AN INVESTIGATION INTO RELATIONSHIP BETWEEN WORKING CAPITAL COMPONENTS AND PROFITABILITY OF SMALL AND MICRO ENTERPRISES IN KISUMU CITY - KENYA.

BY

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DECLARATION

This project is my original work and has not been presented for a degree in any other university.

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This project has been submitted for examination with my approval as the University Supervisor.

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DEDICATION

This study is dedicated to my loving wife Caroline, my sons Edwin and Paul and daughter Glory who walked with throughout the journey.

ABSTRACT

The aim of the study is to assess the relationship between working capital components and profitability of small and micro enterprises in Kisumu City. Most researchers have confined their research on working capital management and practices and how they affect profitability of companies and value. However, careful analysis on the impact of each of the component of working capital and how each affect the profitability of firms is important hence the need to for the study.

The study focused on small and micro enterprises and targeted 217 firms in Kisumu City .Out of the targeted population of 217, 198 respondents responded successfully. The respondents consisted of 156 sole proprietors, 35 were partnership and 7 were private companies. The study revealed that most small and micro enterprises experience problem of little working capital, difficulty of managing working capital and rising cost of business stock. It also showed that most of the owners over depend on business for personal needs and bad debts is a major contributor to their poor performance.

The study assessed the impact of each of the working capital components which included inventory, receivables, payables accounts and cash. The data collected was analyzed using descriptive and inferential techniques and the results revealed that cash management is the most important component of working capital. The ranking in order of importance showed that cash is the most important, followed by debt collection management, inventory and last was accounts payables The study concluded that there is a significant negative relationship between working capital components with the profit.

The study recommends that SMEs in Kisumu City should undertake courses in business record keeping, set clear credit policies in order to help them minimize bad debts and train on inventory management in order to improve their business performance.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

CHAPTER ONE

INTRODUCTION

1.1 Background of the study

Small and micro enterprises (SME's) have been praised for playing a crucial role in their contribution to the developing economies such as Kenya. They comprise a large portion of firms in the economy hence believed to provide an impetus to the economic progress of developing countries. However, the business failure rate is of particular interest to those who believe that the major source of job growth in the economy is through the start up and growth of Small and Micro Enterprises. Effective management of working capital is very important because it affects the profitability and liquidity of firms hence the need to understand the relationship between working capital components and profitability of small and micro enterprises. Management of working capital thus involves the decisions about the amount and composition of current assets and financing of these assets. The decision making process on the level of different working capital components has become a key concern as it affects the profitability and liquidity of the firm. Thus the main objective of working capital management is to maintain an optimal balance between each of the working capital components. Lack of understanding about the impact of working capital requirement on profitability, lack of clarity about its determinants and the lack of management's ability to plan and control its components may lead to insolvency and bankruptcy.

1.1.1 Working capital management

Working capital management involves the relationship between a firm's short – term assets and its short term liabilities. Working capital is recognized as an important concern of the financial managers due to many reasons. For example, maintenance of excessive levels of current assets can easily result in a substandard return on a firm's investment. Firms with inadequate levels of current assets may incur shortages and have difficulties in smoothly maintaining day-to-day operations Horne and Wachowics, (2000). Efficient working capital management involves planning and controlling current assets and current liabilities in a manner that eliminates the risk of inability to meet due short term obligations on one hand and avoids excessive investment in these assets on the other hand Eljelly, (2004). Thus, working capital management should make sure that the desirable quantities of each component of working capital are available for management. It thus, involves the decisions about the amount and composition to stimulate growth, improve performance and reduce risk in today's challenging economic climate. If done right, working capital management can generate cash for growth together with streamlined processes along the value chain and lower costs. Efficient working capital management may enable a firm to react quickly and appropriately to unanticipated changes in the market variables, such as interest rates and raw material prices, and gain comparative advantages over its rivals. Too often, however, this is an area that many organizations have ignored. Many businesses still under estimate the importance of working capital management as a lever for freeing up cash from inventory, accounts receivable and accounts payable. By effectively managing these components, firms can sharply reduce their dependence on outside funding and can use the realized cash for further investment and growth. The inability to understand the determining factors and measurement of adequate amount of working capital will lead an organization to bankruptcy.

Cash is the life – blood of any business, no matter how large or small a business is. If a business has no cash and no way of getting any cash, it will have to close down. Following on from this we can say that if a business has no idea of its liquidity and working capital position it could easily be in a serious trouble. This calls for the need for micro and small business to have insight and knowledge on working capital components and how they influence their profitability.

Porter (1985) attributed firm's business performance on how well it manages the influence from external and internal factors. In his view success or failure of a business enterprise is influenced by external factors such as technology and environmental factors. However, skills of work force, accounting systems and financial management practice particularly working capital management also influence the business performance.

1.1.2 Small and Micro business enterprises in Kenya.

Small business enterprises can be defined as those started by individual who seek income substitution and who may only serve a local constituency. Such small business owners are concerned mainly with filling immediate needs of their customers and clients within the scope of well defined markets. Oster Young and Newman, (1993), defined small business as a business in which there is no public negotiability of common stock and the owners must personally guarantee any existing or planned financing. Wikipedia, the free encyclopedia, December (2010), defined small and micro enterprises as a type of small business , often registered, having five or fewer employees and requiring seed capital of not more than $35,000. The European Union (EU) defines SMEs as those business that meet 2 of the following 3 criteria and have not failed to do so for at leased 10 years. See the table below,

Table 1.1: Workforce and turner over

Company category	Number of employees	Turnover	Balance sheet
Small	<50	<$ 10 M	<$ 10 M
Micro	<10	<$ 2 M	<$ 2 M

In Kenya today there is a major focus on the SMES as a key development initiative particularly in employment creation. Also there is an increasing support for SMES from developing agencies such as NGOs. Small businesses are most commonly in retailing. They also play a role in manufacturing and whole selling.

The growth of jobs and GDP in developing countries is heavily dependent on the growth and health of a country's small and micro business sector. According to Alila and Pedersen (2001), the weak job market in Kenya has driven many individuals to create jobs for themselves by starting their own businesses. The situation has been worsen by the fact that most businesses are restructuring and downsizing their work force in an effort to become more competitive and increase their productivity. The government has also drastically reduced their number of civil servants and privatized state owned enterprises.

In Kenya today there are several sources of credit open to small and micro enterprises as a source of capital. The expansion of credit funding through micro finance institutions, savings and credit societies and unsecured loans from commercial banks in recent years has seen growth of small and micro businesses especially in urban areas. Due to the contribution of this sector to the economy, the government established the youth and women funds to enhance access to credit to enable establishment of small and micro enterprises. Also the licensing requirements, which have been very restrictive for the small and micro enterprises development, have been simplified in order to enable the sector to develop and grow.

However, a large number of small and micro enterprises started individually or in a group are seen to experience a high failure rate. Some that are still in operation are struggling to survive. The question is, "why is the small and micro enterprises failing or struggling to survive dispute the creation of an enabling environment by the Government?"

An understanding on how owners and managers of these enterprises employ working capital management practices will go along way in providing answers to this question. Therefore the topic of the study, "An investigation into the relationship between working capital components and profitability of small and micro enterprises in Kenya".

1.2 Statement of the Problem

Many existing research paper have found out that managers spend a considerable time on day-to-day working of capital decisions since current assets are short-lived investment that require continually being converted into other assets Rao, (1989) In the case of current liabilities, the firm is responsible for paying obligations on a timely basis. As a result, working capital management of any business is a very sensitive area in the field of financial management. A study by Joshi,(1994), showed that effective working capital management ensures adequate cash flow for business operation and expansion. This ensures that an organization with a positive working capital is able to meet its short term obligations whenever they fall due. However, according to Smith, (1980), working capital management appears to have been neglected in spite of the fact that a high proportion of business failure is due to poor decisions concerning the working capital.. Many researchers have studied financial ratios as part of working capital management. In Kenya many studies have been done on working capital management and profitability. Bell,(2009),did a study on working capital management and profitability in Kenyatta Referral Hospital and his study showed that there are policies of working capital management that are not adhered to thus leading to the poor performance. Working capital management is important because of its effects on the firm's profitability and risk and consequently its value Smith ,(1980). Failure to meet current obligations is often a source of business failure Mayo,(2007). According to Deloof, (2003) the way working capital is managed has a significant impact on profitability and risk of firm's. This implies that there is a certain level of working capital requirement which potentially maximizes the returns. Eljelly, (2004) concluded that the effect of cash conversion cycle on profitability is stronger than the effect of current ratio on it.

