INFLUENCE OF WORKING CAPITAL MANAGEMENT PRACTICES ON FINANCIAL PERFORMANCE OF SMALL AND MEDIUM MANUFACTURING ENTERPRISES IN NAIROBI COUNTY, KENYA

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JOMO KENYATTA UNIVERSITY OF AGRICULTURE AND TECHNOLOGY

2015

Influence of Working Capital Management Practices on Financial Performance of Small and Medium Manufacturing Enterprises in Nairobi County, Kenya

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Thesis Submitted in Partial Fulfillment for the Degree of Doctor of Philosophy in Business Administration in Finance in the Jomo Kenyatta University of Agriculture And Technology

2015

DECLARATION

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

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This thesis has been submitted for examination with our approval as University Supervisors.

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DEDICATION

This thesis report is dedicated to my dear family who have been very supportive and kept on encouraging me when things were beyond my take. For the endless support I received from my supervisor, lecturers and friends. God bless you.

ACKNOWLEDGEMENT

My sincere gratitude also goes to my supervisors Prof. Gregory Namusonge and Dr Margaret Oloko and the staff of School of Entrepreneurship, Procurement and Management at Jomo Kenyatta University of Agriculture and Technology for their support and assistance. It was privilege to have them as my academic mentors. I thank them for endless remarks and coaching. They taught me how to be perfect all the time and for never saying "No" whenever I needed their help and for counseling me whenever it was necessary. I offer my bountiful thanksgiving to Dr.WillyMuturiof Jomo Kenyatta University of Agriculture and Technology for his quality scholarly skill, excellent tireless guidance and encouragement. I thank him for innumerable and valuable assistance with the work and for always offering me needed guidance and constantly encouraging me throughout the time which was very tumultuous. His questions have helped to clarify many of the issues discussed in the project. Secondly I would wish to thank my family for moral support, financial support and encouragement and their understanding when I was not there for them during the period I was working to come up with this seminar paper; I wouldn't have made it this far without them. Finally, I would like to thank God Almighty who has brought me this far and providing me with strength, knowledge and vitality that has helped me to make this study a reality.

God bless you all.

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ABBREVIATIONSANDACRONYMNS

ACP	Average Collection Period
APP	Average Payment Period
CAM	Current Assets Management
CCC	Cash Conversion Cycle
CED	Committee of Economic Development
GDP	Gross Domestic Product
ITD	Inventory Turnover in Days
SME	Small and Medium Enterprises
WCM	Working Capital Management
NPV	Net Present Value
RBV	Resource Based View
ROA	Return on Assets
ROE	Return on Equity
VIF	Variance Inflation Factor

DEFINITION OF TERMS

Cash management -is the process of planning and controlling cash flows into and out of the business, cash flows within the business, and cash balances held by a business at a point in time (Pandey, 2008).

Account receivable-consist of the credit a business grants its customers when selling goods or services which take the form of either trade credit which the company extends to other companies or consumer credit, which the company extends to its ultimate consumers. (Joshi, 2000).

Inventory management- This is the management of a set of policies and controls that monitor levels of inventory and determine what levels should be maintained, when stocks should be replenished, and how large orders should be. (Chandra, 2010)

Account Payableare debts that must be paid off within a given period of time in order to avoid default. For example, at the corporate level, AP refers to short-term debt payments to suppliers and banks.(Ngotho, 2009).

Financial Performance-is the growth as a result of expanding the sales operations or assets and usually a major strategic objective of a business.(Lazaridis,2008).

Medium Enterprise – Business with employees less than 250 but more than 50 (Meridith, 2010)

Small Enterprises- A small enterprise is a business operated with a small number of employees numbering upto 50 workers with a turnover of up to 1million (European Union, 2010)

Profitability - This refers to the state or condition of yielding a financialprofit or gain. It is often measured by price to earnings ratio (Pandey, 2008).

Small and Medium Enterprises (SMEs) –Small and medium-sized enterprises (SMEs) refers to enterprises which employ 6 to 50 persons and which have an annual turnover not exceeding 50 million euro, and/or an annual balance sheet total not exceeding 43 million euro (European Commission, 2010)

FinancialManagement- defines financial management based on mobilizing and using sources of funds: Financial management is concerned with raising the funds needed to finance the enterprise's assets and activities, the allocation of theses scare funds between competing uses, and with ensuring that the funds are used effectively and efficiently in achieving the enterprise's goal(Lazaridis,2008)

ABSTRACT

The purpose of this study was to find out the influence of working capital management on financial performance of Small and Medium manufacturing Enterprises in Nairobi County in Kenya.The research employed a survey design comprising of quantitative data collection approach. The target population was 176 SMEs from manufacturing sector. The study applied both probability and non probability sampling procedures to obtain a sample of 121 SMEs required for the study. To achieve the objective of the assessment, primary data was gathered using questionnaires. Secondary data was gathered from past published scholarly articles explaining theoretical and empirical information on the influence of working capital management on the financial performance of SMEs growth in manufacturing sector. Inferential statistics such as Pearson correlation coefficient was used to analyze quantitative data. Pearson correlation coefficient was used to determine the relationship between working capital management and financial performance. The probability value (P- value) was used to test whether the calculated chi-square was significant or not..The findingsof the study revealed that about 83.7 percent of SMEs rarely or sometimes prepare cash budgets, and preparing and reviewing cash budgets are frequently based on monthly periods. At the same time, 85.3 percent of responding SMEs sometimes and often have shortage of cash while about 59.6 percent always and often have a surplus of cash. Nevertheless, only 19 percent of SMEs deposit their cash surplus into bank accounts while up to 58.9 percent of responding SMEs invested cash surplus for profit purposes.The findings of receivable management practices of SMEs in the sample revealed that51.3 percent of SMEs sometimes sell their products or services on credit and 43.1 percent often set up credit policies for the customers. However, there are still 1.6 percent of SMEs that tend to sell on credit to anyone who wishes to buy. The study revealed that 37.2 percentof SMEs review their levels of receivables and bad

debts monthly. As a result, the percentage of bad debts is controllable and maintained at a relatively low level.It was noted that 58.7 percent of responding firms answeredthat they determine inventory level based on owner/manager's experience while 34.0 percent based on historical data. Approximately, 7.3 percent used theories of inventory management Based on the above findings, the study recommends that the government should be able to come up with good working capital management policies to guide the SMEs in their working capital management in order to maximize their returns. This is because proper working management practices are essential for the success of SMEs in Kenya.

CHAPTER ONE

INTRODUCTION

1.1 Background

The corporate finance literature has traditionally focused on the study of longterm financial decisions (Shah, 2010). The investment that firms make in short-term assets, and the resources used with maturities of under one year, represent the main share of items on a firm's balance sheet (Waweru, 2010) .The working capital management deals with the management of current assets and current liabilities (Ross, 2010). According to Van Horne and Wachowicz (2010), excessive levels of current assets can easily result in a firm realizing a substandard return on investment. At the same time, too few current assets may incur shortages and difficulties in maintaining smooth operations of a firm. Rao (2011) observed that managers spend considerable time on day-to-day problems that involve working capital decisions.

In reference to the global perspective, it is apparent that since the government introduced the series of economic reforms, the private sector has rapidly grown in terms of the number of businesses, capital and employees (Barr, 2011). In the United States of America (USA), SMEs provide approximately 75 per cent of the net jobs added to the economy and employ around 50 per cent of the private sector workforce, representing 99.7 percent of all employers (Sabato, 2010). In Australia, the SMEs manufacturing sector employs 45 percent of the workforce, and generates 55 percent of sales (Barnes, 2010). From the base of zero in 1991, the number of private businesses and limited companies had quickly risen to 28,811 SMEs in 2010 (Meredith, 2011). Meredith further observed that SMEs have contributed considerably to growing GDP and creating jobs for labourage people.

In Kenya, SMEs are acknowledged by the government as vital and significant contributors to economic development through their critical role in providing job opportunities, reducing poverty levels, nurturing the culture of entrepreneurship and are a vital link in the economy through their supply chain and intermediary role in trade (Oketch, 2009). Oketch further added SMEs in manufacturing sector is the fourth biggest sector after agriculture, transport and communication, and wholesale and retail trade. It contributed about 10.1 per cent of Kenya's GDP serving both the local market and exports to the East African region. The sector, which is dominated by subsidiaries of multi-national corporations, contributed approximately 18 percent of the Gross Domestic Product (GDP) in 2009 (GoK, 2010)

According to the Economic Survey of 2006, small scale enterprises contributed over 50 percent of new jobs created in the year 2005 and over 20 percent to the Gross Domestic Product (GDP) of the country. In recognition of this indispensable role, the Government of Kenya has instituted enterprise support programmes including the introduction of Women and Youth Enterprise Funds in the years 2006 and 2007 respectively to fuel the development of these enterprises (GoK, 2010). Micro finance institutions have joined the foray in providing them with microcredit hence, seeing their access to microcredit increase from 7.5 percent in 2006 to 17.9 percent in 2009 (FSD Kenya, 2009).

Small and Medium enterprises are new and growing business which (for any number of reasons) do not grow beyond a certain size (Thomson & Martin 2005). The Kenya Bureau of Statistical (KBS) consider firms with fewer than ten employees as small -scale enterprises and their counterparts with more than ten employees as medium and large sized enterprises. The KBS in its national accounts considered companies with up to 9 employees as SMEs. (Kayanula & Quartey 2000).According to the Mathura (2010), SME‟s contributes substantially to reducing the high unemployment rate and to the growth of the economy of Kenya. SME‟s account for a significant share of the economic activity in Kenya and can play an important role in achieving the Millennium

Development Goals (MDGs). The long term goals is for SME"s to maximize their contribution to the Country's economic and social development with respect to production, income distribution and employment and the closer integration of women and people in rural areas within the national economy (NBSS, 1981). One of the significant characteristics of flourishing and growing economy is booming small and medium enterprises (SMEs).

Small and Medium enterprises play an important role in the development of Kenya in various ways by creating employment for rural and urban growing labour force, providing desirable sustainability and innovation in the economy as a whole. The small and medium scale enterprises have obvious advantage for a developing country like Kenya because it provides the means of entry for new entrepreneurial talent. Small and medium scale business sector serve as a seed bed from which new large companies will grow but lack of managerial know-how places significant constrains on SMEs development. Even though SMEs tend to attract motivated managers, they can hardly compete with large firms.

In Nairobi County, Small and Medium Enterprises (SMEs) in manufacturing sector play significant role in business and economy, by their very nature of large numbers (Wanjoi, 2012). Wanjoi added that SMEs create competitive pressure in the market thereby bringing about quality goods and services. They also represent the economic power house responsible for creation of new jobs, poverty eradication and a major source of technological innovation and new products (Waweru, 2011)

This study will be guided by agency theory. The agency theory postulates that the day to day running of a business enterprise is carried out by managers as the agents who have been engaged by the owners of the business as principals who are also known as shareholders. The theory is on the notion of the principle of two sided transaction. It holds that any financial transactions involve two parties and both act on best interest but

with different expectations. The major problem associated with this theory includes information asymmetry, moral hazard and adverse selection (Kwame, 2010)

Working capital management plays an important role of overall corporate strategy in order to create shareholder value (Cox, 2010). Working capital is regarded as the result of the time lag between the expenditure for the purchase of raw material and the collection for the sale of the finished good. The main purpose of any firm is to maximize the profit (Shah, 2010). Maintaining liquidity of the firm also is an important objective. The problem is that increasing profits at the cost of liquidity can bring serious problems to the firm. Thus, strategy of firm must be a balance between these two objectives of the firms. Because the importance of profit and liquidity are the same so, one objective should not be at cost of the other. If we ignore about profit, we cannot survive for a longer period (Shah, 2010). Conversely, if we do not care about liquidity, we may face the problem of insolvency. For these reasons working capital management should be given proper consideration and will ultimately affect the profitability of the firm.

Conceptually, cash management involves the determination of the optimal cash to hold by considering the trade-off between the opportunity cost of holding too much cash and the trading cost of holding too little (Ross et al, 2008). Atrill (2010) stressed that there is need for careful planning and monitoring of cash flows over time so as to determine the optimal cash to hold. Inventory management should be undertaken to maximize the value of the firm (Macharia, 2012). The firm should therefore, consider costs, returns and risk factors in establishing i ventory policy. Inventories represent a significant investment for SMEs in manufacturing sector. Hussain (2010) also states that the aim of inventory management is to avoid excessive and inadequate levels of inventories and at the same time maintain sufficient inventory for the smooth production and sales operations.

Accounts receivables in a firm increases both the net working capital and the costs of holding and managing accounts receivables and both lead to a decrease in the value of

the firm (Michalski, 2007). A study by Juan and Martinez (2002) emphasized that firms can create value by reducing their number of days of accounts receivable, thus confirmed the finding of Deloof (2008) who established that the length of receivables collection period has a negative effect on a firm's performance.

Financial performance can be determined through profitability, return on assets and return in equity (Mureithi, 2009). Income statements are very useful in measuring financial performance where many kinds of ratio analysis can be calculated (Madura 2008).Based on this background, this study is designed to determine the role of working capital management on the financial performance of SMEs in manufacturing sector in Nairobi County in Kenya.

1.2 Statement of the Problem

Working capital management is an important issue in small and medium enterprises (SMEs). This is because without a proper management of working capital components, it's difficult for the SMEs to run their operations smoothly. That is why Brigham and Houston (2003) mentioned that about 60 percent of a typical financial manager's time is devoted to working capital management. SMEs are required to maintain the liquidity for day-to-day operation to ensure their smooth running and to meet their obligation (Eljelly, 2004). Working capital management among SMEs has been major concern especially in the developing countries.

SMEs in manufacturing sector ideally undertake the operation of working capital management with the aim of maximizing the profit which is a form of measuring financial performance. This can be realized if the managers of SMEs have proper understanding and training of working capital management. However, this potential aim is often not fulfilled by some SMEs because of particular set of problems in their management. Therefore, it implies that the working capital management perhaps has an influence in the SMEs performance. According to Chong (2008), 60 percent of SMEs

have not appointed trained and experienced financial managers to be in charge of working capital management of these enterprises. Wanjoi (2008) observed that 70 percent of owner-managers have no formal training in management skills, especially on working capital management.

However, despite the importance of working capital management, its influence on financial performance has not attracted adequate attention of researchers in Kenya. This is attested to by the limited literature on this important subject. Most of the work in this area has been undertaken in developed countries. Thus, there is a glaring gap in literature with respect to developing countries which this study sought to fill. Hence, lack of proper research study on the area gives a chance for Kenya SMEs managers to have limited awareness in understanding the nexus between working capital management and SMEs financial performance. Therefore, by keeping the above problem in mind, the study tried to find out the influence of working capital management on financial performance of SMEs in manufacturing sector in Nairobi County in Kenya

1.3 Objectives of the Study

The study had both general and specific objectives.

1.3.1 General Objective

The general objective was to investigate the influence of working capital management practices on financial performance of Small and Medium manufacturing Enterprises in Nairobi County in Kenya.

1.3.2 Specific Objectives

The specific objectives of the study were to:

1. Determine the influence of cash management practice on financial performance of Small and Medium manufacturing Enterprises in Nairobi County in Kenya.

2. Establish the influence of accounts receivable management practice on financial performance of Small and Medium manufacturing Enterprises in Nairobi County in Kenya.
3. Determine the influence of inventory management practice on financial performance of Small and Medium manufacturing Enterprises in Nairobi County in Kenya.
4. Establish the influence of account payable management practice on financial performance of Small and Medium manufacturing Enterprises in Nairobi County in Kenya.

1.4 Research Questions for the Study

1. What is the influence of cash management practice on financial performance of Small and Medium manufacturing Enterprises in Nairobi County in Kenya?
2. What is the influence of accounts receivable management practice on financial performance of Small and Medium manufacturing Enterprises in Nairobi County in Kenya?
3. What is the influence of inventory management practice on financial performance of Small and Medium manufacturing Enterprises in Nairobi County in Kenya?
4. What is the influence of account payable management practice on financial performance of Small and Medium manufacturing Enterprises in Nairobi County in Kenya?

1.5 Hypothesis for the Study

Ha_1: Cash Management practice has a significant influence on financial performance of Small and Medium manufacturing Enterprises in Nairobi County in Kenya.

H_{a2}: Accounts Receivable Management practice has a significant influence on financial performance of Small and Medium manufacturing Enterprises in Nairobi County in Kenya

H_{a3} : Inventory management practice has a significant influence on financial performance of Small and Medium manufacturing Enterprises in Nairobi County in Kenya..

H_{a4} : Accounts payable managementpractice has a significant influence on financial performance of Small and Medium manufacturing Enterprises in Nairobi County in Kenya..

