Current ratio	1.5	1.4	1.5	1.6	1.8	1.6
Debt ratio	0.53	0.61	0.54	0.73	0.75	0.53
Natural logarithms of sales	0.56	0.57	0.53	0.39	0.63	0.54
Financial assets to total sales	0.33	0.34	0.35	0.42	0.45	0.33

Guan Candle Company

Company/ variables	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**
The average collection period	30	30	28	40	30	30
Inventory turnover period	27	26	28	30	28	30
The average payment period	630	614	620	590	620	612
Cash conversion period	28	31	28	28	30	30
Current ratio	1.3	1.4	1.6	1.5	1.4	1.5
Debt ratio	0.52	0.44	0.73	0.53	0.61	0.54
Natural logarithms of sales	0.41	0.43	0.39	0.56	0.57	0.53
Financial assets to total sales	0.25	0.35	0.42	0.33	0.34	0.35

Kenya Cooperative Cremaries

Company/ variables	2008	2009	2010	2011	2012	2013
The average collection period	40	30	30	28	28	29
Inventory turnover period	30	28	30	28	30	30
The average payment period	590	620	612	620	590	586
Cash conversion period	28	30	30	28	28	30
Current ratio	1.5	1.4	1.5	1.6	1.8	1.6
Debt ratio	0.53	0.61	0.54	0.73	0.75	0.53
Natural logarithms of sales	0.56	0.57	0.53	0.39	0.63	0.54
Financial assets to total sales	0.33	0.34	0.35	0.42	0.45	0.33

Polythene Industries Limited

Company/ variables	2008	2009	2010	2011	2012	2013
The average collection period	40	30	30	28	28	35
Inventory turnover period	30	28	30	28	30	30
The average payment period	590	620	612	620	590	586
Cash conversion period	28	30	30	28	28	30
Current ratio	1.5	1.4	1.5	1.6	1.8	1.6
Debt ratio	0.53	0.61	0.54	0.73	0.75	0.53
Natural logarithms of sales	0.56	0.57	0.53	0.39	0.63	0.54
Financial assets to total sales	0.33	0.34	0.35	0.42	0.45	0.33

Sudi Chemical Industries

Company/ variables	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**
The average collection period	40	30	30	28	28	30
Inventory turnover period	30	28	30	28	30	26
The average payment period	590	620	612	620	590	366
Cash conversion period	28	30	30	28	28	30
Current ratio	1.5	1.4	1.5	1.6	1.8	1.6
Debt ratio	0.53	0.57	0.53	0.39	0.63	0.54
Natural logarithms of sales	0.56	0.57	0.53	0.39	0.63	0.54
Financial assets to total sales	0.33	0.34	0.35	0.42	0.45	0.33

Kapi limited

Company/ variables	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**
The average collection period	40	30	30	28	28	30
Inventory turnover period	30	28	30	28	30	36
The average payment period	590	620	612	620	590	586
Cash conversion period	1.5	1.4	1.5	1.6	1.8	1.6
Current ratio	0.53	0.61	0.54	0.73	0.75	0.53
Debt ratio	0.56	0.57	0.53	0.39	0.63	0.54
Natural logarithms of sales	0.33	0.34	0.35	0.42	0.45	0.33
Financial assets to total sales	0.40	0.30	0.30	0.28	0.28	0.35

Bidco Oil Company

Company/ variables	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**
The average collection period	35	26	35	26	35	26
Inventory turnover period	29	29	29	29	29	29
The average payment period	612	625	612	625	612	625
Cash conversion period	30	29	30	29	30	29
Current ratio	1.5	1.3	1.5	1.3	1.5	1.3
Debt ratio	0.54	0.64	0.54	0.64	0.54	0.64
Natural logarithms of sales	0.53	0.41	0.53	0.41	0.53	0.41
Financial assets to total sales	0.45	0.51	0.45	0.51	0.45	0.51

Nakuru Milling Corporation

Company/ variables	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**
The average collection period	28	28	35	28	30	30
Inventory turnover period	28	30	30	28	28	30
The average payment period	620	590	586	620	590	586
Cash conversion period	28	28	30	28	28	30
Current ratio	1.6	1.8	1.6	1.6	1.8	1.6
Debt ratio	0.73	0.75	0.53	0.73	0.75	0.53
Natural logarithms of sales	0.39	0.63	0.54	0.39	0.63	0.54
Financial assets to total sales	0.42	0.45	0.33	0.42	0.45	0.33

Alimton Industry Ltd

Company/ variables	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**
The average collection period	26	35	35	26	35	26
Inventory turnover period	29	29	29	29	29	29
The average payment period	625	612	612	625	612	625
Cash conversion period	29	30	30	29	30	29
Current ratio	1.3	1.5	1.5	1.3	1.5	1.3
Debt ratio	0.64	0.54	0.54	0.64	0.54	0.64
Natural logarithms of sales	0.41	0.53	0.53	0.41	0.53	0.41
Financial assets to total sales	0.51	0.45	0.45	0.51	0.45	0.51