An understanding of working capital management is of particular importance especially in developing countries like Kenya where majority of SMEs have their major investment in current assets and use short term loans as a source of finance. Working capital management is thus a basic requirement for all business organizations as it is what keeps the business running smoothly. Having sufficient funds invested in working capital reduces the chances of the firm running into liquidity problem besides ensuring uninterrupted operations of the business. It is within this context that the researcher seeks to understand how working capital components affects the profitability of small and micro enterprises in Kenya and whether owners and managers of small and micro enterprises employ working capital management policies in running their businesses. The study therefore seeks to carry out an investigation into the relationship between working capital components and profitability of small and micro enterprises in Kenya.

1.3 Objective of the study.

The overall objective of the study is to investigate the relationship between working capital components and the profitability of small and micro enterprises in Kenya.

1.4 Value of the study

Proprietors / Managers and Investors

The study will provide insight to proprietors, investors and managers of Small and Micro Enterprises on the working capital management practices' that influence their business performance. Managers are ultimately responsible for the day to running of the business. They are entrusted to make policy decisions. Information on working capital will enable them evaluate the key drivers of working capital management and hence be in a position to devise strategies of maintaining an optimum working capital. This include cash management policy which may enable them to identify the cash balance which allows for business to meet day to day expenses but reduces cash holding costs.

Inventory management policy. May help the managers and proprietors to identify the level of inventory which allows for uninterrupted production but reduces the investment in raw-materials and minimizes reordering costs and hence increase cash flow. Debtors' management policy may help the managers to identify the appropriate credit policy, i.e. credit terms that will attract customers such that any impact on cash flow and the cash conversion cycle will be offset by increased revenue and hence return on capital.

They will also be able to have insight on the short term financing policy such that they are able to identify the appropriate source of financing, given the cash conversion cycle. Each component of working capital, i.e. inventory, receivables and payables has two dimensions…….TIME……and …..MONEY. When it comes to managing working capital –TIME is MONEY. If you can get money faster around the cycle by collecting money due from debtors more quickly and reducing the amount of money tied up, the business will generate more cash or it will need to borrow less money to fund working capital. As a consequence, you could reduce the cost of bank interest. Similarly, if you can negotiate improved terms with suppliers e.g. by getting longer credit or an increased credit limit, you can effectively free finance to help fund future sales.

The study may also provide scholars and researchers with useful information to critique financial management conceptual framework underlying working capital management theories and practices with a view to developing more robust financial models.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

Many researchers have studied working capital management from different views and in different environment. Survey by many scholars show that micro and small enterprises formation play a major role in economic and social development of a nation. This is as a result of the relative lack of formal sector jobs available for the poor. Small and micro enterprises thus add value to a country's economy by creating jobs, enhancing income and adding business convenience. However, businesses always fail for reasons that are complex and intertwined. The Small Business Association , citing two well known authors (Michael Ames and Gustar Berle) provides a ten point list to explain business failure and the list include , **(i)** Lack of experience ,**(ii)** Insufficient capital ,**(iii)** Poor business location,**(iv)** Poor inventory management, **(v)** Over-investment in fixed assets, **(vi)** Poor credit arrangement,**(vii)** Personal use of business funds, **(viii)** Unexpected growth, **(ix)** Competition and **(x)** Low sales. Poor inventory management, poor credit arrangement and over-investment in fixed assets are all components of working capital management and hence they have influence on the business performance. The importance of managing working capital is magnified when it refers to firms in developing economies. Mc-Comidc, (1999) claimed that firms in the developing economies have many problems such as being small in size and lack of resources hence exposed to problems of production capacity to satisfy the demand and this makes inventory management more relevant. According to Jonathan Hardcastle, about 60% of a financial manager's time is devoted to working capital management and many of the potential employees in finance related fields will find out that their first assignment on the job will involve working capital, consequently the need to understand working capital management components and how they impact on the small and micro enterprises profitability.

2.1 Working Capital Management and Policy

Working capital policy refers to decisions relating to the level of current assets and the way they are financed, while working capital management refers to all those decisions and activities a firm undertakes in order to manage efficiently the elements of current assets. The main components of working capital are cash, marketable securities, accounts receivable and inventory. Cash is one of the most liquid and important components of working capital. Holding cash involves cost because the worth of cash held, after one year will be less than the value of cash as on today. Excess of cash should not be kept in business because cash is a non-earning asset, hence a proper and judicious management is of utmost importance in business.

Marketable securities also do not give much yield to the business because of two reasons. Securities may act as a substitute for cash and also as temporary investments, hence are held not for speculative balances, but only as a guard against possible shortage of bank credit. Accounts receivable (debtors) always lock up the firm's resources especially during inflationary tendencies. When goods are sold, inventories are reduced and accounts receivables are created. When payment is made, debtors reduce and cash levels increases. Thus, quantum of debtors depends on two things, i.e. volume of credit sales and average length of time between sales and collections. The entrepreneur should therefore determine the optimum credit standards. An optimum credit policy should be established and the firm's operations should be continuously monitored to achieve higher sales and minimum bad debt losses.

Inventories represent a substantial amount of firm's assets. It must be properly managed so that this investment does not become too large, as it would result in blocked capital which could be put to productive use elsewhere. On the other hand having too little or small inventory could result in loss of sales or of customer goodwill. Working capital management is thus important for creating value for shareholders as it has a significant impact on both profitability and liquidity of a business.

2.2.1 Theoretical Review

Aggressive Approach

The approach considered more risk because of the frequent need to refinance to support permanent current assets as well as fluctuating current assets. Moyer et. al (2005) observed that if a firm relied on overdraft, it will be vulnerable to a rapid withdrawal of the facility and if stock and cash are reduced to pay back the overdraft the firm may experience severe disruption, loss of sales and output, and additional costs because of failure to maintain the minimum required working capital to sustain optimum profitability.

Conservative Approach

The low risk is to make sure that long term financing covers the total investment of the assets. There are times in the course of the year when surplus cash is available, this will be invested in short term investments. Many managers feel much happier under the conservative approach because of the lower risk of being unable to pay bills as they arise. However, such policy may not be to the best interest of the owner of the firm. The short term funds invested in the short term securities is unlikely to earn satisfactory return relative to the cost of the long term funds. In all, likelihood, shareholders would be better off if the firm reduced its long term financing, by returning cash to shareholders or paying off some long term loans.

Moderate Approach

Gitman (1997) stated that a moderate or balanced capital falls midway between aggressive and conservative policies. With a moderate policy the level of investment of current assets is neither lean nor excessive. Following a moderate policy long term funds are used to finance the investment in fixed assets and the permanent components of current assets investment. The moderate policy is less risky than the aggressive but more risky than conservative. The firm can only resort to short term financing when seasonal and other temporary demands require it.

Copeland and Khonry (1980), applied CAPM to develop a theory of credit extension. They argued that credit should be extended only if the expected rate of return on credit is greater than or equal to market determined required rate of return.

Soenen(1993) in his findings showed that a shorter net trade cycles are most commonly associated with higher profitability. He explained that by carefully monitoring both the timing and magnitude of cash flows, managers can generate cash for investment purpose. The cash conversion cycle, by reflecting the net time interval between actual cash expenditure for the purchase of productive resources and the ultimate collection of receipts from product sales, provide a vital alternative for measuring a firm's liquidity.

Peel and Wilson (1996) noted that for small and growing business, an efficient working capital management is vital component of success and survival. They further suggested that smaller enterprises should adopt formal working capital management routines in order to reduce the probability of business closure as well as to enhance performance.

De Chazal Du Mee (1998) His study revealed that 60% of small enterprises suffer from cash flow problems hence experience liquidity problem. He suggested that for the small enterprises to enhance their level of performance, they should adopt formal working capital management.

Peel et al (2000) His study revealed that small firms tend to have a relatively high proportion of current assets ,less current liquidity, exhibit volatile cash flows and a high reliance on short term debts.

Nazir and Afza (2008) Suggested that enterprises can minimize risk and improve overall performance by understanding the role and drivers of working capital .It is therefore important to understand the components of working capital so as to have an optimal level of working capital .The optimal level working capital is one in which a balance is achieved between risk and efficiency. However, an optimal level of working capital require continuous monitoring of the various components of working capital such as accounts receivables , accounts payables, inventories , cash ,and marketable securities.