1.6 Significance of the Study

Working capital management practices are significant facets of financial management. The study of working capital management practices and financial performance of SMEs provides insights into the feasible and desirable growth pattern. Since SMEs dominate industrial scene in developing countries, their profitability understanding is very significant to the government, entrepreneurs, research institutions and the community (Namusonge, 2008).

1.6.1The Policy Makers

Knowledge of working capital management like cash management, inventory management, account payable and account receivable management are of great value to policy makers. For example, policy interventions and international development aid intended for growth oriented enterprises could be targeted if the practices are known. The information obtained from this study can be used by economic planners who require knowledge of financial management practices. This knowledge can be used to identify their needs for training, finance and technical assistance.

The government and the private sector need to develop effective, result oriented courses, seminars and programmes. The findings will enable management of SMEs come out with pragmatic policies for effective management.

1.6.2 Entrepreneurs

Classification of entrepreneurs on the basis of differences of personality profiles has found empirical support (Smith, 2010; Carland et al, 2008). These studies have established that entrepreneurial intention of an "opportunistic entrepreneurs" to succeed sets them apart from other entrepreneurs. Since entrepreneurs are not homogeneous group they can be classified as either "opportunistic" or "craft" using Smiths' classification system. The most aggressive and ambitious ones would be classified as "opportunistic entrepreneurs" and the more docile, conservative and non-aggressive types would be classified as "craft entrepreneurs", (Smith, 2010). This classification will enable entrepreneurs to understand their limitations and factors which will enable them to succeed.

1.6.3. Research institutions

Empirical studies on entrepreneurship in Africa are particularly scarce. The study will equally be useful to researchers since it will provide the literature for the future research and also add the knowledge in this area. It will supplement other studies on African entrepreneurship (Kilby, 2010; Harris, 2008; House, 2011; McCormick, 2008; Macharia, 2012; and Berry, 2011). The study will also play a significant role of engineering further research into other aspects of the topic under consideration or other related topics. This would provide various solutions to some of the problems in SMEs.

1.6.4 The Community

Apart from the entrepreneurs, the community will form a major beneficiary of the study. The community in which the SMEs find themselves may form a large market for the product or services provided by the enterprise. There is need to sensitize the community

about the working capital management practices. Successful SMEs may turn out to be role models for their own localities. SMEs that operate in the community stimulate the circulation of money but does not increase the amount of money in circulation unless it reduces the leakage of money from the community. In view of the critical role these SMEs play in the economy, it is essential to identify the relationship between working capital management practices and the SME profitability.

Thus through the above, the study will contribute significantly to the development of the Finance industry which plays a pivotal role in the development of the economy.

1.7 Scope of Study

The study was carried out in Small and Medium scale Enterprises in Nairobi County between May 2012 to December 2013. The population of Nairobi, Kenya is 2,750,547 according to the Geo Names geographical database of 2012. Nairobi County is divided into three trading zones namely: Westland, Eastland and Southland. The study focused on the role of working capital management on profitability of SMEs in Nairobi County in Kenya. According to the GoK (2013), Nairobi County has 5185 SMEs of which 600 SMEs are from manufacturing sector followed by Nakuru county 2045 SMEs and Kisumu County 1560 SMEs among others. Therefore, given the highest number of SMEs in Nairobi, it provided a good scope for this study as compared to other counties. Nairobi is also a home to many researchers like Namusonge (2008), Mathura (2010) and Wanjau (2012) among others who have written extensively on SMEs growth in Nairobi county. This has therefore contributed enormously towards this study.

1.8 Limitations of the Study

The study had limitations but this didn't hinder the researcher from carrying out the study. This study had limitation of scope of the study which led the research study to focus on a limited number of objectives. Moreover the research problem and questions

often directly or indirectly involve multiple areas of working capital management while limits of time and funds would not make all areas to be investigated. Because of limited access to scarce resources, this study could not research SMEs in all regions of Kenya but only selected SMEs located in Nairobi county as the target population and considered the target SMEs representative for all SMEs in Kenya.

Although Nairobi City is the biggest city with the largest number of SMEs located, differences in knowledge and style of management between SMEs located in Nairobi City and SMEs located in other regions may lead to differences in financial management practices. As a result, an overestimation may exist due to the higher level of management knowledge of SMEs in Nairobi county.

In terms of scope of the study, more specific limitations imposed by the approach adopted in the investigation included the concentration on internal factors of SMEs but did not capture much external environment factors. The internal business functions of the greatest concern in this study were working capital management while other functions such as production management, marketing management, and personnel management were omitted.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter reviewed the literature available on the working capital management. It summarizes the information from other researches carried out in the same field of study. The specific areas covered in this chapter are, theoretical review of literature, conceptual framework, empirical review, and the assessment of the gaps to be filled by the study.

2.2. Theoretical Framework

This section discusses the theories that relate to the working capital management and SMEs profitability. Theories of working capital management are applicable to run an organization. These theories are designed and developed for promising positive cash flow and maximizing the profit to stakeholders. Working capital theories comprise of large complex strategies for administration, maintenance of financial operations and minimizing risk involve in different aspects of such operations. By using financial management theories and principles, it becomes easy for executives to figure out way to handle various affairs of an organization. Some of the theories that are applicable to run an organization are as follows:

2.2.1. Agency Theory

Agency theory deals with the people who own a business enterprise and all others who have interest in it like managers, banks, creditors, family members and employees. The agency theory postulates that the day to day running of a business enterprise is carried out by managers as the agents who have been engaged by the owners of the business as principals who are also known as shareholders.

This theory places emphasis on transaction costs, contracting analysis following the work of Coase (1937) Jensen and Meckling (1976) and most important, Stiglitz and Weiss (1981).The work of these writers all point to the challenges that surround ownership, contractual agreements, management interrelationship, credit rationing etc between SMEs and external providers of finance, thereby subjecting firms to the risk of asset substitution which in practice means a change in the firm's asset structure. For very small and micro-enterprises this asset substitution may well take place between the enterprise and the owner's household. As described in the report by South African reserve bank (2004)

The presence of these problems in small firms may explain the greater use of collateral lending to small firms as a way of dealing with these agency problems. Lenders' strategies for dealing with these problems also add significantly to the cost of dealing with this sector. For a large enterprise the evaluation of an application for finance may be limited to the assessment of an (audited) set of financial statements and supporting documentation provided by the applicant, while for SMEs the assessment frequently has to go far beyond this, implying a substantially higher transaction cost.

The theory is on the notion of the principle of two sided transaction. It holds that any financial transactions involve two parties and both act on best interest but with different expectations. The major problem associated with this theory includes information asymmetry, moral hazard and adverse selection (Kwame, 2010). According to Stiglitz and Weiss (1981), agency problems such as asymmetric information and moral hazards can impact on the availability of credit and hence the capital structure of SMEs. Stiglitz and Weiss termed this phenomenon as credit rationing.

2.2.2 Resource-Based Theory

Resource-based view has become one of the most influential and cited theories in the history of management theorizing. It aspires to explain the internal sources of a firm's

sustained competitive advantage (Kraaijenbrink, Spender & Groen, 2010). It was Penrose who established the foundations of the resourced-based view as a theory (Roos & Roos, 1997). Penrose first provides a logical explanation to the growth rate of the firm by clarifying the causal relationships among firm resources, production capability and performance. Her concern is mainly on efficient and innovative use of resources. She claimed that bundles of productive resources controlled by firms could vary significantly by firm, that firms in this sense are fundamentally heterogeneous even if they are in the same industry (Barney & Clark, 2007). Wernerfelt (1984) took on a resource perspective to analyze antecedents of products and ultimately organizational performance and believed that "resources and products are two sides of the same coin" and firms diversify based on available resources and continue to accumulate through acquisition behaviors. The knowledge based literature of the firm fosters and develops the resource based theory in that it considers knowledge to be the most complex of an organization's resources (Alavi&Leidner, 2001). According to resource-based theory, the intellectual capital (IC) is a main source to improve enterprise growth. Therefore, intellectual capital has been studied by many past researchers who investigate the influence of intellectual capital on business performance. However, most past researchers focused on the impact of individual intellectual capital on performance while neglecting the effects of specific elements of intellectual capital.

The currently dominant view of business strategy – resource-based theory or resource-based view (RBV) of firms – is based on the concept of economic rent and the view of the company as a collection of capabilities. This view of strategy has a coherence and integrative role that places it well ahead of other mechanisms of strategic decision making. Ganotakis & Love (2010) used the Resource Based Theory (RBT) to explain the importance of human capital to entrepreneurship. According to RBT, human capital is considered to be a source of competitive advantage for entrepreneurial firms. Ownership of firm-specific assets enables a company to develop a competitive advantage. This leads to idiosyncratic endowments of proprietary resources (Barney,

1991). According to RBT, sustainable competitive advantage results from resources that are inimitable, not substitutable, tacit in nature, and synergistic (Barney, 1991). Therefore, managers need to be able to identify the key resources and drivers of performance and value in their organizations. The RBT also states that a company's competitive advantage is derived from the company's ability to assemble and exploit an appropriate combination of resources. Such resources can be tangible or intangible, and represent the inputs into a firm's production process; such as capital, equipment, the skills of individual employees, patents, financing, and talented managers. As a company's effectiveness and capabilities increase, the set of available resources tends to become larger. Through continued use, these "capabilities", defined as the capacity for a set of resources to interactively perform a stretch task or an activity, become stronger and more difficult for competitors to understand and imitate. (R&D expenditures) and can be used to augment future production possibilities. Rylander, 2001

Resource-based theory has been developed to understand how organisations achieve sustainable competitive advantages. The theory focuses on the idea of costly-to-copy attributes of the firm as sources of business returns and the means to achieve superior performance and competitive advantage (Barney, 1986; Conner, 1991; Hamel and Prahalad, 1996). A firm can be understood as a collection of physical capital resources, human capital resources and organisational resources (Barney, 1991). Resources that cannot be easily purchased, that require an extended learning process or a change in the corporate culture, are more likely to be unique to the enterprise and, therefore, more difficult to imitate by competitors. It is argued that performance differentials between firms depend on having a set of unique inputs and capabilities (Conner, 1991). According to resource-based theory, competitive advantage occurs only when there is a situation of resource heterogeneity (different resources across firms) and resource immobility (the inability of competing firms to obtain resources from other firms) (Barney, 1991). Barney (1991) argues that in order to provide competitive advantage a resource must fulfill four criteria:

1. Valuable: the resource must have strategic value to the firm (for example, by exploiting opportunities or neutralizing threats);

2. Rare: the resource must be unique or rare to find amongst the current and potential competitors of the firm;

3. Imperfect imitability: It must not be possible to perfectly imitate or copy the resource (because it is difficult to acquire; because the link between the capability or the achieved sustained competitive advantage is ambiguous; or because it is socially complex);

4. Non-substitutability: competitors cannot substitute the resource by another alternative resource to achieve the same results.

Grover (1998) explained "the essence of a resource-based theory is that given resource heterogeneity and resource immobility and satisfaction of the requirement of value, rareness, imperfect imitability, and non-substitutability, firms' resources can be a source of sustained competitive advantage" (p.84). Resource based theory treats enterprises as potential creators of value-added capabilities. Understanding the development of such capabilities and competences involves viewing the assets and resources of the firm from a knowledge-based perspective (Conner and Prahalad, 1996; Prahalad and Hamel, 1990). Prahalad and Hamel (1990) concentrate their attention on the collective learning processes of the organization, on the development of skills and technology integration. Their concept of "core competences" is related to mechanisms by which firms learn and accumulate new skills in order to develop business capabilities to outperform competitors. One of the objectives of the theory is to help managers to appreciate why competences can be perceived as a firms' most valuable asset and, at the same time, to understand how those assets can be used to improve business performance. A resource-based view of the firm accepts that attributes related to past experiences, organizational culture and competences are critical for the success of the firm (Campbell & Luchs,

1997; Hamel & Prahalad, 1996). Conner (1991) suggests that an in-house team is likely to produce technical knowledge, skill, or routine that fits better with the firm's current activities.

2.2.3 Pecking Order Theory

The pecking order theory as propagated by Myers (1984)1 states that firms finance their needs in a hierarchical order, first by using internally available funds, followed by debt and finally, external equity. According to the report by South African reserve bank (2004), this practice is more common in small firms practice and indicates the negative relationship between profitability and external borrowing by small firms. This hypothesis implies that there tends to be a negative relationship between profitability and external borrowing by small firms. In other words, assuming a zero growth, firms with high profitability would generate higher levels of internal liquidity, reducing the need for borrowing. Older firms, it may then be hypothesized, would make less use of external finance and, instead, would rely on retained funds.

Pecking Order theory of capital structure states that firms have a preferred hierarchy for financing decisions. The highest preference is to use internal financing (retained earnings and the effects of depreciation) before applying to any form of external funds (external financing). Internal funds incur no flotation costs and require no additional disclosure of proprietary financial information that could lead to more severe market discipline and a possible loss of competitive advantage. If a firm must use external funds, the preference is to use the following order of financing sources: debt, convertible securities, preferred stock, and common stock (Myers, 1984).

Implicit in pecking order theory are two key assumptions about financial managers. The first of these is asymmetric information, or the likelihood that a firm's managers know more about the company's current earnings and future growth opportunities than do outside investors. The use of internal funds saves managers from having to make public

disclosures about the company's investment opportunities and potential profits to be realized from investing in them. The second assumption is that managers will act in the best interests of the company's existing shareholders. The managers may even forgo a positive-NPV project if it would require the issue of new equity, since this would give much of the project's value to new shareholders at the expense of the old (Myers & Majluf, 1984).Pecking Order hypothesis ‟s predictions about leverage, debt typically grows when investment exceeds retained earnings and falls when investment is less than retained earnings as opposed to a more complex view of the model. More recent study on pecking order hypothesis documented Fama and French (2002) have tested some qualitative predictions of the pecking order theory. In their findings suggest that more profitable firms are less levered and this is consistent with the Pecking Order.

The main objective of the pecking order theory is to point out that asymmetric information and signaling problems exists between managers and less-informed outside investors. In this order firms tend to exhaust their internal funds first, use safe debt second and riskier external equity as a last resort. A financial hierarchy is apparent which exemplifies that when firms are facing financial deficits they tend to go further down the pecking order. According to Brealey et al (2006) the pecking order theory work best for large and mature firms that have access to public bond markets, prefer internal financing and rarely issue equity. In case of smaller growth firms the pecking order theory seems to be inconsistent with empirical studies. Brealey *et al* (2006) mentions that when external financing is required these smaller firms are more likely to rely on equity issuance which is against the theory of Pecking Order. According to Myers (1984), the Pecking Order Theory (POT) suggests that there is no well-defined optimal capital structure; instead the debt ratio is the result of hierarchical financing overtime. The foundation of POT is that firms have no defined debt-to-value ratio. Management has a preference to choose internal financing before external financing. When a firm is forced to use external financing sources, managers select the least risky

and demanding source first. When it is necessary to issue external sources, debt issuance is preferred to new equity.

2.2.4 Transaction Cost Theory

The Transaction Cost Theory was formulated by Commons (1934) and reinforced by Coase (1937), Arrow (1969, 1974) and Williamson (1985, 1991). According to Arrow (1969), transaction costs are the costs involved in running the economic system. Coase (1988) suggests that there are always costs for carrying out market transactions. Therefore, a firm would prefer transactions to be organised within the firm if the cost would be less than the cost of carrying out the transaction in the market. However, as the additional costs of transactions within the firm exceed the cost of carrying out the transaction through the market, firms attempt to reduce transaction costs by vertical integration (Williamson, 1991). Therefore, the rationale behind the transaction cost theory is that market costs are usually too high for firms to overcome individually. This leads to the creation of linkages for small firms (Thorelli, 1986).

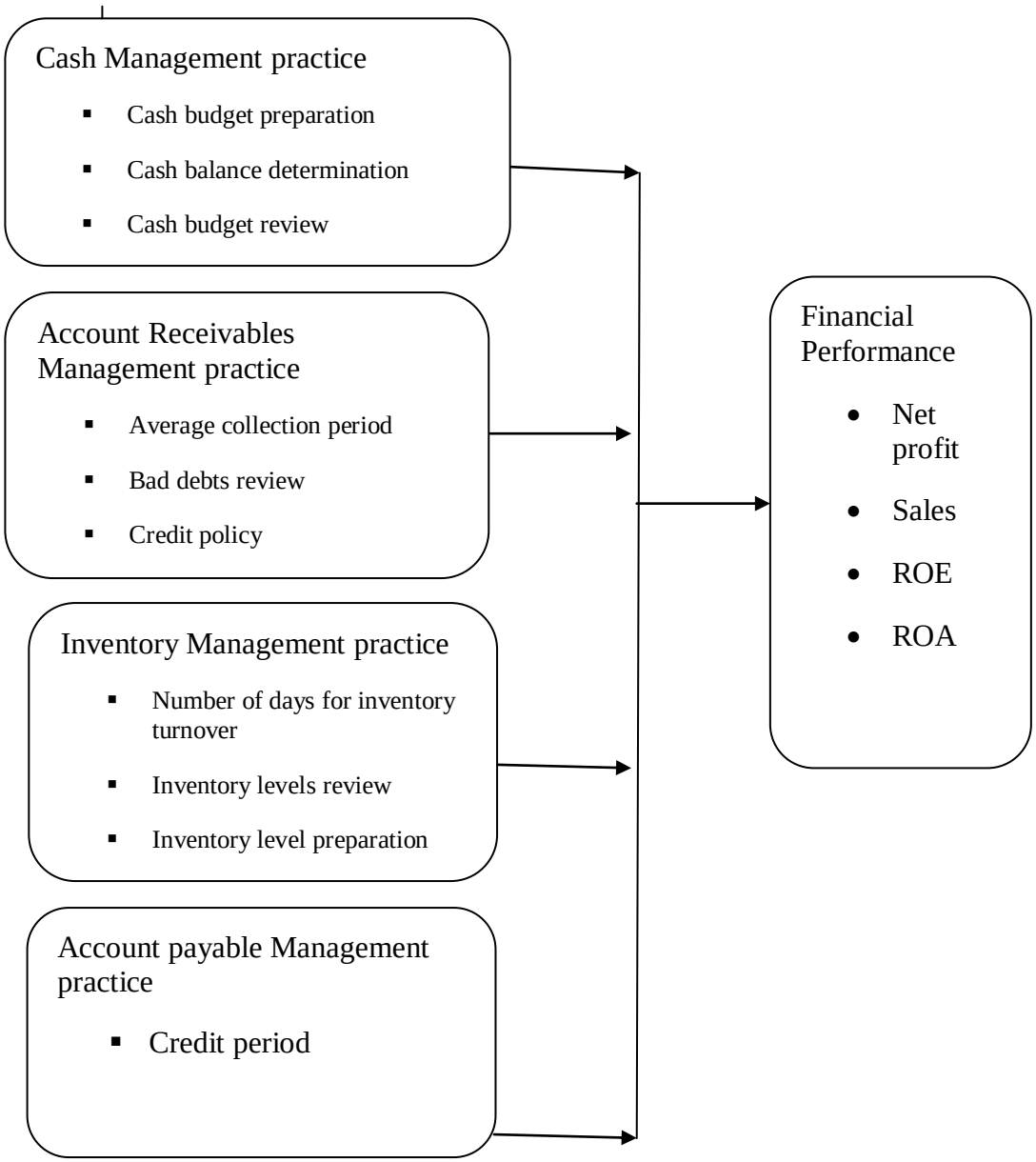
From a transaction theory perspective, a firm needs to consider two main costs, market transaction costs and control costs, as their part of internationalization process (Williamson, 1985; Hennart, 1989). These costs occur as the result of environmental and behavioral uncertainties, opportunism, and asset specificity (RindfleischHeide,1997). Heide (1994) states both environmental and behavioral uncertainties refer to the market changes that is unpredictable together with the uncertainty of possible firm action of reaction. Such unpredictability leads to the contractual constraints, which denote every possibility and consequent response become more ineffective (Heide, 1994). The opportunism can be defined as acting based on self interest with astuteness (Williamson, 1985). Lastly, Williamson (1985) also suggests that asset specificity refers to the fact that the relation between partners is transaction-specific assets that cannot be reorganized easily. Transaction cost theory (TCE) at its core, focuses on transaction and the costs that attend completing transactions by one institutional mode rather than

another (Williamson, 1975). The transaction, a transfer of a good or service is the unit of analysis in the TCE and the means of effecting the transaction is the principal outcome of interest (Williamson, 1985).

The theory's central claim is that transactions will be handled in such a way as to minimize the costs involved in carrying them out. The goods in this case refer to finances committed to for working capital management. In working capital management, the four elements cash, debtors, stock and creditors stand out as the key problems, whose management involves rigorous planning and resource commitment. For example, stocks can be modeled mathematically to formulate a basic policy outlining when stocks should be ordered, what quantity and the associated cost. In a SME environment, the tools for such action may be lacking or the cost of such adoption may offset the benefits of use. In most practical circumstances, firms can choose between the relative benefits of two basic types of strategies for net working capital management; they can minimize working capital investment or they can adopt working capital policies designed to increase sales. Thus, the management of a firm has to evaluate the trade-off between expected profitability and risk each of them representing an opportunity cost of the other before deciding the optimal level of investment in current assets.

2.3. Conceptual Framework

This study was guided by the following conceptual framework as adopted from financial management for small business (McMahon, 1995).



Independent variables **Dependent variable**

Figure 2.1: Conceptual Framework

According to the above conceptual framework, the financial performance which includes growth in profit, growth in sales and growth in total assets depends on the working capital management. The independent variables includes cash management, inventory management, accounts payable and accounts receivable management.

2.4 Review of Literature on Variables

The empirical literature has been discussed in terms of working capital management in small and medium enterprises, cash management, account receivable management and inventory management and financial performance. Working capital management includes both current assets and current liabilities. For the purpose of this study, the researcher shall only consider cash management, payable management, inventory management and receivable management as the variables under the study. Although working capital is the concern of all firms, it is the small firms that should address this issue more seriously, given their vulnerability to a fluctuation in the level of working capital and they cannot afford to starve of cash. Peel *et al.* (2000) revealed that small firms tend to have a relatively high proportion of current assets, less liquidity, volatile cash flows, and a heavy reliance on short-term debt. Therefore, for small and growing businesses efficient WCM is a critical component of success and survival; i.e., both profitability and liquidity (Peel, 1996). With limited access to the long-term capital markets, these firms must rely more heavily on owner financing, trade credit and short-term bank loans to finance their needed investment in cash, accounts receivable and inventory (Howorth and Wilson, 1998). Studies in the UK and the US have shown that weak financial management particularly poor WCM and inadequate long-term financing (Binks and Ennew, 1996) is a primary cause of failure among small businesses (Berryman, 1983). The success factors or impediments that contribute to success or failure are categorised as internal and external factors. The factors categorised as external include financing (such as the availability of attractive financing), economic conditions, competition, government regulations, technology and environmental factors.

The internal factors are managerial skills, workforce, accounting systems and financial management practices.

Small enterprise is not an exception in the economic and social world, but a fundamental aspect of the way in which a society organises itself and produces (Day, 2000). While the performance levels of small businesses have traditionally been attributed to general managerial factors, such as manufacturing, marketing and operations, WCM may have a strong impact on small-business survival and growth. Although WCM has received less attention in the literature than long-term investment and financing decisions (Howorth, 199), yet it occupies the major portion of a financial manager's time and attention (Gitman, 2000).Given their heavy reliance on short-term sources of finance (Walker and Petty, 1998), it has long been recognized that the efficient management of working capital is crucial for the survival and growth of the small firms (Grablowsky, 1984). A large number of business failures have been attributed to inability of financial managers to plan and control properly the current assets and the current liabilities of their respective firms (Smith, 1973). In particular, the small firms may face serious problems due to the operating conditions and characteristics peculiar to them.

Evidence in the literature repeatedly points towards failure to understand cash flow shortages as a major problem of small business operators, which is often the result of poor WCM. During the life of a business, the frequent lack of liquidity to meet current obligations on their due dates is not a welcoming situation and may cause business failure. This may also be aggravated by heavy borrowing which bring along a heavy interest burden to a small business. WCM has been shown to be a major problem both at start up (Moore, 1994) and for growing firms (Dodge, Fullerton & Robbins, 1994). Peel and Wilson (1996) reported quite a disturbing result whereby 81% of the small business failure was attributed to poor financial management and banks were willing to give financial support only to those owner-managers who attended financial management training courses. Poor financial planning may be credited as the main cause of small

business failures at the different stage of the business's life cycle (Argenti, 1976). Nayak and Greenfield (1994) also reported evidence that micro firms lack signs of any systematic WCM.

In a survey undertaken by the Small Business Service Council, UK (2001) '*lack of working capital*' was cited as the top five short-term constraints by SMEs. Similarly, Howorth and Westhead (2003) found that small firms have a lower intake of WCM practices. Timmons (1994) and others also point to a number of factors including strategic errors, weak financial skills, poor management reporting as the determinant of failure. The study of Kargar and Blumenthal (1994) showed that despite having healthy operations and profits, many enterprises fail owing to mismanagement of working capital, so it is a research theme that deserves increased investigation and especially for the SMEs as it is the wide belief that they are an essential element of a healthy and vibrant economy.

Some research studies have been undertaken on the WCM practices of both large and small firms in India, UK, US, Australia, New Zealand and Belgium using either a survey based approach (Burns & Walker, 1991) to identify the push factors for firms to adopt good working capital practices or econometric analysis to investigate the association between WCM and profitability (Shin & Soenen, 1998). Furthermore it is noted that many of the studies in the area of working capital have tended to focus on the management of individual assets such as cash (Grablowsky, 2008), accounts receivable (Lewellenand Johnson, 2008), late payment and credit management (Peel *et al*., 2000; Drever and Armstrong, 2005), accounts payable (Walker, 1980) and inventory (Grablowsky, 1984). But the few studies currently undertaken on the overall WCM/policies used primary data to gauge the take-up of best practices in the area of working capital (Howorth & Westhead 2003; Peel & Wilson 1996). The important finding of those studies was a significant relationship between various success measures and the employment of formal working capital policies and procedures. Given the

evolutionary process of financial management practices, some researchers have also used a qualitative approach (case study) to better understand the owner-manager's approach to financial management (Deakins, *et al.*, 2001, 2002; Ooghe, 1998). Other studies in the area of WCM have used a quantitative approach, a qualitative approach or a mixed approach.

Previous study (Deloof, 2008) have focused their analysis on larger firms. However, the management of current assets and liabilities is particularly important in the case of small and medium-sized companies. Most of these companies' assets are in the form of current assets. Current liabilities are one of their main sources of external finance in view of their difficulties in obtaining funding in the long-term capital markets (Petersen & Rajan, 2012). In this respect, Scott (2010) show that small and medium-sized US firms use vendor financing when they have run out of debt. Thus, efficient working capital management is particularly important for smaller companies (Peel, 2011).

According to Okech 2000, in manufacturing firms, the current assets account for over half of their total assets. For a distribution company, they account for even more. Excessive levels of current assets can easily result in a firm's realizing a substandard return on investment. However, Van Horne and Wachowicz (2008) point out that excessive level of current assets may have a negative effect of a firm's profitability, whereas a low level of current assets may lead to lowers of liquidity and stock-outs, resulting in difficulties in maintaining smooth operations.

Despite the increased attention paid to the SME sector both in developed and developing countries, there is comparatively little knowledge about the process of financial management and to what extent SMEs' growth are being inhibited as a result of poor WCM practices. The research undertaken so far has increased our understanding with regards to the overall numbers of small firms, their characteristics, the number of jobs created, the number of small firms concerned with the take-up and use of support schemes, the number of firms that are using different forms of finance (Winborg, 1997)

and which economies in the world have probably the most dynamic SME populations. However our knowledge on process issues, such as financial management decisions in SME remains something of a '*black box*' (Deakins*et al.*, 2001). However, the biggest problem which most SMEs usually face is that of a lack of liquidity, which is often the result of late payment or poor credit management (Howorth & Wilson, 2009). Ironically, their operations may turn out to be very profitable in the long run, but due to liquidity (cash flow) problems, they get into financial difficulties. On this note, Kolay (1991) highlighted that firms need to systematically plan for adopting suitable short and long-term strategies to manage and avoid future working capital crisis.

2.4.1 Cash Management Practice

Managing cash is becoming ever more sophisticated in the global and electronic age of the 1990s as financial managers try to squeeze the last dollar of profit out of their cash management strategies (Block & Hirt 1992).According to Mclaney (2000) cash is much more than just one element of working capital. As the medium of exchange and store of value, cash provides the linkage between all financial aspects of the firm. More specifically it links short and long-term financing decisions with one another, with decision involving investment both in fixed assets and working capital. Clearly, cash management is one of the key roles in any organisation of any size description. Meyer, et al (1992) observes that cash and marketable securities are the most liquid of the company's assets. Cash is the sum of currency a company has on hand and the funds on deposit in bank checking accounts. Cash is the medium of exchange that permits management to carry on the various functions of the business organisations.

From economic theory, several writers have theorized in support of Keynes" that the motives for holding cash are merely, transactionary, precautionary and speculative. According to Keynes (1973), companies hold cash in order to bridge the interval between the time of incurring business cost and that of the receipt of the sale-proceeds. In other words, companies hold a certain amount of cash in order to meet the regular

expenses of their activity. Therefore, the higher the firm's ability to schedule its cash flows (depending on their predictability) the weaker the „transactions-motive" for holding cash will be. The transaction motive illustrates the cash holding of firms and therefore more applicable to SME"s.

A study by Kwame (2008) established that the setting of a cash balance policy ensures prudent cash budgeting and investment of surplus cash. This finding agree with the findings by Kotut (2009) who established that cash budgeting is useful in planning for shortage and surplus of cash and has an effect on the financial performance of the firms. The assertion by Ross et al. (2008) that reducing the time cash is tied up in the operating cycle improves a business's profitability and market value furthers the significance of efficient cash management practices in improving business performance. Provision of trade credit is normally used by businesses as a marketing strategy to expand or maintain sales (Pandey, 2009).

Cash management also involves the management of cash flow into and out of the firm; cash flow within the firm; and cash balances held by the firm at a point in time by financing deficit or investigating surplus cash (Pandey, 2009). Cash management involves the management of cash flow into and out of the firm; cash flow within the firm; and cash balances held by the firm at a point in time. Firms should evolve strategies regarding: cash planning, managing the cash flows, optimum cash level and investing surplus cash. Ideal cash management system will depend on the firm's product, organization structure, competition, culture, and options available (Raheman , 2008).

Grablowsky (1978) and Grablowsky and Rowell (1980) conducted a questionnaire survey concerned with the cash management practices of 66 small enterprises from a number of industries located in and around Norfolk, Virginia. The results showed that 67 percent of respondents replied they did not do forecasting of cash flows. When asked how they determined the level of cash to be held by the business, less than 10 percent of

enterprises reported using any type of quantitative technique. The method most often employed was to hold cash as a fixed ratio of projected expenses, forecasted sales or anticipated purchases. Non-quantitative methods used consisted of meeting compensating balance requirements, maintaining the level considered safe by management or achieving a level recommended by outside advisers. Additionally, seventy-one percent of business in the Virginia survey reported that they had no short-term surpluses of cash in their recent history. Only 23 percent had a long-term surplus. Nearly 30 percent of respondents had invested excess cash in earnings securities or accounts. The most common investments were savings accounts, certificates of deposit, treasury bills, repurchase agreements, commercial papers, shares, bonds and other investments.

Based on Cooley and Pullen's (1979) research, cash management was seen as the process of planning and controlling cash flows. It consisted of three basic components: cash forecasting practices, cash surplus investment practices and cash-control practices. Cooley and Pullen (1979) examined cash management practices of 122 small businesses engaged in petroleum marketing and reported that 73 percent of respondents had experienced a cash surplus.

Evidence on the cash management practices of 123 small enterprises across a variety of industries in the Canadian provinces of Quebec and Ontario was provided by Anvari and Gopal (1983). Generally, 53 percent of the sample businesses indicated that they prepared cash forecasts, substantially higher than the 30 percent figure reported by Grablowsky (1978, 1980). Respondents were also asked the basis for determining the level of their cash balances. Only 26 percent of respondents indicated they used formal techniques, using a fixed percentage of sales or expenses, for determining the level of their cash balances. Fifty-five percent of respondents claimed to have had a short-term surplus of cash and 26 percent of businesses had generated what they considered to be long-term surplus funds in the previous year

Mathuva (2009) examined the influence of working capital management components on corporate profitability by using a sample of 30 firms listed on the Nairobi Stock Exchange (NSE) for the periods 1993 to 2008. He used Pearson and Spearman's correlations, the pooled ordinary least square (OLS), and the fixed effects regression models to conduct data analysis. The key findings of his study were that: i) there exists a highly significant negative relationship between the time it takes for firms to collect cash from their customers that is accounts collection period and profitability, ii) there exists a highly significant positive relationship between the period taken to convert inventories into sales that is the inventory conversion period and profitability, and iii) there exists a highly significant positive relationship between the time it takes the firm to pay its creditors that is average payment period and profitability. Rowell (2011) conducted a survey on cash management of 66 small enterprises from a number of industries located in and around Norfolk, Virginia. The results showed that 67 percent of respondents replied they did not do forecasting of cash flows. When asked how they determined the level of cash to be held by the business, less than 10 percent of enterprises reported using any type of quantitative technique.