2.2.2. Empirical studies

Sushma Vishnani and Bhupesh Kr. Shar on their study on Impact of working capital management policies on corporate performance (1994) felt that there is need to study the role of working capital management policies on profitability of a company . Consequently, it has been seen that if a company desires to take a greater risk for bigger profits and losses, it reduces the size of its working capital in relation to its sales. If it is interested in improving its liquidity, it increases the level of its working capital. However, this policy is likely to result in a reduction of sales volume therefore its profitability. Hence a company should strike a balance between liquidity and profitability.

An empirical study by Manoj Anand and Keshar Malhotra (2007) on working capital performance of corporate in India which employed the methodology developed by Anand and Gupta (2003) and provides estimates by using the data of 339 S & P CNX 500 nonfinancial companies with at least three years of publicly available records over the period 2001 to 2002 to 2003 to 2004 for each company and industry. During the period of study, corporate India has achieved a compound Annual Growth rate of 26.3 % in the net sales and 1.6 % in the three year average cash operating margin. The length of the operating cycle and cash conversion cycle has reduced by 10.2 % and 12.7 % respectively on compounded annual basis. The paper finds very little evidence on the positive relationship between working capital management and profitability.

A study on working capital management and corporate profitability, analysis of selected quoted companies in Nigeria **(Evidence from Panel Data ,1996- 2005)** , showed a significant negative relationship between net-operating profitability and the average collection period , inventory turnover in days, average payment period and cash conversion cycle for a sample of fifty Nigerian firms listed on the Nigeria Stock Exchange .Furthermore, the study found no significant variations in the effects of working capital management between large and small firms.

In the Pakistan context, Rehman (2006) investigated the impact of working capital management on profitability of 94 Pakistan firms listed on Islamabad Stock Exchange for the period of 1999-2004. He studied the impact of the difference variables of working capital management, including average collection period, inventory turnover in days, average payment period and cash conversion cycle on the net operating profitability of firms. He concluded that there is a strong negative relationship between working capital ratios mentioned above and profitability of firms. Furthermore, managers can create a positive value for the shareholders by reducing the cash conversion cycle (CCC) up to an optimum level.

Solano, (2005) Suggested that managers can create value by reducing their firm's number of day's accounts receivables and inventories and also that shortening the cash conversion cycle improves the firm's profitability. Similar studies on working capital and profitability include those carried out by Begenmann (1997), Eljetty (2004), Ghosh andMaji (2004), and Lazarids and Tryfondis (2006).

In summary, the available literature depicts that there is a general consensus on the importance of working capital management practice on the performance of business enterprises. Firms that are more aggressive in managing their working capital are generally more profitable compared to their counter parts who adopt less aggressive policies and practices. (Gardner et al.,1986 and Weinruab and Visscher, 1998), in their study observed that more aggressive working capital policies are associated with higher return and risk while conservatives working capital policies are associated with lower risk and return. Working capital management is thus important because of its effects on the firms' profitability and risk and consequently its value However, there is still need to investigate the relationship between working capital components and profitability of small and micro enterprises in Kenya.

2.3 Working Capital Components

Receivables Management

These are generated when a firm offers credit to customers .Cash flow can be significantly enhanced if the amount owing to a business are collected faster. This calls for every business to know who owes them the money, how much is owed and how long it owes. Slow payment by debtors has a crippling effect on business, in particular on small businesses who cannot afford it. If debtors is not managed well, they begin to manage the business and thus make the owner to lose control due to reduced cash flow and, of course, the business could experience incidences of bad debts. Management of receivables require someone to recognize that the longer someone owes the business, the greater the chances that it will not be paid. It is therefore necessary for a firm to establish a credit policy which sets standards by which a firm is judged in determing whether or not. In establishing credit policy the 5Cs of credit may be considered. This includes character, capacity, capital, collateral and conditions.

While the whole purpose of extending credit is to increase sales and thus, gross profits, the expected increase in gross profits must be compared with the costs associated with extending credit to customers. These costs include the time value of money tied up in accounts receivables, bad debts that occur, credit checks, collection costs, discounts for early payment and clerical costs associated with maintaining a credit department

Payables Management

Creditors are a vital part of effective cash management and should be managed carefully to enhance cash position of a business. Management of creditors and suppliers is very important as slow payment by a firm may create ill-feeling and can signal that the business is not doing well. In managing accounts payables one needs to take into consideration the following- alternative sources of supply and consider the best discounts and credit terms. One needs to remember that a good supplier is someone who will work with you to enhance the future viability and profitability of your business.

Inventory Management

Managing inventory is a juggling act. Excessive stock can place a heavy burden on the cash resources of a business. Insufficient stock can result in lost sales, delays for customer and an increase in cost. The key is to know how quickly your overall stock is moving and this can be achieved by identifying the fast and slow stock movers with the objectives of establishing optimum stock levels for each category and, thereby, minimize the cash tied up in stock. Factors to consider when determing optimum stock levels include: - the projected sales of each product, how long it takes for delivery by suppliers. One should remember that stock sitting on shelves for long periods of time ties up money which is not working for him

Cash Management

Cash is one of the most liquid and important components of working capital. Holding cash involves cost because the worth of cash held, after a year will be less than the value of cash as on today. Excess of cash balance should not kept in business because cash is a non-earning asset- hence a proper and judicious cash management is of utmost importance in business. In order to maximize your cash balance one can either accelerate the inflow of funds or delay the outflow of funds.

2.4 Conceptual Framework

As Miles and Huberman (1994) points out, a conceptual framework explains, either graphically or in narrative form, the main issues to be studied. It covers the issues main aspects or features (variables) of a study and their presumed relationships. Robson, (1993), also argues that developing a conceptual framework enables one to be explicit about what he or she is doing. It helps to select and to decide, which relationship are to be of importance and therefore what data are going to be colluded and analyzed. This study undertakes the issue of identifying key variables that influence working capital management. Choice of the variables is influenced by the previous studies on working capital management. The ratios relating to working capital management may include components such as return on assets, cash conversion cycle, accounts receivable periods, accounts payable periods, inventory periods and leverage.

Return on assets (ROA) which is a measure of profitability of a firm was used as a dependent variable. It is defined as net profit divided by capital employed. Cash conversion cycle (CCC) was used as an independent variables. It is computed as account receivable period add inventory period less accounts payable period divided by cost of sales.

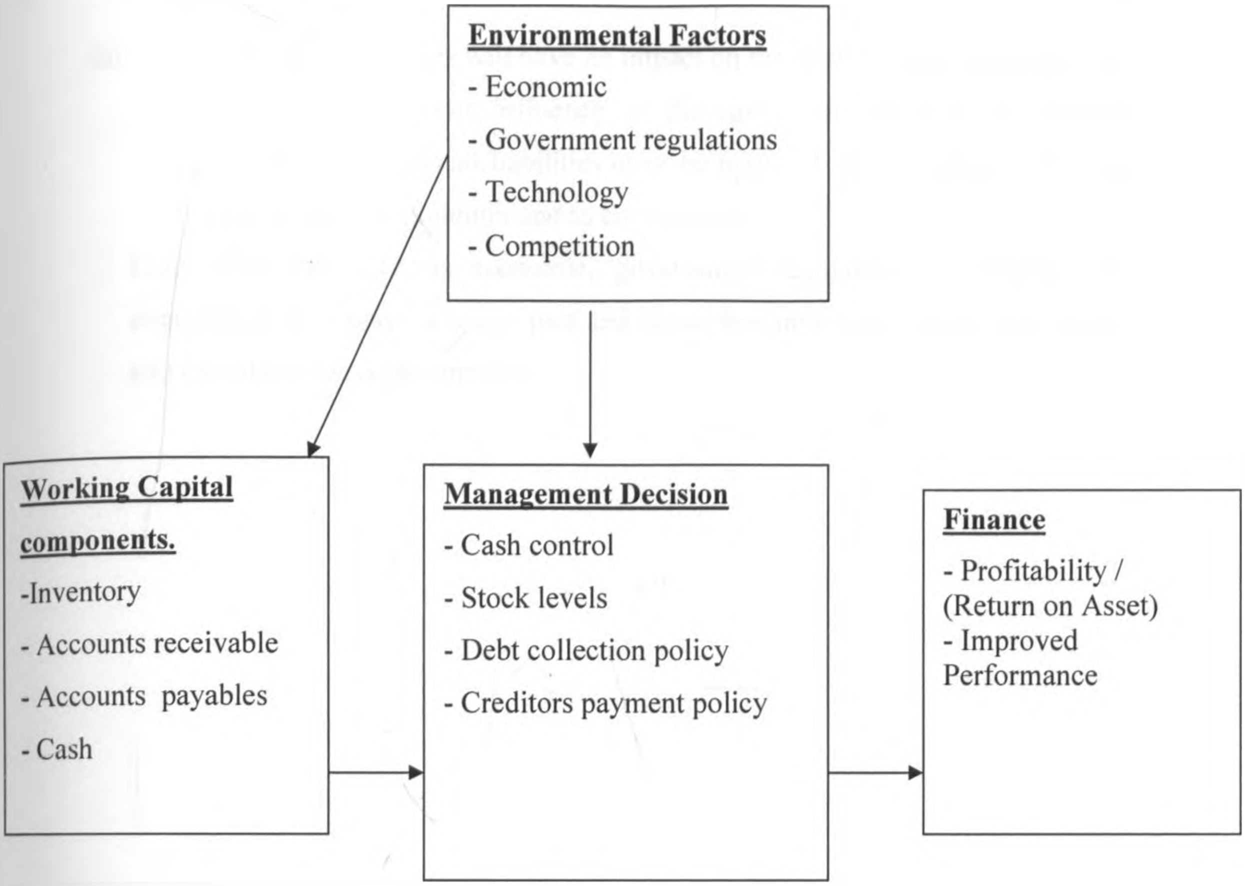
Accounts receivable period (ACRP) was used as a proxy for the collection policy and is an independent variable it is computed by dividing accounts receivable by sales and multiplying the results by 365 (number of days in a year).