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2.4.2. Accounts Receivable Management Practice

Sales on credit are inevitable necessity in the business world today. No business can exist without selling the products on credit. According to (Joshi, 2000) and Meyer et al (1992), noted that accounts receivables consist of the credit a business grants its customers when selling goods or services which take the form of either trade credit which the company extends to other companies or consumer credit, which the company extends to its ultimate consumers. The effectiveness of a company‟s credit policies can have a significant impact on its total performance.

Machiraju (2005) also argue that receivables arise out of delivery of goods or rendering of services on credit. Receivables represent claims against others for future receipt of money, goods or services whose value depends upon the volume of credit sales and the policy for collecting such credits. Joshi (2000) indicated that the primary objective of investment in trade debtor is to increase profit by expanding sales to attract new customers and retain old customers. By constantly increasing its sales and profit the business carves out a bigger niche in the market and elevates its status among competitors. In determining an optimal credit extension policy, Meyer et al (1992) observe that a company's financial managers must consider a number of major controllable variables that can be used to alter the level of receivables which include credit standards, credit terms and collection effort.

Singh and Pandey (2008) had an attempt to study the working capital components and the impact of working capital management on profitability of Hindalco Industries Limited for period from 1990 to 2007. Results of the study showed that current ratio, liquid ratio, receivables turnover ratio and working capital to total assets ratio had statistically significant impact on the profitability of Hindalco Industries Limited. As

observed by Michalski (2009), an increase in the level of accounts receivables in a firm increases both the net working capital and the costs of holding and managing accounts receivables and both lead to a decrease in the value of the firm. A study by Lazaridis (2008) and Dimitrios (2008) found out that firms who pursue increase in their accounts receivables to an optimal level increase their profitability resulting from increase sales and market share.

A study by Juan and Martinez (2008) emphasized that firms can create value by reducing their number of days of accounts receivable, thus confirmed the finding of Deloof (2009) who established that the length of receivables collection period has a negative effect on a firm's performance. A study by Nyakundi (2009) also affirmed that, putting in place a sound credit policy ensures proper debt collection procedures and is pivotal in improving efficiency in receivables management hence the performance of firms. When goods or services are transferred to a customer the firm becomes a trade debt or of the supplying firm until such time that it settles its debt by making payment(Singh, 2008). Pandey(2009) indicated that trade credit is considered as an essential marketing tool, acting as abridge for the movement of goods through production and distribution stages to customers. Additionally, a firm grants trade credit to protect its sales from the competitors and to attract potential customers to buy its products at favorable terms. According to Shah (2009), while cash sales continue to dominate in manufacturing industries, situations where customers purchase goods and services on credit are increasing. Determining credit terms, selecting credit customers and monitoring the level of accounts receivable become important area form managerial decision making (Smith,2010). In determining credit policy, firms tend to strike the balance between the cost of granting credit and those associated with denying or restricting credit (Sabato, 2008). Mureithi (2009) states that one of the central issues in modern financial management is the proper evaluation of risk and return. The profitability of many firms depends very much on the institution's ability to evaluate and control credit risk.

Shah (2012) found generally low standards. Approximately 95 percent of businesses that sold on credit tended to sell to anyone who wished to buy. Only 30 percent of respondents subscribed to a regular credit reporting service. Most had no credit checking procedures and guidelines, and only 52 percent enforced a late-payment charge. Thirty-four percent of businesses had no formal procedure for aging accounts receivable. Bad debts averaged 1.75 percent of sales, with a high of 10 percent in some concerns. Singh (2008) revealed a very high level of awareness and utilization of credit control systems in the UK, even in the smallest businesses.

2.4.3 Inventory Management Practice

The word „inventory" has been defined in many ways. Ballou (2004) defines inventories as stockpiles of raw materials, supplies, components, work in process, and finished goods that appear at numerous points throughout a firm's production and logistics channel's. According to Chase, Jacob and Aquilino (2004) inventory is the stock of any item or resource used in an organization. An inventory system is the set of policies and controls that monitor levels of inventory and determine what levels should be maintained, when stocks should be replenished, and how large orders should be. Finally, Pycraft et al (2004) define inventory or stock as the stored accumulation of materials resources in a transformation system.

International Accounting Standards (IAS2) states that Inventories shall be measured or valued at the lower of cost and net realizable value. The costs of inventories comprise all cost of purchase, cost of conversion and cost incurred in bringing the inventories to their present location and condition. Inventory management should be undertaken tomaximize the value of the firm. The firm should

therefore, consider costs, returns and risk factors in establishing inventory policy. Inventories represent asignificant investmentfor many organizations. The manager, would not normally have control over inventory management alone but instead other

functional departments will usually share decision-making authority regarding inventory. Smith (2011) in his study on inventory management observed that business firms are confronted with the dilemma of attempting simultaneously to meet ever-increasing demands for improved customer service; maintain stable production operations and keep the investment in inventory at a reasonable level.

Gasse (2010) studied the utilization of management techniques in small shoe and plastic manufacturing industries in Canada and found 64 percent of shoe and 65.4 percent of plastic businesses employed formal inventory control systems. Rowell (2009) in his study on the effect of inventory management on performance found that most of the respondents had in excess of 30 percent of their capital invested in inventory; the general standard of inventory management was poor. Only six percent of businesses in their survey used a quantitative technique such as economic order quantity for optimizing inventory and 54 percent had systems which were unable to provide information on inventory turnover, reorder points, ordering costs or carrying costs.

Falope and Ajilore (2009) used a sample of 50 Nigerian quoted non-financial firms for the Period 1996 -2005. Their study utilized panel data econometrics in a pooled regression, where time series and cross-sectional observations were combined and estimated. They found 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 Nigerian Stock Exchange. Furthermore, they found no significant variations in the effects of working capital management between large and small firms.

Teruel and Solano (2009) aim at investigating the effect of working capital management on firm profitability, using a sample of 8,872 small and medium size European companies. They found that reducing inventory and average collection periods affect positively the firm value, as reducing the cash conversion cycle improves the firm's profitability

Walker (2009) examined working capital management as a whole. In their survey of working capital policy among small manufacturing firms in the USA, the following aspects of working capital were considered; working capital policy and managing working capital components, including cash, receivable, payable and inventory management, and examined. Findings can be summarized into some main points as follows: Thirty-nine percent of the company's total assets were working capital, but only 24 percent of the financial manger's time was spent on working capital. Overall, companies had an informal procedure or no written policy for working capital management. However, those that did have a written policy were probably more profitable than others.

Abel (2008) argues cash is crucial in every business in terms of enhancing its survival and prosperity. The term cash refers to the most liquid of assets, including demand deposits, money market accounts and currency holdings. The key elements of cash management are cash forecasting, balances management, administration of cash receipts and disbursements, and internal control (i.e. bank reconciliation) (Gitman, 2009). Good cash management can have a major impact on overall working capital management. It is objectively used to manage and determine the optimal level of cash required for the business operation and invested in marketable securities, which is suitable for the nature of the business operation cycle (Gitman, 2009).

2.4.4 Accounts Payable Management Practice

A firm will always wish to tie up as little cash as possible in disbursement. The idea in these systems is to have no more than the minimum amount necessary to pay bills on deposit in the Bank (Ross, 2008). The most significant source of short-termfinanceis the tradecredit and that it is relatively easy to obtain; that it varies with the amount granted; and that trade credit is an informal, spontaneous source of finance. It does not require any negotiations and form a agreement. It does not have there strictions which are usually part of negotiated sourcesoffinance. Ngaba (2008) defines credit terms as the

conditions under which the school allows students to have fee arrears. The conditions include the due date and the cash incentives. (discounts) given.

In summary, the main research areas related to these practices included cash, receivable and inventory management summarized in Table 2.1. This table shows that studies on working capital management practices conducted by previous research provided detailed descriptions of working capital management practices of SMEs. However, the role working capital management on SME financial performance have not been investigated. To date there are almost no tests of associations between working capital management and SME profitability.

Table 2.1: Working Capital Management

Researcher(s) and year	Country	Main research areas
Grablowskyand Rowell (2010)	USA	Short-term surplus of cash Low standards of receivable management
Cooley and Pullen (2009)	USA	Cash forecasting Cash surplus investment Cash control
Barrow (2010)	Canada	Preparing cash forecasts Techniques used to determine cash balance Short-term cash surplus Investment of short-term investment
Nazir (2009)	UK	Awareness and utilization of credit control system
D'Amboise and Gasse (1980)	Canada	Inventory control system
Grablowsky and Rowell (2010)	USA	Capital invested in inventory Poor standard of inventory management Methods used to determine inventory level
Teruel (2008)	UK	Frequency of using and reviewing working capital management

Source: Adapted from Abel (2008)

2.4.5. Financial Performance

English (2010) defines performance as the results of activities of an organization or investment over a given period. Lamberson (1995) point out that it is essential to recognize the multidimensional nature of the performance construct. Thus, research that

only considers a single dimension or a narrow range of the performance construct (for example, multiple indicators of profitability) may result in misleading descriptive and normative theory building. Research should include multiple performance measures. Such measures could include traditional accounting measures such as sales growth, market share, and profitability. In addition, factors such as overall satisfaction and non-financial goals of the owners are also very important in evaluating performance, especially among privately held firms. This is consistent with the view of Wanjoi (2008) that both financial and non-financial measures should be used to assess organisational performance. Van Horne et al. (2010) assert that SMEs may be differentiated from larger companies by a number of key characteristics such as personalised management, with little devolution of authority, severe resource limitations in terms of management, manpower and finance, reliance on a small number of customers, and operating in limited markets; flat, flexible structures and reactive, firefighting mentality. The significant differences in the structure and philosophy of SMEs indicate a need to assess the performance of SMEs differently from large firms. The resource limitations associated with SMEs indicate that the dimensions of quality and time are critical to ensure that waste levels are kept low, and that a high level of productivity performance is attained. Similarly, the reliance on a small number of customers suggests that to remain competitive, SMEs must ensure that customer satisfaction remains high and that they can be flexible enough to respond rapidly to changes in the market.

Cohen (2009) declares that there are four main approaches to measure the performance of organisations. These are the goal approach, sys- tem resource approach, stakeholder approach and competitive value approach. The goal approach measures the extent an organization attains its goals while the system resource approach assesses the ability of an organization obtaining its resources. For the stakeholder approach and the competitive value approach, these evaluate performance of an organization based on its ability to meet the needs and expectations of the external stakeholders including the customers, suppliers, competitors. Among these, goal approach is most commonly used

method due to its simplicity, understandability and internally focused. Information is easily accessible by the owners managers for the evaluation process. The goal approach is a better fit for the SMEs where targets are being set internally based on the owners-managers' interests and capability to achieve.

According to Raheman (2009), the goal approach directs the owners-managers to focus their attentions on the financial (objective) and non-financial measures (subjective). Financial measures include profits, revenues, returns on investment (ROI), returns on sales and returns on equity, sales growth, and profitability growth. Non-financial measures include overall performance of the firm relative to competitors, employment of additional employees, customer satisfaction, employee satisfaction, customer loyalty, brand awareness and owner's satisfaction with way the business is progressing. Atieno (2009) notes that financial measures are objective, simple and easy to understand and compute. However, financial measures suffer from being historical and are not readily available in the public domain especially for SMEs. In addition, profits are subject to manipulations and interpretations. The solution to the limitations of financial measures is to apply the non-financial measures, though subjective in nature, as supplements to the financial measures. The combinations of these two measures help the owners-managers to gain a wider perspective on measuring and comparing their performance. Emory (2009) agrees that this is a holistic approach and Balanced Scorecard approach to performance evaluation for SMEs.

Profitability is one of the most important objectives of financial management because one goal of financial management is to maximize the owner's wealth (McMahon, 2011). Thus, profitability is very important in determining the success or failure of a business. At the establishment stage, a business may not be profitable because of investment and expenses for establishing the business. When the business becomes mature, profits have to be produced. Due to the importance of profitability, Emory (2009) among other researchers have suggested that small firms need to concentrate on profitability. Mona

(2012) found profitability to be a significant determinant of a small firm's credit risk. Holmes (2008) stress the aim of a business is not only the generation of sales, but also generation of profits. Profit is especially important because it is necessary for the survival of a business. Low profitability contributes to under-capitalization problems because it leads to fewer dollars as retained earnings and therefore to a reliance on external capital (Meredith, 2010).

Firms use financial information developed by accountants to support decisions. For example, the historical revenue and cost information can be used for budgeting decisions. The marketing managers can use sales information to evaluate the impact of a particular promotion strategy while the same sales information can be used by production manager to determine the future production levels. Income statements are very useful in measuring financial performance where many kinds of ratio analysis can be calculated (Mathuva 2009).

2.5. Measurement of Financial Performance

One of the most difficult attributes of a firm to conceptualize and measure is profitability (Ross, Westerfield & Jaffe, (2009). In a general sense, accounting profits are the difference between revenues and costs. However, the problem with accounting-based measures of profitability is that they ignore risk. In the economic sense, a firm is profitable only if its profitability is greater than investors can achieve independently in the capital market. In their text, Ross et al. (2009) suggest some methods to measure profitability including profit margin or return on sales, return on assets, and return on equity.

Profit margins are computed by dividing profits by total operating revenue and thus express profits as a percentage of total operating revenue while return on assets is the ratio of income to average total assets, both before tax and after tax, and measures managerial performance.

Return on equity is defined as net income divided by average stockholders' equity, and shows profit available for stockholders. Cohen (2009) stated measures of profitability are essential in any business. In his text, he indicated many different ratios to measure profitability of the business. They included asset-earning power, return on the owner's equity, net profit on sales, and return on investment. Asset earning power is determined by the ratio of earnings before interest and tax to total assets. It indicates how much operating profit each dollar of total assets earns. Return on the owner's equity is computed by dividing net profit by average equity, and shows return that the business received in exchange for investment. The net profit on sales is determined by the ratio between net profit and net sales, and measures the difference between what the business takes in and what it spends in the process of doing business. Return on investment is simply computed by dividing net profit by total assets.

This measure is very useful for measuring profitability. There are several different ways of calculating return on investment depending upon the purpose of measure: Some researchers, who have studied financial characteristics of SMEs, also mentioned measuring profitability. For example, Kwame (2008) used three ratios: return on total assets, return on net assets and return on equity to measures SME profitability while Hutchinson, Meric and Meric (2008) measured profitability by the following ratios: net profit after tax/sales, earnings before interest and tax/total assets, and net profit after tax/owners' equity. Altman (2008), in a study of financial ratios, discriminant analysis and the prediction of corporate failure, measured profitability by two ratios: retained earnings/total assets (RE/TA) and earning before interest and taxes/total assets (EBIT/TA). According to Altman (2008), retained earnings to total asset ratio is the measure of cumulative profitability over time and the age of a firm is implicitly considered in this ratio. A relatively young firm will probably show a low RE/TA ratio because it had not had time to build up its cumulative profits. EBIT/TA ratio is

calculated by dividing the total assets of a firm into its earnings before interest and tax reductions. In essence, it is a measure of the true productivity of the firm's assets, abstracting from any tax or leverage factors.

2.5.1 SMEs Performance

The concept of SMEs performance has been interpreted variously. In applied studies, it is common to associate improvements in firm performance with increased profitability, higher efficiency and increased output (Teruel, 2008). Assessing managerial performance is a difficult task. Typically, the capital market only has the current profit statement and other public disclosures with which to assess performance. These are inadequate measures of managerial quality since they ignore "soft issues" and strategic off-the balance sheet items in such as human resource development, expansion of production capacity and Research and Development whose return can only be realized in subsequent accounting periods (Star, 2008).

Extant research addressing SMEs performance has relied on accounting-based financial indicators (Vuong, 2008; Van, 2010), market-based indicators as well as combinations of both (Waweru, 2009). The nature of a given financial performance indicator may be fundamental, as there is some disagreement regarding the extent to which any board or executive decisions might impact accounting versus market-based measures of financial performance.

According to Waweru (2009), reliance on financial accounting measures has been frequently criticized. It has been argued, for example, that such measures (1) are subject to manipulation; (2) may systematically undervalue assets; (3) create distortions due to the nature of depreciation policies elected, inventory valuation, and treatment of certain revenue and expenditure items; (4) differ in methods adopted for consolidation of accounts; and (5) lack standardization in the handling of accounting conventions. Besides, financial accounting returns are difficult to interpret especially in the case of

multi-industry participation by firms. It has been demonstrated, for example, that SMEs managers often compare SMEs performance relative to average industry performance when evaluating managerial decisions and performance (Wanjoi, 2008). It is also notable that financial accounting measures do not normally account for shareholder investment risk. Fearing the loss of their jobs, managers might put too much emphasis on how their decisions influence short-term profits and other public disclosures. Managers thus have a tendency to act myopically (Mathuva, 2009).

The emphasis on short-term performance is a common practice among executives. The danger is that current profits are over-valued by the market relative to strategic decisions that are likely to generate future profits. Hence, management will use a very high discount rate when making investment decisions. Good projects that reap their gains in the distant future will be ignored and bad projects with a short payback period accepted (Michalski, 2009). Researchers have however, relied on financial indicators of firm performance because they are readily available to the public.

The typical financial indicators that have been commonly used are Return on Assets (ROA) and Return on Equity (ROE) (Cohen, 2009: Meredith, 2010; McMahon, 2011). Over-reliance on financial indicators to judge overall SME performance is often misleading especially if the SME in question has a lot of intangible assets component in its operations including human resources, Research and Development and other non-balance sheet assets. Hence, the need to pay attention to non-financial indicators of performance, or at least one that combines aspects of both, for a more comprehensive appraisal of firm performance cannot be overemphasized (Emory, 2009).

Alternatively, market-based returns have a number of advantages. They do reflect risk adjusted performance; they are not adversely affected by multi-industry or multinational issue may, however, be that market-based performance indicators are often subject to forces beyond management control (Falope, 2009). As there appears to be no consensus regarding the efficacy of reliance on one set of indicators, a combination of financial and

market-based indicators is recommended in order to capture the issues that are under the control of management as well as those that are market-driven. For purposes of this study, Return on Assets and Return on Equity, sales growth and net profit will be utilized to gauge financial performance .

2.5.2. Return on Assets (ROA)

Return on Assets is a useful indicator of how profitable a company is relative to its total assets. The ROA is calculated by dividing a firm's annual earnings by its total assets (Pandey, 2008). This ratio is an indicator of what the company can do with what it has got, i.e., how much profit it can achieve using one unit of assets that they control. It is an indication of how effective management is in utilizing the resources that it controls to make profits (Ross, 2008). The higher the ratio the higher the profits generated per unit of assets. Return on Assets has proved to be a very useful number for comparing competing companies in the same industry. The number will vary widely across different industries. For example, capital-intensive industries (like railroads and steel structures) will yield a low return on assets, since they have to own such expensive assets to do business.

Labor-intensive companies (like software, job placement firms) will have a high ROA since their asset requirement is minimal (Shah, 2009). ROA lias been used widely in researches on corporate profitability, and found to be extremely robust. Other researchers who have used ROA include Sanger (2009), Singh (2008), Nyakundi (2008), English (2010), Ondiege (2008), and Ngaba (2008), all of whom were investigating various aspects of financial management, and their impact on financial performance.

Return on Assets (ROA) is very relevant to the current study since it enables us to evaluate the result of managerial decisions on the use of shareholder assets which have

been entrusted to them for stewardship and value creation. The major disadvantage of ROA as an indicator of profitability however, is that it ignores liabilities and non-balance sheet assets such as highly skilled human resources. It is, therefore, Ineffective in skills-based industries with heavy investments in human resources and sophisticated Information Technology processes.

2.5.3. Return on Equity (ROE)

Return on Equity refers to the earnings generated by shareholders' equity over a period of one year. ROE stands as a critical weapon in the investor's arsenal if it is properly understood for what it is. It encompasses the three main levers which management can utilize to ensure health of the organization, namely, profitability; asset management; and financial leverage. By perceiving return on equity as a composite that represents the management team's ability to balance these three pillars of SME management, investors cannot only get an excellent sense of whether they will receive a decent return on equity but also assess the management's ability lo get the job done (Meredith, 2010).

Shareholders' equity is an accounting convention that represents the assets that have actually been generated by the business (i.e. total assets less total liabilities). A business that creates a lot of shareholder equity is a business that is a sound investment, as the original investors in the business will be able to be repaid with the proceeds that come from the business operations. Businesses that generate high returns relative to their shareholders equity are those that pay their shareholders off handsomely, creating substantial assets. These businesses are more than likely to be self- funding companies that require no additional debt or equity investments. One of the quickest ways to gauge whether a company is an asset creator or cash consumer is to look at the return on equity that it generates. By relating the earnings generated to the shareholders equity, an investor can quickly see how much cash is created from the existing assets. Mona (2012) utilized ROE to study the relationship between working capital management policies and firm's profitability..

They found ROE to be extremely handy as a measure of profitability when studying the impact of external control on profitability of USA companies. Ross (2008) utilized this tool to investigate the relationship between ownership and performance of large industrial firms in the USA. A good ROE is not only an indicator of what the management team has done with the investors' assets, but also points to good strategies that would probably ensure handsome returns on future. This, therefore, is a very appropriate tool for the current study since it gauges the effectiveness of the corporate governance practices adopted by the SME.

In summary, previous researchers in the literature have used several different ratios to measure profitability of SMEs depending on their research purposes. Table 2.2 summarizes the ratios used by previous researchers to measure profitability of SMEs. Of the ratios summarized in table 2.2, three ratios: return on sales, return on assets and return on equity are the most popularly used as the measurement of SME profitability.

Table 2.2: Summary of measurements of SME profitability

Researcher(s) and year	Ratio	Measurement or computation
Altman (2008)	Return on total assets	Measure of firm's efficient use of assets
	Return on net asset	The key measure of performance
	Return on equity	A measure of the profit return to the shareholders
Hutchinson, Meric and Meric (2008)	Return on sales	Net profit after tax/Sales
	Return on assets	Earnings before interest and tax/Total assets
	Return on equity	Net profit after tax/Owners' equity
Back (2009)	Return on assets	Operating profit/Total assets
Ross (2009)	Return on investment	Return on investment ratio
Kwame. (2008)	Return on sales	Operating profit/Sales
	Return on assets	Net income/Total assets
	Return on equity	Net income/Common equity

Source: Adapted from Mona (2012)

2.6. Research Gaps in the Literature

Based on the literature, this research chapter was seeking to provide an overview of the findings of the relationship between working capital management practices and SME profitability in Nairobi County. However, there still exist gaps in the literature on working capital management practices of SMEs, which need to be examined. Smith

(2010) mentioned that about 60 percent of a typical financial manager's time is devoted to working capital management. SMEs are required to maintain the liquidity for day-to-day operation to ensure their smooth running and to meet their obligation (McMahon, 2011). Working capital management has been major issue especially in developing countries.

Wanjoi (2008) observed that 70 percent of owner-managers have no formal training in management skills, especially on working capital management. Currently, the role of working capital management of SMEs is one of the major emerging issues in developing countries which needs to be investigated (Zikmund, 2008). It appears that the role of working capital management of SMEs on financial performance in developing economies like Kenya have not been investigated especially in Nairobi county. As such, lack of empirical evidence from the emerging economies and the absence of examination of the role of working capital management on SME financial performance, are the gaps that this review found from the literature.

2.7. Summary

The literature on working capital management practices identifies efficiency of cash management, efficiency of receivables management and efficiency of inventory management as determinants of financial performance model. Financial performance could therefore be improved if efficiency levels of cash, receivables and inventory management practices are increased. The literature review further indicates that working capital management practices impact on the profitability of the firm but there is still an ambiguity regarding the appropriate variables that might serve as proxies for financial management.

At the same time, working capital management practices have long attracted the attention of previous researchers. The main research areas related to these practices included cash receivable, cash management and inventory management. However,

relationships between working capital management practices and SME profitability have not been investigated. To date there are no tests of associations between working capital management practices and SME profitability. This study will therefore investigate the relationship between these set of variables and the profitability of a sample of manufacturing, trading and service providers SMEs.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1. Introduction

This chapter is a blueprint of the methodology that was used to find answers to the research questions. In this chapter the research methodology is presented in the following order, research design, target population, sample size, sampling method, data collection method, reliability and validity, data analysis methods and ethical considerations.

3.2. Research Design

The study was cross-sectional in nature targeting data for 2014. The research employed a survey design comprising of quantitative data collection approach. Surveys allow the collection of large amount of data from a sizable population in a highly economical way. It allows one to collect quantitative data which can be analyzed quantitatively using inferential statistics (Saunders et al., 2009). Survey research design allows for the exploration between variables through the testing of hypothesis (Gall & Borg, 2009).

3.3. Target Population

The target population comprised of 176 owner-managers/ managers of SMEs licensed by Nairobi City Council (NCC) within Nairobi County (NCC, 2012). Therefore, in this research, 176 SMEs in Nairobi County was defined as the target population from where the sample was drawn for research. The rationale for studying this category of SMEs is that past study (Namusonge, 2008) show that this category of enterprises exhibit growth.

3.4. Sample and Sampling Frame

To arrive at the desired sample, Fisher's model was used. In this case when the target population is more than 10.000, the formulae is given as

$$n, = (Z^2 Pq)/d = 121$$

Where

p-proportion of the target population with traits being investigated as 0.5

q- proportion of the target population without traits being investigated as i.e (q=1-p)

d- is the tolerance error as 0.05

Z- normal deviate as 1.96

The confidence level being 95%

n- sample size

A representative sample size of 121 was used for this study.

The study applied both probability and non probability sampling procedures to obtain the number required for the study from SMEs in Nairobi County. The probability sampling used was stratified and simple random sampling. From each stratum, simple random sampling was then be applied to arrive at 121 out of 176.

Table 3.1: Number of SMEs in Nairobi County

Type of manufacturing SME	Target Population
Plastic	56
Beverage	86
Metal	34
Total	**176**

Source: Nairobi county Economic Secretary office – Nairobi County 2013

3.5 Sample and Sampling Technique

The sample size table was arrived at using statistical formulae and consisted of 121 SMEs selected from 176 SMEs in Nairobi County. The plan procedure for selecting sampling units is presented in Table 3.2

Table 3.2: Number and percentage of SME sample population

Type of manufacturing SME	Number	Sample size	Percent
Plastic	56	39	37.33
Beverage	86	59	44.67
Metal	34	23	18.00
Total	**176**	**121**	**100**

The sample of 121 was chosen because of the need to represent the target population in the study and the need to have a well spread representative group across strata. The sample also was enough to represent the salient features of the target population.

Since the target population was made up of heterogeneous SMEs, both stratified and simple random sampling techniques were used in the study. In selection for sampling techniques, this study was concerned with the principle that the sample had to reflect the population.

Based on this principle, stratified sampling was most appropriate in this study. This technique was used to ensure that the target population is divided into different homogenous strata and each stratum was represented in the sample in a proportion equivalent to its size in the population. From each stratum, simple random sampling was then applied to arrive at 121 out of 176. Simple random sampling was used to ensure that each member of the target population had an equal chance of being included in the sample.

3.6. Data Collection Instruments

3.6.1 Primary data

Questionnaires was the principal way of data collection adopted during the field survey. The data for the study was collected from two sources; a sample of SME in Nairobi. Primary data was obtained using questionnaire which consisted of both closed and open ended questions. A structured questionnaire was administered to 121 owner-managers/managers of the sampled SMEs to collect primary quantitative data.

3.6.2. Secondary data

Secondary data was obtained from financial records of the sampled SMEs and published documents in Government Ministries and in private sector. Secondary data was also collected from previous studies, books, newsletters, journals and other written material in the finance industry. It was largely desk review of published information on SME growth. The researcher and the assistants administered the interview schedules to obtain in-depth information from the managers of SMEs. This tool was used to collect qualitative data from the respondents.

3.7 Pilot Study

Before the actual study was conducted, a pilot study was done. The aim of the pilot study was to test the reliability and validity of the research instrument. The validity of the data collection instrument for the study was tested by first administering it on conveniently selected respondents of twelve SMEs from manufacturing sector. The pilot survey was conducted to find out if the respondents could respond to the questions without difficulty. The questionnaire was found to be valid save for a few minor corrections which were suggested by the respondents in the pilot study. The instrument was modified on the basis of the responses from the pilot tests. Cronbach's Alpha was used to test reliability of the instrument. The Alpha can take any value from zero (no internal consistency) to one (complete internal consistency). Emory (2009) suggested that as a rule of thumb. Cronbach's Alpha should not be lower than 0.7.

3.8 Data Analysis and Presentation

Data collection procedure started in May 2014 immediately the instruments were be received. The questionnaire was administered to each of the selected SME managers in Nairobi County collected by the research assistants. Before processing the responses, the completed questionnaires were edited for completeness and consistency. Descriptive

statistics was used; this included the use of means, standard deviation, frequencies and percentages

After data processing, the Statistical Package for Social Science (SPSS) was used to produce the output for data analysis. SPSS has descriptive statistics features that assist in variable response comparison and gave clear indications of response frequencies.The data was then coded to enable the responses to be grouped into various categories. Statistical techniques used in this study included descriptive and inferential statistics.

The study used descriptive statistics such as frequency distribution and percentages to facilitate the change of raw data into a form that was easy to understand and interpret in relation to the objectives. Inferential statistics such as Pearson correlation coefficient was used to analyze quantitative data. Pearson Product Moment Correlation was used to determine the degree of between working capital management and financial performance.

3.9 Research Model

Linear multiple regression was used to establish and explain the relationship between working capital management and profitability. Based on Aiken and West (1991), the relationship between working capital management and SMEs financial performance was developed into linear regression model as follows

$$Y= \beta_o+ \beta_1X_1+ \beta_2X_2+ \beta_3X_3+ \beta_4X_4+\varepsilon$$

Where:

Y- The dependent variable. Referring to Financial performance

β_0 Regression constant. It is the value of Y when $X_{1=}X_{2=}X_{3=}X_{4=}0$

β_1 Change in Y with respecto to a unit change in X_1

β_2 Change in Y with respect to a unit change in X_2

β_3 Change in Y with respect to a unit change in X_3

β_4 Change in Y with respect to a unit change in X_4

X_1- Cash Management Practice

X_2- Inventory Management Practice

X_3- Accounts Receivable Management Practice

X_4- Accounts Payable Management Practice

βi (i = 0, 1, 2, 3, 4) are the coefficients

ε is the error variable. The inclusion of a random error, ε, is necessary because other unspecified variables may also affect SMEs financial performance.

The multiple regression is based on the assumption that for any specific value of the independent variable, the value of the Y variable are normally distributed (normality assumption) and that the variances for the Y variables are the same for each of the independent variable (equal –variance assumption).

Based on the model above the researcher hypothesizes that;

H_0: $\beta_1 = 0$ (X_i **is not related to Y)**

H_1 : $\beta_1 \neq 0$ (X_i **is related to Y)**

The study applied four hypothesis generated from the model as follows;

Ha_1: Cash ManagementPractice has a significant role on financial performance of Small and Medium manufacturing Enterprises in Nairobi County in Kenya.

Financial Performance of SMEs = *f* (Cash ManagementPractice, random error)

$Y=\beta_{0+}\beta_1 X_{1+}\ \varepsilon_1$

Ha₂: Inventory ManagementPractice has a significant role on financial performance of Small and Medium manufacturing Enterprises in Nairobi County in Kenya.

Financial Performance of SMEs = *f* (Inventory ManagementPractice, random error)

$$Y=\beta_{0+}\beta_2 X_{2+}\ \varepsilon_2$$

Ha₃: Accounts Receivable ManagementPractice has a significant role on financial performance of Small and Medium manufacturing Enterprises in Nairobi County in Kenya.

Financial Performance of SMEs = *f* (Accounts Receivable ManagementPractice, random error)

$$Y=\beta_{0+}\beta_3 X_{3+}\ \varepsilon_3$$

Ha₄: Accounts payable Management Practicehas a significant role on financial performance of Small and Medium manufacturing Enterprises in Nairobi County in Kenya.

Financial Performance of SMEs = *f* (Accounts Payable ManagementPractice, random error)

$$Y=\beta_{0+}\beta_4 X_{4+}\ \varepsilon_4$$

After data processing, the Statistic Package for Social Science (SPSS) was utilized to produce the output for data analysis. SPSS has descriptive and inferential statistics features that assist in variable response comparison and gave clear indications of response frequencies.The data was then coded to enable the responses to be grouped into various categories. Statistical techniques used in this study included descriptive and

inference statistics. Qualitative data analyses method applied to analyze the data using open ended questions where the respondents gave their personal opinions.

CHAPTER FOUR

RESEARCH FINDINGS AND DISCUSSIONS

4.1 Introduction

This chapter presents the results of the present study on the role of working capital management on financial performance of Small and Medium manufacturing Enterprises in Nairobi County in Kenya. The presentation of the result has been done in six sections. These profile of respondents, cash management, receivable management, inventory management, financial performance of SMEs and multiple linear regression analysis.The above sections arise from the research objectives that address the study. Computation of frequencies, averages, statistical tests like correlation and chi square were used to analyze the data guided by the research questions in reference to study objectives.

4.2 Results from Pilot Study

A summary of the scores of the independent variables on the Cronbach's Alpha Reliability Coefficient is presented in table 4.1.