- Inventory period (INVP) will be used as an independent variable. It was used as a proxy of the inventory policy. It is computed as inventory divided by cost of goods sold and multiplying the results by 365 days.

- Accounts payable period (ACPP) was used as proxy of the payment policy and used as an independent variable. It is computed by dividing accounts payable by purchases and multiplying the results by 365 days.

All the above variables have a relationship that ultimately affects working capital management. It is expected that there would be a negative relationship between return on investment on one hand and the measure of working capital management on the other hand. This expected result is consistent with the view that time lag between expenditure purchases of raw materials and collection of sales of finished goods can be too long and that decreasing this lag increases profitability.

Conceptual Framework



Source : Synthesis of literature and research conceptualization

Figure 2.1: Conceptual framework

Working capital management policies affect the business in the following:-

i) Purchase policies affect the level of cash, accounts payables and the level of stock. Creditors are a vital part of effective cash management and should be managed carefully to enhance the cash position. Purchasing initiates cash out flow and an over-zealous purchasing function can create liquidity problems. Knowledge on whether purchase quantities are geared to demand forecast is important to investors

ii) Sales policies also affect the level of cash, accounts receivable and stock levels. Accounts receivables are created when a firm offers credit to customers. Knowledge on what to be addressed when establishing a credit policy is important in order to help the investor in decision making, hence the need to apply the 5 Cs of credit that is character, capacity, capital, collateral and condition.

iii) Management decisions will have an impact on the level of cash, purchases and sales. It also has some influence on the cash flow and over all business performance. Assets and liabilities must be matched and coordinated in order to keep costs to a minimum and to control risks

External factors such as economic, government regulations, technology and competition also plays a major part and hence has influence on working capital and overall business performance.

CHAPTER THREE
RESEARCH METHODOLOGY

3.0 Introduction

This section describes the research procedure and techniques that are to be used in the study. It deals with the description of the methods applied in carrying out the research study. It provides a description of the research design, model specification, study area, target population, sample size, and sampling techniques, data collection procedure and data analysis techniques

3.1 Research Design

A survey research design was used to investigate population by selecting samples to analyze andprovide numeric description of a population from just part of it Oso and Onen, (2005). . This was based on the fact that there are a number of SME's operating in different kinds of business activities in Kisumu city. The study investigated the effects of working capital components on the profitability of small and micro business enterprises in Kisumu city.

3.2 Target population.

The study targeted those MSE's that have been in operation for at least one year to provide an informed data on how management of working capital components have influenced their performance.

Sample Size

The sample size used was 217 which was arrived at after the adoption of Kathuri & Palls (1993) table of determination of randomly selected samples from given finite population (the targeted population of 500 micro and small enterprises), such that the sample was within +or- 0.05 of the population with a 95% level of confidence.

The sample size was therefore arrived at by using the formula below:-

$$N = \frac{Z^2 PQ}{d^2}$$

Where N – Samples

Z – Standards normal deviation at required confidence.

P – Population of the target population.

Q – 1 – P

D – the level of statistics significance.

Therefore for a population of sample size >10,000

(384 x500) / (384+500) =217

3.3 Data type and collection Techniques.

The data collected included management of accounts receivable, accounts payable, stock control and cash disbursement. Accounts receivable are generated when a firm offers credit to its customers while accounts payable are created when firms buy inventory on credit. Inventories may include raw materials, work-in-progress, and finished goods. They make up a large portion of most firm's current assets and for many, total assets. The extent to which a firm efficiently manages its inventories can have a large influence on its profitability. Secondary data will be obtained from GOK Economic survey reports on MSE's Sector. Descriptive statistics such as proportions, percentages and mean was used to show the relationship between working capital components and profitability. Inferential analysis was used to help in making judgment on the relative importance on the various components of working capital and their impact on the profitability of small and micro enterprises

Reliability and Validity of Research Instruments

To statistically test the reliability of the instruments, the researcher carried out a pilot study using a test, re-test technique. The questionnaires was initially tested on 50% of the respondents picked at random from a sample similar to the population under study and a repeat interview was done with the same similar to the population under study.

3.4 Data analysis

The data collected was analyzed using descriptive and inferential techniques. Descriptive analysis enabled the researcher to describe relevant aspects and provide detailed information about each variable. Correlation analysis enabled the researcher to determine the ratios that are used the explain the variables.

In order to understand the relationship between working capital and profitability a linear multiple regression models was used.

Model specification

The general form of the regression model to be used in the analysis

$ROI = b_o + b_1 X_1 + b_2 X_2 + b_3 X_3 + b_4 X_4 ----b_n X_n$

Where b_o, b_1, b_2, b_3, b_4 ----b_n are the parameters of the ROA line to be estimated.

X_1, X_2, X_3, X_4 ----- Xn represents the selected ratios, which in this case are cash conversion cycle, accounts receivable period, accounts payable period and inventory period.

Specifically the regression model will be

$Y (ROA) = b_o + b_1 CCC + b_2 ACRP + b_3 INVP + b_4 ACPP$

Where

Y (ROA)	= Return on Assets (Profitability)
CCC	= Cash conversion cycle.
ACRP	= Account receivable period
INVP	= Inventory period
ACPP	= Accounts payable period

This regression model was used to show the relationship between the working capital components and profitability of the small and micro enterprises businesses. The regression analysis hence helps to illustrate how the various working capital components impact on the profits of small and micro enterprises as highlighted in the literature review and the conceptual framework

CHAPTER FOUR

RESULTS AND DISCUSSIONS

4.1 Introduction

This chapter presents the results and discussions of the study findings as captured from the analysis of the objectives. The objective of the study was to investigate the relationship between working capital components and the profitability of small and micro enterprises in Kenya.

4.2 Response rate of the study

The study sought to investigate a total of 217 SMEs. The study was however unable to get a 100% response rate as only 198 respondents responded successfully. Table 4.1 below shows the response rate of the study.

Table 4.1: Study response rate

Respondents	Targeted	Obtained	Response rate
MSEs	217	198	91.24%

The study obtained the views of 198 out of the 217 targeted respondents. This was a response rate of 91.24%. According to Cooper and Scindler (2011) a study response rate greater than 75% is adequate for a study of a social scientific nature to proceed.

4.3 Background information of the SMEs

The study examined several types of small and micro enterprises. The respondents included owners of sole proprietorship, partnership and private limited company; the number of years the business had in operation and sources of financing. The researcher chose to study these characteristics because they could aid him in explaining the study objective that is the relationship between working capital components and profitability.

4.3.1 Type of business

The study examined the type of business that the SMEs were – whether sole proprietor, partnership or private limited company. The type of business is an indicator of level of activity as well as the source of capital. For instance it is expected that partnerships and private limited companies have more stakeholders than sole proprietorships and they therefore have higher levels of activities compared to sole proprietorships. It is also expected that a private limited company or a partnership will have more sources of capital compared to a sole proprietorship.

Figure 4.1 below shows the type of businesses that were studied as SMEs.

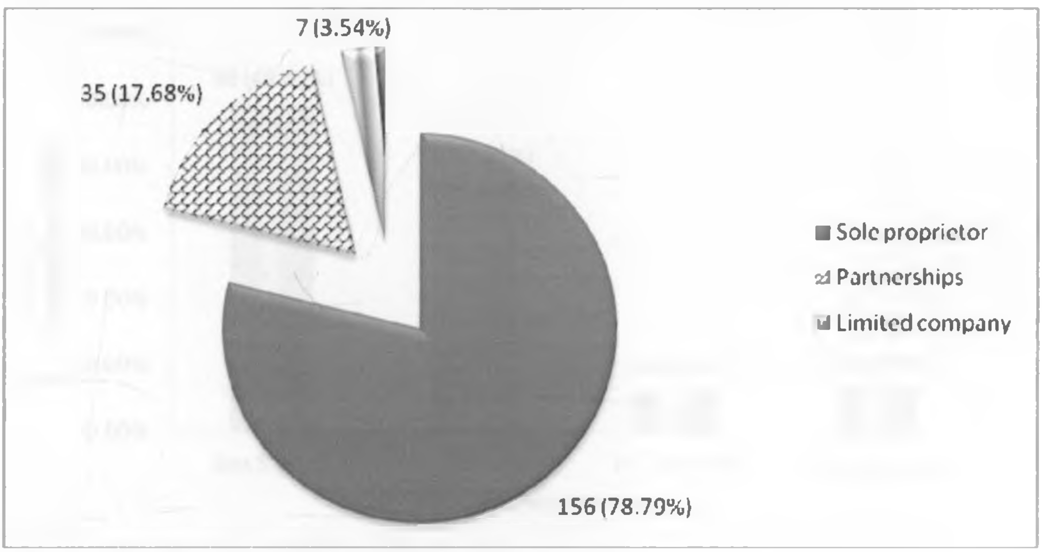


Figure 4.1: Type of business

Out of the 198 businesses whose views were involved in the study 156 (78.79%) business were sole proprietorship, 35 (17.68%) businesses were partnerships and 7 (3.54%) business were private limited companies. These results indicate that most SMEs were sole proprietorship and were therefore more likely limited in capacity and sources of capital as the owner's capital contribution formed the main source finance as he or she is only one person, unlike the partnerships and private limited companies where the stakeholders are many.

4.3.2 Number of years in operation

The number of years in business operation can be an indicator for business steadiness in the dynamic business environment as well as capital accumulation. A study by Sarah J. Lane and Martha Schary (1991) showed that a firm's age is the largest determinant of its probability of failure. A business that can survive and thrive for over 10 years is deemed to be very flexible and able to survive than a business that has not been tested and is still less than 5 years in operation. The researcher explored the number of years in business operations and presented the findings as shown in figure 4.2 below.

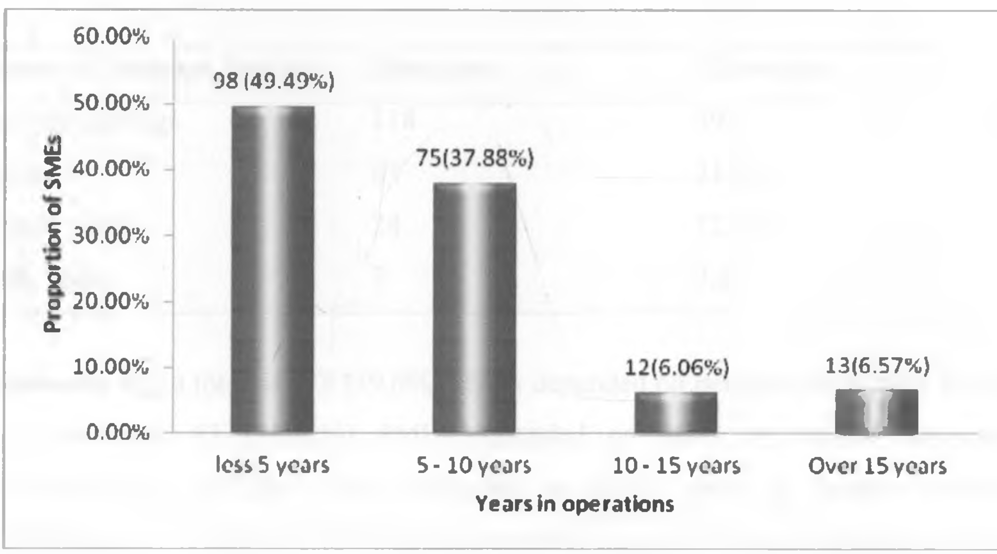


Figure 4.2: Number of years in operation

The study established that out of the 198 MSEs that were involved in the study a total of 98 (49.49%) had been in existence for less than 5 years, 75 (37.88%) had been in operation for between 5 and 10 years, 12 (6.06%) MSEs had been in business for between 10 and 15 years and 13 (6.57%) SMEs had been in operations for over 15 years. These results show that most businesses do not survive long enough beyond 10 years possibly because of the challenges in the business environment and poor management of working capital components as depicted by the research study. This confirms Sarah J. Lane and Marther Schary (1991) theory that the firm's age is the largest determinant of its probability of failure.

4.3.3 Business financing (source of capital)

The study examined the business financing that the SMEs in Kisumu City depended on. Knowing the sources of finances available to a business was important in explaining the ability of a business to undertake its operations, cost of capital and its ability to source for working capital. Table 4.2 below shows the sources of finance for the businesses.

Table 4.2: Sources of business finances

Source of business finance	Frequency	Percentage
Personal savings	118	59.6
Loans	63	31.82
Family funds	24	12.12
Bank loans	7	3.54

From table 4.2, a total of 118 (59.6%) SMEs depended on personal savings to finance the businesses, 63 (31.82%) SMEs depended on loans to finance businesses operations, 24 (12.12%) SMEs depended on family funds to finance business operation and 7 (3.54%) SMEs depended on bank loans for business financing. These results show that most MSEs in Kisumu city depended on personal savings for financing. This explains why most of the businesses remains small and cannot expand easily and possibly why most SMEs in Kisumu city were sole proprietorship as indicated in figure 4.1. This confirms Mc comedic (1999) theory which claim that many firms in developing economies have many problems such as being small in size and lack of resources hence cannot expand Additionally the researcher went ahead to examine whether the SMEs had experience financial problems in the past. Figure 4.3 below shows the results of the analysis.

Figure 4.3: Experience of financial problems

The study found that out of the 198 SMEs involved in the study 158 (79.8%) were experiencing financial problems while the other 40 (20.2%) SMEs were not experiencing any financial problems. This is possibly because of the fact that SMEs depended on finance from the business owner as a source of capital for financing as pointed out in table 4.2. Depending on personal finances for business financing may put the business in financial problems that may arise from personal financial needs. This is in line with De Chazal Mee (1998) whose study revealed that 60% of small enterprises suffer cash flow problems hence experiencing liquidity problem and he further suggested that firms should adopt formal working capital management which will reduce financial problems that may arise from personal needs. Specifically the researcher queried the respondents who said that they had financial problems. The result of the findings are as shown in the table 4.3 below.

Table 4.3: Financial problems faced by the SMEs in Kisumu City

Financial problems faced by the SMEs	Frequency	Percentage
Little working capital	75	47.47
Mixing of business and personal finances	39	24.68
Over depending on business for personal needs	18	11.39
Failure by debtors to pay	12	7.59
Rising cost of business stock	9	5.7
High interest rate charged on bank loans	5	3.16

The study found that the major financial problem faced by SMEs in Kisumu city was little working capital to finance daily operations and consequently low business productivity. A total of 75 (47.47%) respondents in the study said that they had little working capital. This implied that they were limited in their ability to purchase business stock in large quantities and enjoy quantity discounts hence reduced cost in operation or even in planning for business growth. The study also found that the financial problem that affected the SMEs second most was mixing of business and personal finances. A total of 39 (24.68%) SMEs in the study said that they had the problem of mixing business and personal finances this was mainly due to lack of adequate knowledge of record keeping and working capital management hence inability to control cash in hand. Mixing business and personal finances has the danger of reducing the business finances in the long run at the expense of personal needs. This may lead to stagnation of the business growth and eventually to the failure of the business. Similarly, 18 (11.39%) respondents said that over depending on business for personal needs was a financial problem that affected them in business. Another 12 (7.59%) respondents mentioned that failure by debtors to pay was a financial problem that affected their business. This therefore calls for the need to address credit policy and set standard by which a firm determines whether or not to extend credit. This therefore confirm the theory of Peel and Wilson (1996) that small and growing businesses need to adopt an efficient working capital management as it is a vital component of success and survival of such firms. A total of 9 (5.7%) respondents mentioned that rising cost of business stock was a challenge that affected their business operations and hence their profitability. This was mainly due to the high inflation being experienced in the country. . A total of 5 (3.16%) respondents in the study said that they were faced with the challenge of high interest rates charged by financial institutions on the loans borrowed by the SMEs. High interest rates charged on bank loans was the financial challenge that was mentioned by the least number of respondents as a challenge affecting the businesses. Moyer el al (2005) observed that if a firm relies on overdraft, it will be vulnerable to a rapid withdrawal of the facility and if stock and cash are reduced to pay back the overdraft the firm may experience severe disruption, loss of sales and output and additional cost because of failure to maintain the minimum required working capital to sustain the optimum profitability. This made most of the firms under the study not to go for bank loans hence the small percentage of 5%. Having an alternative source of income can be important way in shelving the business from excessive financial dependence by the business owner and other stakeholders. The study sought to know whether the business owners had alternative sources of income. Table 4.4 shows the results.