Table 4.1: Summary of Cronbach's Alpha Reliability Coefficient for working capital management

Factor (Scale)	Number of Items	Cronbach Alpha
Cash management	3	0.82
Cash receivable management	3	0.79
Inventory management	3	0.89
Accounts payable management	3	0.91

The basis of interpreting the reliability of the scale in the current study was Cronbach's Alpha. The Alpha can take any value from zero (no internal consistency) to one (complete internal consistency). Emory (2009) suggested that as a rule of thumb. Cronbach's Alpha should not be lower than 0.7. In the case of the instrument for this study, the Cronbach's Alpha values for cash management, cash receivable management, inventory management and account payable management were all above 0.7 (Table 4.1). The data collection instrument is therefore, reliable and acceptable for the purposes of the study.

4.3 Profile of the Respondents

The aspects covered under this section included; categories of respondents, highest level of education of respondents, financial training of respondents and training background of respondents among others. The study considered this section important as it provided information on the nature of the business under study and the respondents. The findings of this section provide oversight on the type of manufacturing SMEs that exist.

4.3.1 Categories of Respondents

The respondents were asked to indicate the positions they belong in. From Figure 4.1, it was found that approximately 60% of the respondents were owners of the SMEs while only 40% of them were managers.

Figure 4.1: Categories of Respondents

4.3.2 Highest Level of Education of the Respondents

The researcher wanted to know the highest education level qualifications of the respondents. It was observed that 39.7% of the respondents hold college certificate while 38.8% hold Bachelor's degree qualifications. Respondents with high school certificates were 11.6%.

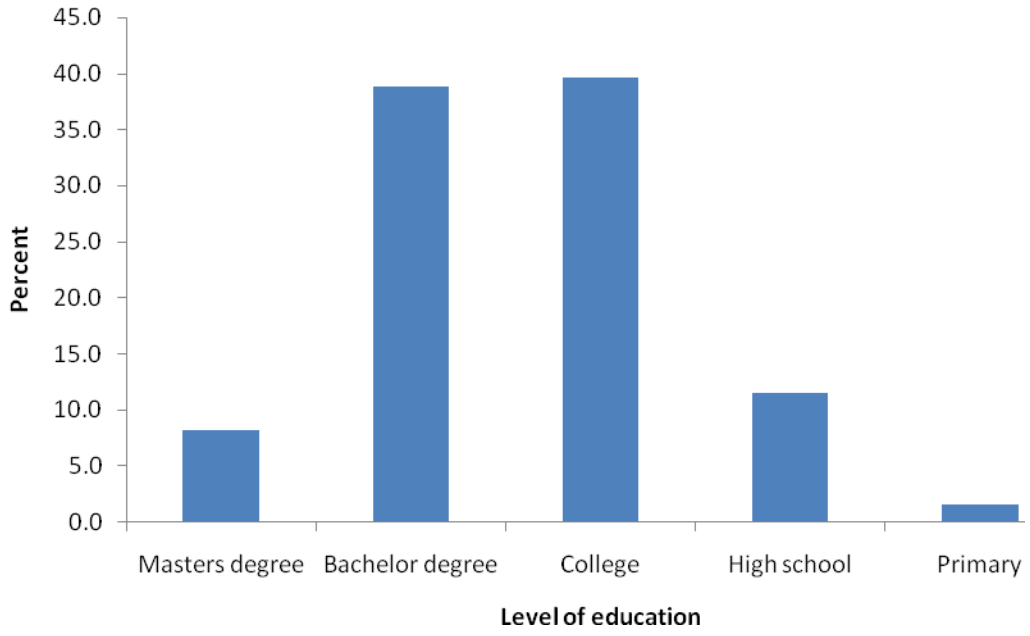

Figure 4.2: Highest level of education of the respondents

4.3.3 Financial Management Training

The researcher was interested in knowing how frequent the respondents attend management training programs related to financial management. It was observed that 46% of them rarely attend the training. Only 4% of the respondents never attend the management training programs related to financial management (Figure 4.3)

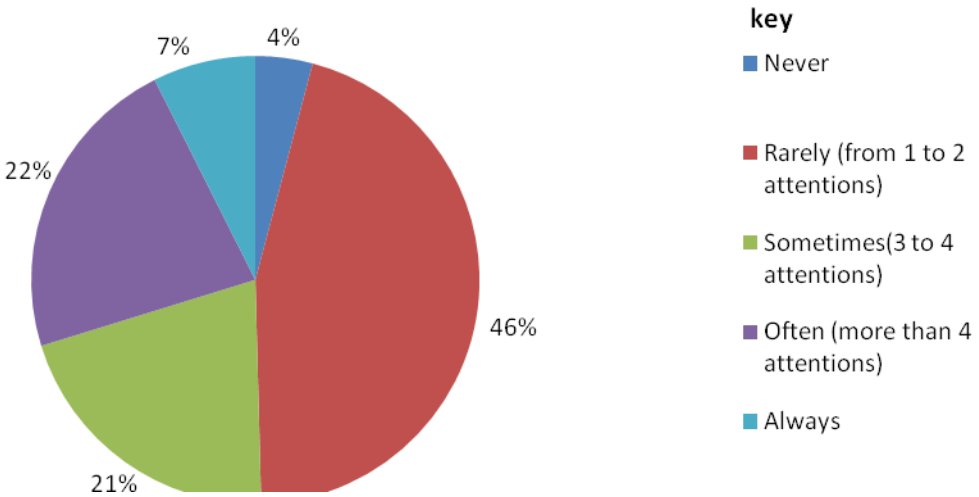

Figure 4.3: Financial Management Training of respondents

4.3.4 Training Background

It was observed that 44% of them had a background from technical field while 33% had a business general background (Figure 4.4).

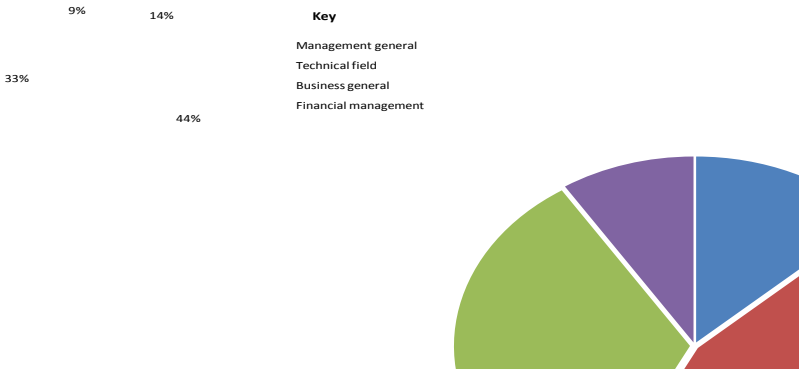

Figure 4.4: Training background

4.3.5 Type of the manufacturing enterprise

According to Figure 4.5, it was observed that 61.2% of them were from beverage manufacturing enterprises while 20.7% were from metal enterprises.

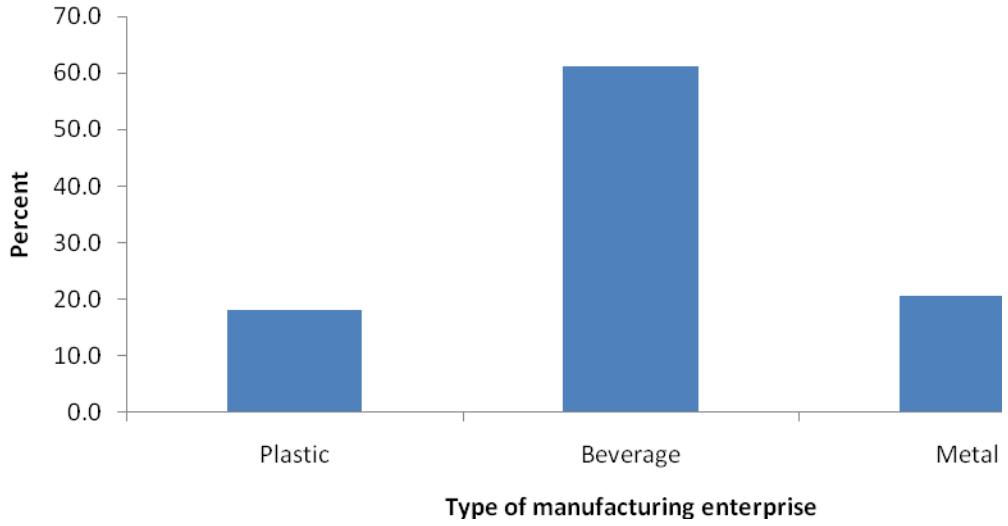

Figure 4.5: Type of the manufacturing enterprise

4.3.6 Form of Business Ownership

The respondents were asked to describe the form of ownership of their business. It was found that 36.4% of them were e from private enterprises and 4.1% were from limited company (Figure 4.6).

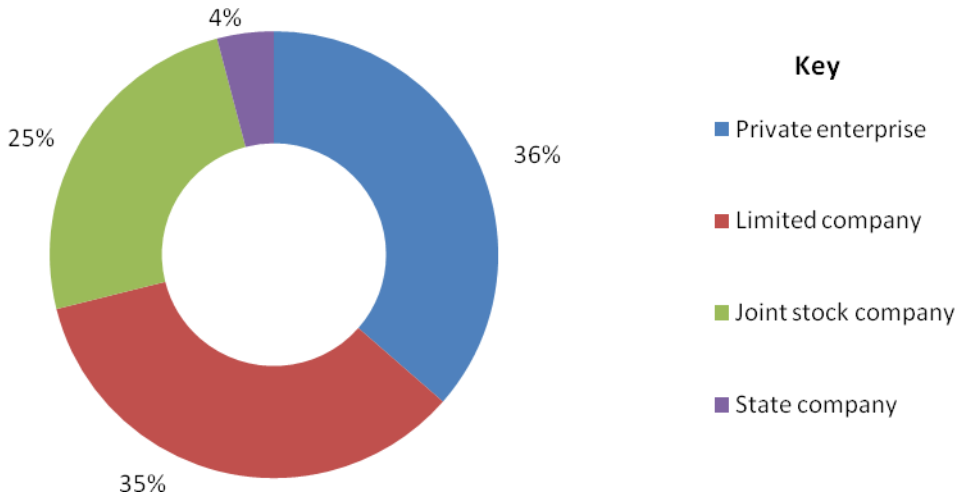

Figure 4.6: Form of business ownership

4.3.7 How Long the Business Has Been Established

It was observed according to Figure 4.7 that 33.9% of the respondents indicated that their business have been in existence between 6-10 years while 31.4% were established more than 10 years ago.

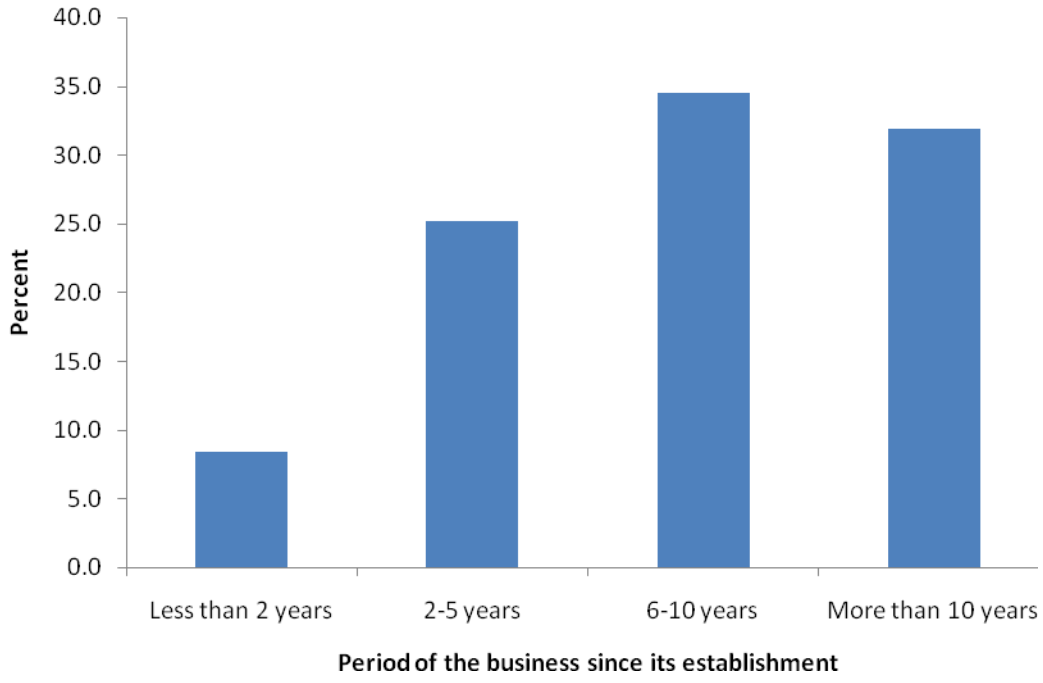

Figure 4.7: How long the business has been established

4.3.8 Number of Employees

According to Figure 4.8, it was found that 50 percent of SMEs employ between 6 to 20 employees while only 8.2 percent of SMEs employ 41-50 employees. The study also revealed that the SMEs employ between 6 to 50 employees which are consistent with the definition of SMEs according to European Commission (2010).

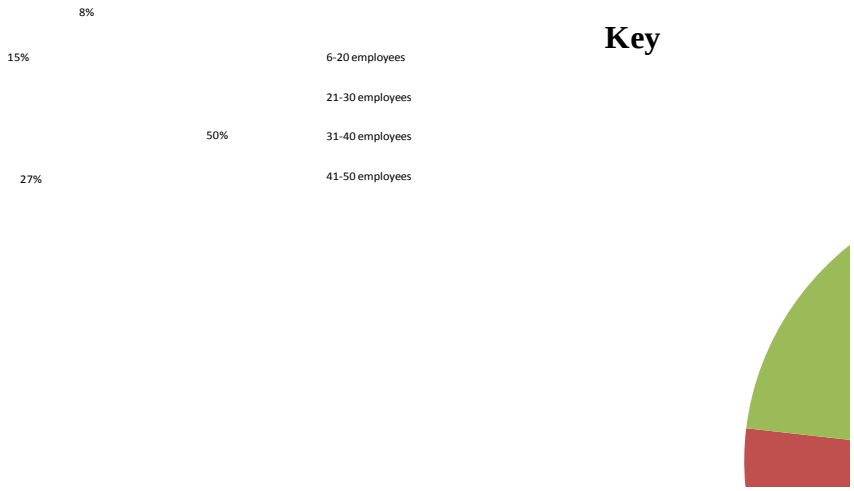

Figure 4.8: Number of SMEs employees

4.4: Cash Management Practice

Examination of cash management by previous researchers have mainly focused on examining areas such as cash budgets, cash balance and cash surplus or shortage. This subsection presents descriptive findings of cash management practices of the sample of 39 plastic, 59 beverages and 23 metal manufacturing SMEs in Kenya.

4.4.1 Preparing Cash Budgets

Table 4.2 indicates that 51.3 percent often prepare cash budget while 21.5 percent sometime do. 19.9 percent and 5.7 percent of respondents always and rarely prepare cash budgets respectively. 1.6 percent never prepare the budgets. The finding shows that SMEs in Nairobi county did embrace cash budgeting as a tool to plan and control cash flows of their businesses. Similar views were expressed by Kotut (2009) who established that over 56.25% of the businesses studied prepared cash budgets on a daily basis and used them to plan for shortage and surplus of cash

On the other hand, Table 4.2 also reveals that 79.5 percent of SMEs prepare cash budgets monthly, 15.6 percent annually, about 4.1 percent by weekly periods and only 0.8 percent prepare the budget on quarterly basis. As such, the monthly period is most frequently used by SMEs in preparing cash budgets. These findings agree with Kwame (2008) who established that the setting of a cash balance policy ensures prudent cash budgeting and investment of surplus cash.

Table 4.2: Frequency of preparing cash budgets

Factor	Frequency	Number of firms	percent
Frequency of preparing cash budgets	Never	2	1.6
	Rarely	7	5.7
	Sometimes	26	21.5
	Often	62	51.3
	Always	24	19.9
	Total	121	100

On the other hand, Table 4.3 also reveals that 79.5 percent of SMEs prepare cash budgets monthly, 15.6 percent annually, about 4.1 percent by weekly periods and only 0.8 percent prepare the budget on quarterly basis. As such, the monthly period is most frequently used by SMEs in preparing cash budgets.