Table 4.4: Sources of income

Sources of income	Frequency	Percentage
Business is my only source of income	132	66.67
I have part time employment	33	16.67
I have fulltime employment	24	12.12
I have income from other properties	9	4.55

From table 4.4, a total of 132 (66.67%) respondents said that the business was their only source of income. This helps to explain why most respondents were complaining of facing the problem of overdependence on business finances as mentioned in table 4.3. Depending on business only for financing may result in two things: one, the business may not have the advantage of getting support from the owners other sources of income other than the business and two, the owner may vulnerable to over depending on the business for personal needs and this may lead to business failure. Only 33 (16.67%) respondents said they had part time employment. Another 24 (12.12%) respondents said that they had fulltime employment and lastly 9 (4.55%) respondents said they had income from other property. This explains Mac comedic (1999) theory that firms in developing economies have many problems hence remain small in size and lack adequate resources to make them grow in size. These results explains why very few SMEs in Kisumu city had the advantage of getting support from the owner's other sources of income and hence explains why most businesses cannot easily expand and grow hence the high failure rate in SMEs .

4.4 The relationship between working capital components and profitability

The objective of the study was to examine the relationship between working capital components and profitability of the SMEs in Kisumu City. The capital components that were examined were the business inventory, cash receivables, cash payables and cash. The researcher started out by getting the views of the respondents on the importance of the various capital components. They were either to rate them as not important, important or very important. Very important was given a score of 3, important was given a score of 2 and not important was given a score of 1. The scores were summed up for each of the respondents and divided by the total number of respondents to give a mean score. A mean score less than 1.5 means that on average the respondents were of the opinion that the particular capital component was not important; a mean score ranging between 1.5 and 2.5 means that the particular capital component was important and lastly a mean greater than 2.5 means that the particular capital component was very important. Table 4.5 shows the results of the findings.

Table 4.5: Importance of working capital components

Capital components	Not important		Important		Very important		Mean rating
	Freq.	%	Freq.	%	Freq.	%	
Cash management	9	4.55	23	11.62	166	83.84	2.79
Debt collection	20	10.1	41	20.71	137	69.19	2.59
Inventory control	25	12.63	38	19.19	135	68.18	2.56
Managing accounts payables / creditors	28	14.14	38	19.19	132	66.67	2.53

In responding to the importance of cash management, a total of 9 (4.55%) respondents said that cash management was not important, 23 (11.62%) respondents said that cash management was important and 166 (83.84%) respondents said that cash management was very important in their business. The mean for the importance of cash management was 2.79 meaning that on average cash management was very important to the SMEs in Kisumu City.

The second most important cash component according to the respondents in the study was debt collection. Debt collection had a mean score of 2.59 implying that it was very important to the SMEs. A total of 137 (69.19%) respondents said that debt collection was very important, 41 (20.71%) respondents said that debt collection was important to the business and 20 (10.1%) respondents said that debt collection was not important to the business. This confirms Nazir and Afza study that suggested that enterprises can minimize risks and improve overall performance by understanding the role and drivers of working capital.

The working capital component which was ranked third in importance was inventory control, it had a mean score of 2.56. a total of 25 (12.63%) respondents said that inventory control was not important, 38 (19.19%) respondents said that inventory control was important and 135 (68.18%) respondents said that inventory control was very important. These results show that most respondents were of the opinion that inventory control was very important.

Managing accounts payables and accounts receivables was the working capital component that ranked lowest in importance with a mean of 2.53; this was the lowest mean score for all of the capital components. A total of 28 (14.14%) respondents said that managing accounts payables and accounts receivables was not important, 38 (19.19%) said it was important and 132 (66.67%) said it was very important. Similar studies and theories showed the importance of working capital management. Study by Salano (2005) suggested that managers can create value by reducing their firms number of days of accounts receivables and inventory and also by shortening cash conversion cycle which improves firm's profitability

From the results above, it is clear that the respondents were of the opinion that working capital components were very important to their businesses.

The researcher went ahead to assess the problems facing SMEs in managing the various working capital components. Table 4.6 shows the problems faced in managing business cash.

Table 4.6: Problems facing SMEs in managing office cash

Problem in office cash management	Frequency	Percentage
No problems faced in managing office cash	97	48.99
Lack of skills in record keeping/ failure to reconcile records	41	20.71
Business losses	28	14.14
Poor budgeting for the business	16	8.08
Over depending on the business for personal financing	9	4.55
Impulsive expenditure	7	3.54

From table 4.6, most SMEs had no problems in managing business cash. This was according to the views of 97 (48.99%) respondents. Another 41 (20.71%) respondents said that they lacked skills necessary to keep financial records, or for reconciling records. This is unfortunate considering it is from records that a business can monitor and evaluate its performance. It was mentioned by 28 (14.14%) respondents that business losses was the factor that posed a challenge in managing business finances. Another 16 (8.08%) respondents said that poor budgeting for the business was the business financial challenge that affected them most. A total of 9 (4.55%) respondents said that overdependence on the business for personal financing was the main challenge that affected them in the daily business operations. A total of 7 (3.54%) respondents said that impulsive expenditure where they bought things they did not plan to buy was the financial challenge that affected them the most. A study by Soenen (1993) suggested in his findings that a shorter net trade cycle are most commonly associated with higher profitability. He maintained that by carefully monitoring both the timing and magnitude of cash flows, managers can generate cash for investment.

The study explored the challenges facing SMEs in debt collection and presented the findings as shown in table 4.7 below.

Table 4.7: Problems facing MSEs in debt collection

Problems facing SMEs in debt collection	Frequency	Percentage
I don't have debtors in the business	66	33.33
Bad debtors who fail to pay	51	25.76
No problem faced with debtors	46	23.23
Debtors who delay payment	27	13.64
Poor records for the debtors	8	4.04

The most predominant challenge facing SMEs in debt collection was bad debtors who failed to pay. This was according to 51 (25.76%). Copeland and Khonry (1980) applied CAPM to develop a theory of credit extension. They argued that credit should be extended only if the expected rate of return on credit is greater than or equal to market determined required rate of return. Evidence from Panel data (1996-2005) showed a significant negative relationship between net operating profitability and the average collection period, inventory turnover in days, average payment period and cash conversion cycle. A total of 27 (13.64%) respondents said that they were faced with the problem of debtors who delay to pay and 8 (4.04%) respondents said that the challenge they faced was poor keeping of debtor's records. Peel and Wilson (1996) suggested in their study that smaller enterprises should adopt formal working capital management routines in order to reduce the probability of business closure as well as to enhance performance.

The study examined the problems facing SMEs in stock control and presented the findings as shown in table 4.8 below.

Table 4.8: Problems facing SMEs in stock control

Problems facing SMEs in stock control	Frequency	Percentage
No problems faced	138	69.7
Little stock due to little working capital	33	16.7
Problems in book keeping on stock	19	9.6
Loss of stock through theft	5	2.5
Presence of dead stock	3	1.5

The study facing the SMEs in stock control was little stock volumes as a result of little working capital. This was according to 33 (16.7%) respondents in the study. The study further found that 19 (9.6%) respondents had the challenge of lack of record keeping skills on business stock. A total of 5 (2.5%) respondents said they were faced with the problem of loss of stock through theft and lastly 3 (1.5%) respondents said that they were faced with the problem of having stock that is not in demand. This leads to loss of revenue.