Table 4.3: Period for Preparing Cash Budgets

Factor	Period	Number of firms	percent
Cash budget preparation	Weekly	5	4.1
	Monthly	96	79.5
	Quarterly	1	0.8
	Semiannually	0	0
	Annually	19	15.6
	total	121	100

4.4.2 Cash Balance Determination

On cash balance determination, the findings (Table 4.4) reveals that 47.2 percent and 36.5 percent of responding firms rarely and sometimes determine their target cash balances respectively. 8.2 percent of the firms often determine the target cash balance while 7.3 percent always do. Only 0.8 percent of the respondents never determine their target cash balance. This finding is consistent with the common trend that SMEs rarely pay attention to setting up a cash-balance policy. Most SMEs simply consider cash-balance as the result of differences in cash inflows and outflows without any policies. The results suggest that on the average, majority of the SSEs hardly determine the appropriate amount of cash to hold. The pronouncement is consistent with a finding by Kwame (2008) who established that small firms rarely pay attention to setting up a cash

balance policy but simply consider cash-balance as the result of differences in cash inflows and outflows without any guidelines. However, the finding is at variance with the finding by Waweru (2009) who established that most businesses studied had a set minimum cash balance level which guarded them against running out of cash.

Table 4.4: Determining the Target Cash Balance

Factor	Determinant	Number of firms	percent
Cash balance Determination	Never	1	0.8
	Often	10	8.2
	Sometimes	44	36.5
	Rarely	57	47.2
	Always	9	7.3
	Total	121	100

Additionally, Table 4.5 indicates that 69.4 percent and 30.6 percent of SMEs that often or always set up their cash balance policy were based on the owner/manger's experience and historical data respectively in determining the target cash balance.

Table 4.5: Cash Balance Determination

Factor	Determinant	Number of firms	percent
Cash balance determination	Based on historical data	37	30.6
	Based on owner/manager 'experience	84	69.4
	Total	121	100

4.4.3 Cash Surplus or Shortage

For cash shortage phenomena, 43.9 percent of enterprises often have been short of cash, while 41.4 percent of responding SMEs sometimes have insufficient cash for expenditure. 9.1 percent and 4.9 percent of the responding SMEs rarely and always have cash shortage respectively. Only 0.8 percent never have cash shortage (Table 4.6).

The finding confirmed the assertion by Scarborough and Zimmerer (2008), that small businesses reserve cash and maintain relatively high current ratios to ensure that they do not run out of cash hence the conclusion that the management of cash surpluses rather than cash shortages is a problem for SMEs

Table 4.6: Cash Shortage

Factor	Frequency	Number of SMEs	Percent
Occurring cash shortage	Never	1	0.8
	Rarely	11	9.1
	Sometimes	50	41.4
	Often	53	43.9
	Always	6	4.9
	Total	121	100

According to table 4.7, about 39.7 percent of SMEs in the sample reported that sometime they have a surplus of cash while 34.7 percent often incur cash surplus. Approximately 14.9 percent and 9.1 percent always and rarely have cash surplus respectively. 1.6 percent never have cash surplus. This finding is consistent with Kotut (2009), and Ngaba (2008) findings, which indicated SMEs in Kenya seems likely to reserve cash and maintain relatively high current ratios.

Table 4.7: Cash Surplus

Factor	Frequency	Number of SMEs	Percent
Occurring cash surplus	Never	2	1.6
	Rarely	11	9.1
	Sometimes	48	39.7
	Often	42	34.7
	Always	18	14.9
	Total	121	100

Regarding cash surplus investment, up to 58.9 percent of responding SMEs do not invested cash surplus for profit purposes (Table 4.8) About 19 percent deposit cash surplus in bank accounts for interest and 17.3 percent used the cash surplus to buy money-market instruments such as treasury bills, commercial papers or others.

This can be explained, because the money market inKenya has not fully developed, therefore, firms could not use cash surplus to purchase short-term investment instruments for profit purposes.

Thisfinding supports the pronouncement by Waweru (2009), that majority of businesses do not invest their surplus cash in marketable securities. It also confirms Kwame (2008) decree that most small businesses have problems on how to invest temporary cash for profitable purposes.

Table 4.8: Cash Surplus Investment

Factor	Investment	Number of SMEs	Percent
Cash surplus investment	Bank deposit	23	19.0
	Treasury bills/bonds	21	17.3
	Both above	7	4.8
	No where	71	58.9
	Total	121	100

4.4.4 Efficiency of Cash Management Practice

The mean score for the opinion of owner/manager might feel about the efficiency of cash management practices as worked out by adding all respondents scores. The sum 5436 was divided by the no. of respondents multiplied by eight (121x8) since the statements were eight. The overall mean score is 5.62. This means that the opinion of the respondents was on the higher side of the likert scale which implied that the respondents felt that the efficiency of cash management was positive.

The summary findings indicate that cash management practices that about 83.7 percent of SMEs rarely or sometimes prepare cash budgets, and preparing and reviewing cash budgets are frequently based on monthly periods. At the same time, 85.3 percent of responding SMEs sometimes and often have shortage of cash while about 59.6 percent always and often have a surplus of cash. Nevertheless, only 19 percent of SMEs deposit their cash surplus into bank accounts while up to 58.9 percent of responding SMEs invested nowhere.

Table 4.9: Efficiency of cash management

	1	2	3	4	5	6	7	8	9	Mean	SD	Respondent score
How does your business regard cash management practices?	0	1	3	27	44	33	9	3	1	5.23	1.13	633
How regularly does your business prepare cash budgets?	0	1	4	24	29	41	17	4	1	5.46	1.24	661
How involved in the owner /manager in preparing cash budgets?	0	1	8	15	23	43	25	6	0	5.64	1.30	682
How involved is the owner/ manager in interpreting and using cash budgets?	0	1	7	22	20	38	25	7	1	5.61	1.39	679
How useful are cash budgets of your business in providing information for making decisions?	1	0	10	14	26	33	27	10	0	5.65	1.44	684
How does your business apply theories of cash management in determining the target cash balance?	0	3	7	20	16	34	30	11	0	5.69	1.50	689
How acceptable is the target cash balance in your business?	1	1	6	18	16	36	32	9	2	5.81	1.49	703
How computerized are cash management practices in your business?	2	3	13	19	9	25	24	15	11	5.83	2.00	705
Total Respondent score												5436

overall mean score = 5.62

4.5: Receivable Management Practice

The respondents were asked questions concerned with credit sales and policies, reviewing levels of receivables and bad debts, and percentage of bad debts compared

with sales. Below are descriptive findings of receivable management practices of SMEs in the sample.

4.5.1 Sales on Credit and Credit Policies

Table 4.10 demonstrates 51.3 percent of respondents sometimes sell their products or services on credit, while 43.9 percent often sell on credit.28.2 percent and 1.6 percent rarely and never sell their products on credit. This finding suggests that selling products on credit was averagely practiced for SMEs in Nairobi county and contradicts findings by Kwame (2008) which showed that small businesses always sold their products on credit. Approximately 43.1 percent of SMEs which rarely set up credit policy to the customers while 30.7 percent of the respondents sometimes set up credit policy to the customers. 17.3 percent and 7.3 percent often and always set up credit policy respectively. Only 1.6 percent never set up their credit policy but they tend to sell on credit to anyone who wishes to buy.

Table 4.10: Sales on Credit

Factor	Decision	Number of firms	percent
Sell products or services on credit	Never	2	1.6
	Rarely	34	28.2
	Sometimes	53	51.3
	Often	32	43.9
	Always	0	0.0
	Total	121	100

The high use of credit sales can be attributed to the lack ofsound credit policies since majority (52 SMEs representing 43.1% of all SMEs) seem rarely to set credit guidelines for their credit customers (Table 4.11). As established by Laziridis and Dimitrios (2006) pursuing reduced receivables account causes diminished financial performance for firms hence the suggestion by Juan and Martinez (2009) for firms to keep an eye on the debtors' repayment period with a view to make it minimal.

Table 4.11: Sales on Credit Policies

Factor	Decision	Number of firms	percent
Set up credit policy to the customers	Never	2	1.6
	Rarely	52	43.1
	Sometimes	37	30.7
	Often	21	17.3
	Always	9	7.3
	Total	121	100

4.5.2 Frequency of Reviewing Receivable Levels and Bad Debts

Relatively high percentage of SMEs (about 41.4 percent) in the sample review their receivable levels on monthly periods while 19.0 percent reviewed weekly. 12.4 percent and 9.9 percent of the respondents reviewed the levels of their receivables quarterly and annually respectively. Approximately 9.1 percent of the respondents reviewed their level of receivables semiannually. Only 8.2 percent never reviewed their receivable levels (Table 4.12).

Table 4.12: Frequency of Reviewing Receivable Levels

Factor	Frequency	Number of firms	percent
Review levels of receivables	Never	10	8.2
	Weekly	23	19.0
	Monthly	50	41.4
	Quarterly	15	12.4
	Semiannually	11	9.1
	Annually	12	9.9
	Total	121	100

In regard to review of bad debts, 37.2 percent and 34.0 percent of the respondents reviewed their bad debts monthly and weekly respectively. According to Table 4.13, it was found that 22.2 percent of the respondents reviewed their bad debts quarterly, annually and semiannually. However, 6.6 percent answered that they never review their bad debts . As such, like cash management practices, monthly periods are still popularly used by SMEs in reviewing receivable levels and bad debts. This finding is at variance with Kwame's (2008) finding that most small businesses review their level of receivables and bad debts quarterly

Table 4.13: Frequency of Reviewing Bad Debts

Factor	Frequency	Number of firms	percent
Review bad debts	Never	8	6.6
	Weekly	41	34.0
	Monthly	45	37.2
	Quarterly	12	9.9
	Semiannually	4	3.2
	Annually	11	9.1
	Total	121	100

4.5.3 Percentage of Bad Debts Compared to Sales

It was observed that 83.7 percent of responding firms indicated that their bad debts have not exceeded 10 percent of sales (Table 4.14). This figure is not high under given conditions of financing source shortages and shows that SMEs are relatively good in managing receivables. However, 2.4 percent SMEs answered that they did not know their percentage of bad debts to sales.

Table 4.14: percentage of bad debts compared to sales

Factor	Rates	Number of firms	percent
Bad debt percentages	Less than 5 % of sales	44	36.5
	5 -10% of sales	57	47.2
	10 -20% of sales	9	7.3
	More than 20% of sales	8	6.6
	Don't know	3	2.4
	Total	121	100

4.5.4 Efficiency of Receivable Management Practice

The mean score for the opinion of owner/manager might feel about the efficiency of receivable management practices as worked out by adding all respondents scores. The sum 6622 was divided by the no. of respondents multiplied by nine (121x9) since the statements were eight. The overall mean score is 6.08. This means that the opinion of the respondents was on the higher side of the likert scale which implied that the respondents felt that the efficiency of receivable management was positive.

The findings of receivable management practices of SMEs in the sample revealed that 51.3 percent of SMEs sometimes sell their products or services on credit and 43.1 percent often set up credit policies for the customers. However, there are still 1.6 percent of SMEs that tend to sell on credit to anyone who wishes to buy. The study revealed that

37.2% of SMEs review their levels of receivables and bad debts monthly. As a result, the percentage of bad debts is controllable and maintained at a relatively low level

Table 4.15: Efficiency of Receivable Management Practice

	1	2	3	4	5	6	7	8	9	Mean	Standard Deviation	Respondent score
How does your business regard to receivable management practices?	0	1	5	31	31	33	11	9	0	5.31	1.31	643
How regularly does your business review debtors' credit period?	0	1	4	18	19	33	32	14	0	5.91	1.38	715
How reasonable is debtors' credit period in your business?	0	1	4	15	19	28	32	21	1	6.10	1.46	738
How regular does your business review debtors discount	0	3	7	11	13	21	36	26	4	6.26	1.67	758
How reasonable is debtors' discount policy in your business	0	4	6	8	18	23	33	25	3	6.20	1.65	744
How regular does your business review percentage of bad DEBTS	1	1	5	13	22	14	33	32	0	6.21	1.62	751
How reasonable is the percentage of bad debts in your business	1	3	4	13	15	23	32	28	2	6.20	1.67	750
How frequent does your business implement theories of receivable management?	0	2	4	14	14	25	33	26	3	6.26	1.56	758
How computerized are receivable management practices in your business?	2	4	7	13	19	10	19	29	18	6.32	2.11	765
											Total Respondent score	6622

Overall mean score = 6.08

The respondents were asked questions related to preparing and reviewing inventory budgets, determining inventory levels, and using the economic order quantity (EOQ) model. Below are descriptive findings of inventory management practices of SMEs in the sample.

4.6. Inventory Management Practice

This subsection presents descriptive findings of inventory management practices of the sample of 39 plastic, 59 beverage and 23 metal manufacturing SMEs in Kenya.

4.6.1 Frequency of Reviewing Inventory Levels and Preparing Inventory Budgets

From Table 4.16 a relatively high percentage (48.1%) of SMEs in the sample always review inventory levels while 25.7 percent of them sometimes review inventory levels. 21.4 percent and 1.6 percent often and rarely reviews their inventories respectively. Only 2.3 percent of the respondents never review their inventory levels.

These findings suggest that preparation of inventory budgets and review of inventory levels are regularly carried out by SMEs' owner managers/ managers and are in agreement with findings of Kwame (2008) which established that majority of small businesses always review their inventory levels and prepare inventory budgets and which is as stressed by Lazaridis and Dimitrios (2006) that enhancing the management of inventory thus enable businesses to avoid tying up excess capital in idle stock at the expense of profitable ventures.

Table 4.16: Frequency of Reviewing Inventory Levels

Factor	Frquency	Number of firms	percent
Review inventory levels	Never	3	2.3
	Rarely	2	1.6
	Sometimes	31	25.4
	Often	26	21.4
	Always	58	48.1
	Total	121	100

It was also observed that 40.3 percent often prepare inventory budgets while 27.3 percent and 23.2 percent sometimes and rarely prepare inventory budgets respectively. Only about 1.6 percent never prepare inventory budgets (Table 4.17). This finding is consistent with Smith (2011) who in his study on inventory management observed that business firms are confronted with the dilemma of attempting simultaneously to meet ever-increasing demands for improved customer service; maintains table production operations; and keep the investment in inventory at a reasonable level.

Table 4.17: Frequency of Preparing Inventory Budgets

Factor	Frequency	Number of firms	percent
Prepare inventory budgets	Never	2	1.6
	Rarely	28	23.2
	Sometimes	33	27.3
	Often	49	40.3
	Always	9	7.4
	Total	121	100

4.6.2 Basis of Determining Inventory Levels and Using EOQ Model

It was noted that 58.7 percent of responding firms answered that they determine inventory level based on owner/manager's experience while 34.0 percent based on historical data. 7.3 percent used theories of inventory management (Table 4.18). A study by Kwame (2007) established similar results which showed that up to 90% of small businesses relied on manager's experience in their management of working capital.

Table 4.18: Basis of Determining Inventory Levels

Factor	Determinant	Number of firms	percent
Inventory level determination	Based on theories of inventory	9	7.3
	Management	41	34.0
	Based on historical data	71	58.7
	Based on owner/management's Experience	121	100

On the other hand, SMEs very rarely use the "Economic Order Quantity Model" in inventory management. About 74.6 percent of SMEs revealed that they had never known of the Economic order model, 19 percent know of it but never use it, while 4.8 percent and 1.6 percent sometimes use and often use the model respectively (Table 4.19).

Table 4.19: Basis of Using EOQ Model

Factor	Usage	Number of firms	percent
Economic Order Quantity	Do not know this model	90	74.6
Model application	Know but never use	23	19.0
	Sometimes use	6	4.8
	Often use	2	1.6
	Total	121	100

4.6.3 Efficiency of Inventory Management Practice

The mean score for the opinion of owner/manager might feel about the efficiency of inventory management practices as worked out by adding all respondents scores. The sum 5926 was divided by the no. of respondents multiplied by eight (121x8) since the statements were eight. The overall mean score is 6.12. This means that the opinion of the respondents was on the higher side of the likert scale which implied that the respondents felt that the efficiency of inventory management was positive.

Practices of inventory management as reviewed above demonstrate that SMEs have a very low level of management expertise regarding inventory. They often review inventory levels and prepare inventory budgets but the ability to applying theories of inventory management to inventory budgeting is very limited.

Table 4.20: Efficiency of Inventory Management Practice

	1	2	3	4	5	6	7	8	9		
	Count	Count	Count	Count	Count	Count	Count	Count	Count	Respondent score	Mean score
Q5.3.i How does your business regard inventory management practices?	1	1	4	15	24	33	35	8	0	702	5.8
Q5.3.ii How regularly does your business review inventory turnover?	0	3	1	11	19	34	30	22	1	747	6.2
Q5.3.iii How regularly dos your business review inventory level?	0	1	7	13	14	28	33	23	1	737	6.1
Q5.3.iv How fast is inventory turnover of your business?	0	2	8	12	13	28	37	18	1	721	6.0
Q5.3.v How acceptable is inventory level of your business?	1	2	6	9	20	27	26	28	2	745	6.2
Q5.3.vi How are inventory budgets of your business useful in providing information for making the inventory decisions?	0	1	6	13	21	20	22	35	2	749	6.2
Q5.3.vii How does your business apply theories of inventory management in determining the inventory level?	0	2	8	11	15	25	27	26	7	757	6.3
Q5.3.viii How computerized are inventory management practices in your business?	3	6	8	15	11	16	10	20	32	768	6.3
									Total Respondent score	5926	

Overall mean score =6.12

4.7: Accounts Payable Management Practice

Table 4.21: Mode of Paying Creditors

Value label	Frequency	Percent
Through bank only	**37**	**30**
Through cash only	**12**	**10**
Through cash and bank	**72**	**60**
Total	**121**	**100**

It was observed that 60% of SMEs pay their creditors through either cash and bank while 30% through bank only and only 10% pay through cash only.