Table 4.9: Challenges facing SMEs in managing account payables / receivables

Challenge facing SMEs in managing accounts payable / receivables	Frequency	Percentage
Poor accounting skills	28	14.1
Inability to pay creditors on time	9	4.5
Inability to pay creditors	4	2
Too many debtors in the account receivables	2	1

The most significant challenge facing SMEs in managing accounts payable / receivables is poor accounting skills. This was according to the views of 28 (14.1%) respondents. A total of 9 (4.5%) respondent said that they faced the problem of inability to pay creditors on time. It was mentioned by 4 (2%) respondents that they faced the challenge of not being able to pay creditors at all and this posed a challenge in managing accounts payables and accounts receivables. It was mentioned by 2 (1%) respondents that they had challenges in managing the accounts payables and account receivables because of having too many debtors.

In order to assess the relationship between the relationship between capital components and profitability the researcher used correlation analysis. The correlation analysis had the four capital components namely: cash conversion cycle, inventory period, accounts payable period and accounts receivable period. These capital components were correlated with profits. Accounts receivable period simply means the average time allowed for debtors to pay the business was worked out by dividing the accounts receivables by the total sales and then multiplying by 365 days. Cash flow can be significantly enhanced if the amount owing to a business are collected faster. Slow payment has a crippling effect on business, in particular on small businesses who can least afford it. The formula for calculating accounts receivable period is as illustrated below.

Account receivable period (ARP) = $\frac{Accounts\ receivable}{Sales} \times 365\ days$

The accounts payable period is actually the average time the business gives itself before it pays creditors. Creditors are a vital part of effective cash management and should be managed carefully to enhance the cash position. Purchasing initiates cash outflows and an over-zealous purchasing function can create liquidity problems. It is worked out by dividing the accounts payables by the total value of purchases and multiplying the product by 365 days. The result is as shown in the equation below.

Accounts payable period (APP) = $\frac{Accounts\ payables}{Purchases} \times 365\ days$

Inventory period on the other hand is the time that the business allows or expects stocked goods to be completely sold off. Managing inventory is a juggling act.

Excessive stock can place a heavy burden on the cash resources of a business. Insufficient stocks can result in lost sales or delays for customers It is worked out by dividing the total value of the inventory with the cost of sales and multiplying the divisor by 365 days. The result is as illustrated in the formulae below.

Inventory period (IP) = $\frac{Inventory}{Cost\ of\ sales} \times 365\ days$

A positive cash flow in simple terms means more money is coming in than going out. Current assets must outweigh current liabilities to maintain a positive cash flow Controlling inventory, accounts receivables and accounts payables is an important means of controlling a firm's cash flow position Cash conversion cycle on the other hand was worked out by adding the accounts receivable period to the inventory period and reducing the accounts payable period and later dividing it with the cost of sales.

Cash conversion cycle = $\frac{ARP+IP-APP}{Cost\ of\ sales} \times 365\ days$

The relationship between the capital components and profit were done using a correlation analysis as shown in below.

Definition of variables:

Y = Profits

X1 = Cash conversion cycle

X2 = Accounts payable period

X3 = Accounts receivable period

X4 = Inventory period

Table 4.10: Correlation between profits and capital components

	Y	X1	X2	X3	X4
Y Pearson Correlation	1.000				
X1 Pearson Correlation	-0.703**	1.000			
X2Pearson Correlation	-0.651**	.733**	1.000		
X3Pearson Correlation	-0..685**	.620**	.885**	1.000	
X4Pearson Correlation	-0..670**	.890**	.781**	.986**	1.000

Referring to Table 4.10, the variable X11 (Cash conversion cycle) had the highest correlation coefficient of -0.703 with profits (Y) of the businesses. The variable that had the second highest association with profits was accounts receivable period X1 (Accounts receivable periods) with a correlation coefficient of -0.685. The third variable was X4 (Inventory period) had a correlation coefficient of -0.670. The variable that had the fourth highest association with the profits was Accounts payable period X2 with a correlation coefficient of -0.667. Clearly all the correlations were negative meaning that an increase in the cash conversion cycle, accounts payable period, accounts receivable period and cash conversion cycle led to a decrease in profits.

The researcher did a correlation to assess the influence of the capital components on profits and presented the results in table 4.11 below.
Table 4.11 below shows linear regression equation coefficients.

Table 4.11: Regression Coefficients

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Colinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	47.412	12.906		3.674	.000		
X1	-.971	0.144	-0.619	-6.743	.000	.996	1.004
X2	-5.738	0.832	-1.486	-6.897	.000	.974	1.027
X3	-.797	0.136	-1.243	-5.86	.000	.975	1.025
X4	-.718	0.1245	-2.171	-5.767	.000	.985	1.015

In Table 4.11, the Beta column indicates the values of the standardized regression coefficients. Beta represents the effect that a standard deviation difference in the independent variable would have on the dependent variable in standard deviation (the standardized scores of the dependent variable). The results presented in table 4.11 suggest that three of all the independent variables had significant regression coefficients. The linear regression model is shown below as:

Y = 47.412 - 0.971X1 - 5.738X2 - 0.797X3 - O.718X4

The model was highly significant and all the variables were important in the model. This was demonstrated in the p - value of the analysis of variance of the regression model below in table 4.12.

Table 4.12: ANOVA Table for the Multiple Regression Model

	Sum of Squares	df	Mean Square	F	Sig.
Regression	104156. 51	5	20831.250	127.657	.000(a)
Residual	79469.481	487	163.182		
Total	183625.732	492			

The ANOVA had a p - value of 0.000, indicating that the independent variables have a significant effect on the dependent variable. This indicates that the combination of independent variables have a significant effect on the dependent variable.

The study went ahead to assess the influence of the capital components on the profitability through the coefficient of determination of the regression model as shown in table 4.13 below.

Table 4.13: The Coefficient of Multiple Determination

R	R Square	AdjustedRSquare	Std.Errorof theEstimate
-0.834(a)	.696	.693	10.0874

As observed in Table 4.13, the multiple R is a correlation between the dependent variable (profits) and the independent variables. The correlation between the dependent variable and independent variable was as high as -0.834 The R Square (R^2), which is an indicator of how well the model fits the data, is 0.696. R Square is the proportion of the variance in the dependent variable associated with variance in the independent variables. In other words, the independent variable explains 69.6% of the change in the dependent variable. The independent variables namely Cash conversion cycle, Accounts payable period, Accounts receivable period and Inventory period influence 69.6% of the profits of the SMEs in Kisumu City. This means that 30.4% of their profit is determined by other factors as indicated in Table 4.13 above. Gardner et al,(1986) and Weinruab and Visscher, (1998) in their study observed that more aggressive working capital policies are associated with higher returns and risk while conservative working capital policies are associated with lower returns and risk. A study by Rehman (2006), where he studied the impact of the different variables of working capital management, which included average collection period, inventory turnover in days, average payment period, and cash conversion cycle on the operating profitability of firms, concluded that there is a strong negative relationship between working capital ratios mentioned above and profitability of firms.

CHAPTER FIVE

SUMMARY AND CONCLUSIONS

5.1 Introduction

This chapter presents the summary, conclusions and recommendations of the study as captured in from the analysis of the study objective. This chapter further gives recommendations for further study.

5.2 Summary of research findings

The study found that cash management was the most important working capital component as most businesses in Kisumu city rated it the most important in their business operations was with a mean rating of 2.79, debt collection was the second most important working capital component with a mean rating of 2.59, inventory control was the third most important capital component with a mean rating of 2.56 and lastly managing accounts payable was the fourth important working capital components to the SMEs in Kisumu city.

In exploring the challenges that the businesses faced in handling the capital components, the study found that the 48.99% SMEs faced the problem of Lack of skills in record keeping/ failure to reconcile records, 14.14% SMEs incurred business losses, 8.08% SMEs were faced with the problem of poor budgeting for their businesses, 4.55% SMEs said they faced the problem of Over depending on the business for personal financing and 3.54% SMEs said that they faced the problem of impulsive business expenditure. In the case of debt collection the study found that the 25.76% of SMEs from Kisumu city were faced with the problem of bad debtors, 13.64% SMEs had debtors who delayed payment and 4.04% had poor records on details of their debtors. The problems that the SMEs faced in managing the stock / inventory were: little stock due to little working capital, 2.5% SMEs were faced with the problem of loss of stock to theft and 1.5% SMEs were faced with the problem of stocking dead stock that was not in demand. The problems that the SMEs faced in managing accounts payables were: poor accounting skills this was a problem faced with 14.1% SMEs in Kisumu city, 4.5% SMEs said they faced the problem of having too many creditors, 2% of the SMEs in Kisumu city were faced with the problem of inability to pay creditors and lastly 1% of the SMEs were faced with the problem of having too many creditors in their accounts receivables.

The study found that there was a negative relationship between Cash conversion cycle, Accounts payable period, Accounts receivable period and Inventory period with the profits. i.e. as the Cash conversion cycle, Accounts payable period, Accounts receivable period and Inventory period increase the profits reduce. The correlation between cash conversion cycle and profits was -0.703, the correlation between accounts payable period and profits was -0.651, the correlation between profits and accounts receivable period was -0.685 and lastly the correlation between inventory period and profits was -0.67. all the correlations were significant at 5% level of significance. The joint contribution of Cash conversion cycle, Accounts payable period, Accounts receivable period and Inventory period influenced up to 69.6% of profits.

This was in line with the evidence from Panel data, (1996 -2005) which showed a significant negative relationship between net operating profitability and the average collection period, inventory turnover in days, average payment period and cash conversion cycle. Lamberson, (1995) in his study observed that lack of understanding about the impact of working capital requirement on profitability, lack of clarity about its determinants, and lack of management ability to plan and control its components may lead to insolvency and bankruptcy. Nazir and Afza (2008) in their study suggested that it is important to understand the components of working capital to have an optimal level of working capital. This helps the business to achieve a balance between risk and efficiency. However, an optimal level of working capital requires continuous monitoring of the various components of working capital.

5.3 Conclusion

The study concluded that there was a significant negative relationship between Cash conversion cycle, Accounts payable period, Accounts receivable period and Inventory period with the profits. i.e. as the Cash conversion cycle, Accounts payable period, Accounts receivable period and Inventory period increase the profits reduced and vice versa. The study found that joint contribution of Cash conversion cycle, Accounts payable period, Accounts receivable period and Inventory period influenced up to 69.6% of profits. This therefore shows that firms that are more aggressive in managing their capital are generally more profitable compared to their counterpart who adopt less aggressive policies as observed by Grardner el at (1986) and Weinruab and Visscher (1998)

5.4 Recommendation

The study made the following recommendations to the SMEs in Kisumu city:

The study recommends that the SMEs should consider taking courses in business record keeping. This will be important because the SMEs in the study reported that they lacked skills necessary to keep financial records, that they had poor records of debtors and they had poor accounting skills. These training will not only help to alleviate these problems but will go a long way in assisting the SMEs monitor and evaluate the success of past strategies and to spot hidden or unexpected costs.

The study recommends that the businesses should set clear credit practice policies. Such policies should assist them in checking out the credit worthiness of every customer thoroughly before offering credit. The credit practice policies should set a credit limit and should monitors the debtors balance to ensure that the period for recovery is not prolonged such that the business is denied of revenue. While the whole purpose of extending credit is to increase sales and ,thus, gross profit, knowledge on how it affects the profit in terms of the costs associated with extending credit to customers is important hence the need for owners of SMEs to know the costs such as the time value of money tied up in accounts receivable, cost of bad debts that occur, collection costs and clerical costs associated with maintaining credit records.

The study recommends that the SMEs should adopt a strategy whereby inventories are held in the businesses based on the demand for the goods. The extent to which a firm efficiently manages its inventories can have a large influence on its profitability. Thus keeping abreast of inventory policy is critical to the profitability of any firm. Training SMEs on effective inventory policy is of importance as it will assist them attach great importance on the following factors that influence the amount of inventory that a firm should maintain. This include level of sales, length of time and technical nature of the production process, durability or perishability and cost of holding inventories.

5.5 Limitation of study

The study was only limited to SMEs in Kisumu City. There were however some challenges. The first was financial resource and this made the researcher not to be able to collect the required data in time as it was quite expensive to move round collecting the data. The limited resources also made him have only few personnel to assist in collecting the data for the study. This was however taken care of by having the personnel working extra to compensate for the little financial resources.

The other limitation was with respect to administration and collection of the questionnaires. Some of the respondents were unable to fill in the questionnaire in time thus prompting more visits. Due to this the study was not able to get all the respondents. However the study was able to get more than 75% respondents which Cooper and Schindler (2000) state that it is the threshold for any social research to continue.

5.6 Suggestion for further study

The study suggests that in future researchers should conduct the same study in other counties so as to compare with the findings of this study.

The study recommends that in future researchers should do a follow up study in the same area so as to monitor and evaluate for improvements in the management of working capital components.

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APPENDIX 1

QUESTIONNAIRE

This questionnaire has been developed to collect data required for a study title; Investigation into relationship between working capital components and profitability of small and micro enterprises in Kisumu county- Kenya (case study in Kisumu East District). Please complete the questionnaire form to aid the study. The data is required for academic purpose only and will be treated with strict confidentiality. Your cooperation will be highly appreciated.

Section One : (a) Firm Profile.

1. Name of the firm...
2. What type of business organization is your firm ? (Tick the appropriate one)

   Sole proprietor ☐

   Partnership ☐

   Limited company ☐

   Other (specify)......................................
3. Number of years in operation..
4. Which of the following source have you used to finance your business?

   (i) Personal savings ☐

   (ii) Family funds ☐

   (iii)Bank overdraft ☐

   (iv) Loans ☐

   (v)Others (specify)

Section One; (b) Personal Profile

1. Which of the following best describe your current situation (tick one type)

   (i) Business is my only source of income ☐

   (ii) I have part time employment ☐

   (iii) I have fulltime employment ☐

   (iv) I have income from other properties ☐
2. Please indicate if you have experienced any financial problem in the past.

   Yes ☐ No ☐

If yes, specify..

....

....

....

Section Two

1. For each of the following please circle only one of the respective number to indicate how important the factor has influence in your business performance.

Key

1.................Not important

2.................Important

3.................Very important

(a) Cash management 1 2 3

(b) Debt collection 1 2 3

(c) Inventory control / stock control 1 2 3

(d) Managing accounts payables / creditors 1 2 3

3. What practical constraints do you experience in managing the following:

(a) Office cash..

....

....

(b) Debt collection...

....

....

(c) Inventory control /stock control ....

....

....

(d) Managing accounts payables/creditors.......................................

....

....

Please indicate the sales turnover in Kenya shillings for last year. (state the appropriate amount in shillings)

....

6. What is the average value of stock maintained in Kenya shillings per year? (state the appropriate amount in shillings)

....

7. Do you purchase in cash or on credit?

Yes ☐ No ☐

8. Does the firm take advantage of cash discount that is offered by creditors?

Yes ☐ No ☐

11. Please indicate the average amount in the following areas of operation.

(a) Average amount spent in cash purchases in the last one year. (State the appropriate amount in shillings)

....

(b)Average amount spent in credit purchases in the last one year (state the appropriate amount in shillings)

....

(c) Please indicate the total value of creditors in your business i.e. money you owe your supplies in Kenya shillings

....

(f)What is the average amount of credit sales in a year? (Please tick as appropriate)

....

(h) What is the total debt per year (money owed to your business) in Kenya shilling?

....

(i)Please indicate the costs incurred per month in the following; (state the appropriate amount in shillings)

Salaries ....

Rent ....

Electricity...

Telephone...

APPENDIX 2

	S	N	S	N	S
10	10	220	140	1200	291
15	14	230	144	1300	297
20	19	240	148	1400	302
25	24	250	152	1500	306
30	28	260	155	1600	310
35	32	270	159	1700	313
40	36	280	162	1800	317
45	40	290	165	1900	320
50	44	300	169	2000	322
55	48	320	175	2200	327
60	52	340	181	2400	331
65	56	360	186	2600	335
70	59	380	191	2800	338
75	63	400	196	3000	341
80	66	420	201	3500	346
85	70	440	205	4000	351
90	73	460	210	4500	354
95	76	480	214	5000	357
100	80	500	217	6000	361
110	86	550	226	7000	364
120	92	600	234	8000	367
130	97	650	241	9000	368
140	103	700	248	10000	370
150	108	750	254	15000	375
160	113	800	260	20000	377
170	118	850	265	30000	379
180	123	900	269	40000	380
190	12	950	274	50000	381
200	132	1000	278	75000	382
210	136	1100	285	100000	384

Table of determination of randomly selected samples (adopted from Kathuri & Palls)

Figure 2

N =Population Size : S = Sample size.

Adapted : Kathuri & Palls (1993)