Table 4.22: What Induces to Pay Creditors in Good Time

Value label	Frequency	Percent
Discounts	**19**	**15**
Reduced prices	**24**	**20**
After sale services	**30**	**25**
When cash in available	**48**	**40**
Total	**121**	**100**

The researcher wanted to know what induces SMEs to pay creditors in good time, 40% of the institutions pay in good time when cash is available while 25% pay when there is

after sales services. Reduced prices and discounts are considered at 20% and 15% respectively.

Table 4.23: Interval of Time for Preparing Cash Budget.

Time interval	Frequency	Percent
Daily	**67**	**55**
Weekly	**38**	**31.67**
Monthly	**16**	**13.33**
Quarterly	**0**	**0**
Total	**121**	**100**

It was found that 55% of the respondents prepare cash budgets on daily basis 31.67% of institutions prepare the cash budgets on weekly basis while 13.33% do so on monthly basis.

Table 4.24: Ranking of uses of cash budgeting by the SMEs

Use of cash budget	Frequency	Percent
Rank		
To plan for shortages and surplus of cash	98	**81.67**
To explore implications of alternative credit terms	15	**11.67**
To explore implications of alternative inventory policy	6	**5**
To explore the implications of alternative sales forecast	2	**1.67**
Others		
Total	**121**	**100**

It was observed that the use of cash budgeting to plan for shortage and surplus of cash was ranked at 81.67%. The use of cash budgeting to explore the implications of alternative credit terms was ranked 11.67% while the use of cash budget to explore implications of alternative inventory on policy was ranked at 3%. The use of cash budget to explore the implications of alternative sales forecast was ranked 1.67%.

4.8 Measures of Financial Performance of SMEs

Financial performance of SMEs was measured in terms of ROA, ROE, annual sales and profitability

4.8.1 Hierarchical Order of Variables

To analyze the expected hierarchical relationship between the four predictor variables (cash management, accounts receivable management, inventory management and accounts payable management) and the criterion variables (ROA and ROE), hierarchical regression analysis was used. In the current study, it was theorized that the increase in the variance in SMEs performance proceeded from cash management, accounts payable, inventory management and accounts receivable.

4.8.2. Return on Assets (ROA)

This section presents analysis for the determination of hierarchical relationships between the predictor variables: cash management, receivable management, inventory management and payable management and Return on Assets as a measure of SMEs performance.

Table 4.25: Results of the Hierarchical Regression Analysis

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change in R Square	Change in F
1	.280(a)	079	.054	10.7735659	.079	3.159
2	.295(b)	.087	.036	10.8736776	.008	.322
3	.296(c)	.088	.009	11.0235732	.001	.028
4	.297 (d)	.089	.010	11.0452125	.002	.124

1. a: Predictors: (Constant), cash management
2. b: Predictors: (Constant), receivable management
3. c: Predictors: (Constant), inventory management
4. d: Predictors: (Constant), payable management

Model I: R square = .079, indicating that cash management (predictor variable) alone accounts for about 8 % of the variance in ROA.

Model 2: R square = .087. This is higher than the value of R^2 model 1 by 0.008 (i.e. 0.087-0.079). The change in the value of R^2 in model 2 indicates that accounts receivable (a predictor variable) accounts for 0.8% of the variance in ROA after controlling for cash management (i.e. R^2=0.079 + 0.008 = 0.087). Therefore, the incremental value to the variance in ROA is 0.008.

Model 3: R square = .088, showing that R^2 has increased by 0.001 from 0.087 in model 2 to 0.088 in model This demonstrates that the predictor inventory management

accounts for 0.1% of the variance in ROA, after controlling for cash management and accounts receivable (ie R^2 = .079 + .008+ .001= .088).

Model 4: R square = .089, showing that R^2 has increased by 0.001 from 0.088 in model 3 to 0.089 in model This demonstrates that the predictor payable management accounts for 0.1% of the variance in ROA, after controlling for cash management, accounts receivable and inventory management (ie R^2 = .079 + .008+ .001+ .001 = .089).

Overall, about 9% of the variance in the criterion variable (ROA) was explained by cash management (8%), accounts receivable (0.8%) , inventory management (0.1%) and accounts payable (0.1%).

4.8.3. Return on Equity (ROE)

This section presents results of hierarchical regression analysis for relationships between the predictor variables: cash management, receivable management, inventory management and payable management and Return on Equity. These results are presented in table 4.26

Table 4.26: Regression Results for the effects of the Predictor Variables on ROE

Model	R	R Square	Std. Error of the Estimate	Change in R Square	Change in F
1	.301(a)	.091	13.1200958	.091	3.787
2	.303(b)	.092	13.2892111	.001	.039
3	.303(c)	.092	13.4715041	.000	.005
4	.303(d)	.092	13.4845112	.000	.004

As shown in table 4.26, R^2=0.091 in model 1. This means that cash management (predictor variable) alone accounts for about 9% of the variance in ROE.

In model 2, R^2=0.092, indicating an increase of 0.001 (i.e. 0.092-0.091). These statistics imply that accounts receivable alone accounts for 0.1% of the variance in ROE after controlling for cash management.

In model 3, R^2=0.092. This is higher than the 0.091 in model 1, and equal to 0.092 in model 2. This implies that inventory management (predictor variable) does not account for any variance in ROE, even after cash management and accounts receivables were excluded from the model, leaving only accounts payable.

In model 4, R^2=0.092. This is higher than the 0.091 in model 1, and equal to 0.092 in model 2 and model 3. This implies that accounts payable management (predictor variable) does not account for any variance in ROE, even after cash management, accounts receivables and inventory management were excluded from the model.

4.8.5 Descriptive Findings of Financial Performance of SMEs in terms of Annual Sales

According to Figure 4.9, it was observed that 45% of them have an annual sales ranging between 1-5 million Kenya shillings while 28% have an annual sale of less than 1 million Kenya shillings. 24% have their annual sales range between 5-10 million Kenya shillings. The chi-square test ($\chi^2_{(3)} = 44.067$, $P < 0.001$) indicated that the number of respondents in atleast one of the ranges of the business annual sales was significantly different from the expected number as shown in appendix 3.

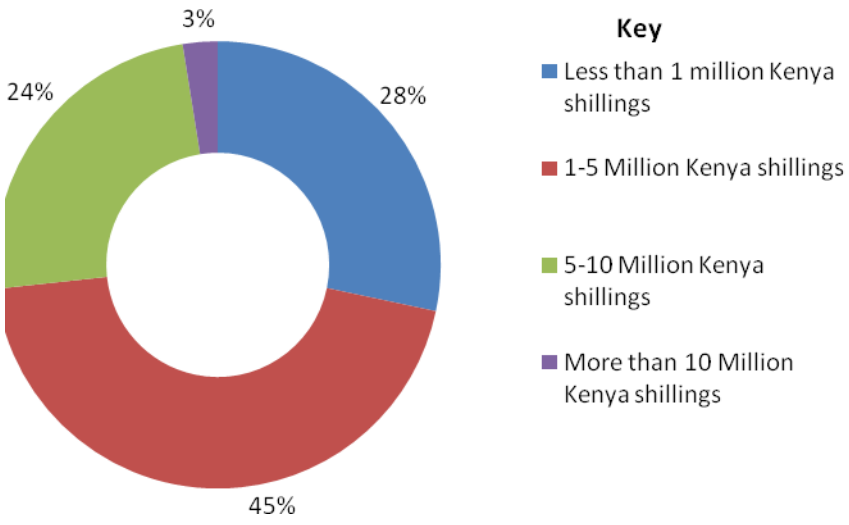

Figure 4.9: Business annual sales

4.8.6 Descriptive Findings of Performance of SMEs in Terms ofSMEs Profitability

The research investigated whether or not SMEs in Nairobi county are profitable.SME is said to be "profitable" if it produces an annual average profit return that is greater than the free-risk rate of interest, which is estimated as 5.4 percent in the 2000's in Kenya (Mathuva, 2009). Conversely, if the annual average profit of a business is not greater than the free-risk rate of interest, the business is said to be not profitable or unprofitable.

The annual average profits are averaged from three profitability ratios: return on sales, return on assets and return on equity. The free-risk rate of interest is here defined as the deposit rate of interest of state-owned commercial banks, which is of 0.45% per month or 5.4% per year in the year 2000. The arguments for the definition of SME profitability as mentioned above are based on the following propositions: Firstly, the deposit rate of interest offered by state-owned commercial banks is considered free-risk because these commercial banks are secured by the Government. Secondly, the free-risk rate of interest is considered the opportunity cost of capital, and SMEs have to produce annual average profits greater than their opportunity cost, otherwise they should cease operating and deposit money into the banks for free-risk rate of interest. Based on the definition of profitability as indicated earlier, It was observed (Table 4.27) that 83.5 percent of them are profitable. While the remainder (16.5 percent) was not profitable, that is, they could not produce an annual average profit return that was higher than the free-risk rate of interest.

Table 4.27: SMEs Profitability

Performance	Frequency	Percent
Profitable	101	83.5
Not profitable	20	16.5
Total	**121**	**100.0**

4.8.7 Descriptive Findings of Performance of SMEs in Terms of Annual Profits

The study according to Figure 4.10 revealed that only 9 percent of SMEs had annual profit range of more than 10 million Kenya shillings while approximately 48.8 percent

had annual profit range between 1 to 5 million Kenya shillings. Levels of annual profit of SMEs in Nairobi county arebig compared to other counties because firm size is large in termsof total assets and labour

Figure 4.10: Performance of SMEs in terms of annual profit

4.8.8 Financial Performance in Terms of Profitability and Business Structure

This subsection analyzes profitability of SMEs in relation to business structure to investigate which types of SMEs are profitable. Table 4.28 reports relationships between profitability and type of industry in which manufacturing SMEs are found to be more profitable than trading. In terms of business structure, metal industry accounted for 20.7% of SMEs in the sample but 15.8 percent of metal manufacturing SMEs are profitable while beverage industry accounted for 61.2% but 64.4 percent are profitable. Conversely, up to 45 percent of beverage SMEs are not profitable while this percentage is only 10 percent for plastic.

Table 4.28: Profitability

		Not profitable		Profitable		Total	
		frequency	percent	Frequency	percent	Frequency	percent
Type of industry	Plastic	2	10	20	19.8	22	18.2
	Beverage	9	45	65	64.4	74	61.2
	Metal	9	45	16	15.8	25	20.7
	Total	20	100.0	101	100.0	121	100.0

On the other hand, Table 4.29 also provides the findings of relationships between profitability and business structure in which private enterprises are more profitable than limited and joint stock companies. In term of structure, private enterprises, limited companies, joint stock companies and state accounted for 36.4%; 34.7%; 24.8 percent and 4.1 percent respectively, but the percentage of profitable SMEs are correspondingly 42.4%; 32.6%; 21.7% and 3.3 percent for

private enterprises, limited companies, joint stock Companies and state companies. As such, although limited companies occupy 34.7 percent of SMEs in the survey, only 32.6 percent are profitable while private enterprises occupy 36.4 percent but 42.4 percent are profitable and 17.2 percent are not profitable.

Table 4.29: Business structure

Factor	Type	Not profitable		Profitable		Total	
		frequency	percent	Frequency	percent	Frequency	percent
Business ownership	Private enterprise	5	17.2	39	42.4	44	36.4
	Limited company	12	41.4	30	32.6	42	34.7
	Joint stock company	10	34.5	20	21.7	30	24.8
	State company	2	6.9	3	3.3	5	4.1
	Total	29	100.0	92	100.0	121	100.0

4.9. The Relationship Between Working Capital Management and Financial Performance

Pearson's correlation coefficients and multiple regression analysis techniques were used to address the relationship between the working capital management and the financial performance of SMEs. Before the correlation and regression procedures were carried out, the basic assumptions of multiple regression analysis were verified and they were satisfactorily met as follows: the concern for multicollinearity was tested by observing the variance inflation factors (VIF's) subject to the rule of thumb that the number should be less than 10 (Thomas, 2008). All the VIF's entries were adequately low hence the possibility of multicollinearity did not exist. The normality of the dependent variable was checked by the use of normal probability plots (histogram and normal P-P plot) which both indicated that the residuals were normally distributed. The test for the linearity assumption was done by the use of scatter plots and none of the plots

demonstrated a nonlinear pattern. Constant variance (homoscedasticity) assumption was checked by visual examination of a plot of the standardized residuals (the errors) by the regression standardized predicted value. The residuals were randomly scattered around 0 (the horizontal line) providing a relatively even distribution and hence no violations of homoscedasticity were detected.

4.9.1. Test of Multicollinearity

Multicollinearity refers to excessive correlation of the predictor variables. When correlation is excessive (using the rule of thumb, r>0.90), standard errors and beta coefficients become large, making it difficult or impossible to assess the relative importance of the predictor variables. Multicollinearity is less important where the research purpose is sheer prediction since the predicted values of the dependent remain stable, but multicollinearity is a severe problem when the research purpose includes causal modeling (Garson, 2008). The current study relied heavily on modeling to establish nature and strength of relationships between cash management, cash receivable management, inventory management, account payable management and SMEs financial performance on the other. The study relied on the most commonly used test statistics for multicollinearity, namely: tolerance and the variance-inflation factor (VTF). The results of the correlation values for the independent variables used are presented in Table 4.30

Table 4.30: Correlation Results for tests of Multicolinearity

Independent variable	Analytical tool	Cash management	Account receivable management	Inventory management	Account payable
Cash management	Pearson Correlation	1	.766(**)	-.021	-124
Account Receivable management	Pearson Correlation	.766(**)	1	-.044	.134
Inventory management	Pearson correlation	-.21	-.44	1	-.588(**)
Account payable	Pearson correlation	-.36	-.56	-.048	1

'* Correlation is significant at the 0.01 level (2-tailed).

As can be discerned from Table 3.4, some variables were significantly correlated while others had insignificant correlation. The score 1 indicates perfect colinearity, which is found only when a variable is correlated with itself. Using the rule of the thumb (Garson, 2008) however, none of the independent variables used in the study had a correlation value of more than 0.9, suggesting that no multicollinearity was detected among the independent variables used in this study.

4.9.2 Tolerance and Variance-Inflation Factor (VIF)

The SPSS output gives as many tolerance coefficients as there are independent variables. Regressing cash management on receivable management, inventory management and account payable management would give an indication as to whether the variables are so closely correlated that they screen one another. The higher the inter-correlation of the independent variables, the more the tolerance will approach zero. If tolerance is less than 0.20, a problem with multicollinearity is indicated. When tolerance is close to 0.00, there is high multi-colinearity of that variable with other independents and the beta coefficients will be unstable. The more multicollinearity there is among independent variables, the lower the tolerance, and the more the standard error of the regression coefficients. Tolerance is part of the denominator in the formula for calculating the confidence limits on the partial regression coefficient.

Variance-Inflation Factor is the reciprocal of tolerance. Therefore, when VIF is high there is high multicolinearity and instability of the beta coefficient, and vice versa. A variance inflation factor of more than 4.0 is an indication of high multicolinearity. Tolerance and VIF for the study independent variables are presented in the Coefficients (Table 4.31).

Table 4.31: Coefficients for Tolerance and VIF Tests

Variables	Colinearity Statistics	
Independent Variable	Tolerance	VIF
Cash management	.373	2.678
Receivable management	.403	2.481
Inventory management	.645	1.551
Account payable management	.804	1.243

Using the r< .20 and r> 4.0 levels for the tolerance and VIF coefficients respectively results in Table 4.31 suggest that there existed no multi-colinearity problem among independent variables used in this study.

4.9.3. Test of Heteroscedasticity

In regression analysis, heteroscedasticity means a situation in which the variance of dependent variable varies across the data. Heteroscedasticity complicates and because many methods in regression analysis are based on an assumption of t variances (cooley, 2009). On the other hand homoscedasticity means a situation which the variance of the dependent variable is the same for all the data. According to Deloof (2009), homoscedasticity describes the consistency of variance of the error term (e, residual) at different levels of the predictor variable.

Smith (2010) explains homoscedasticity in terms of the standard error estimate (of the regression line). The standard error of estimate is an index of the variance of measured values around each predicted value. The homoscedasticity assumption more formally stated as VAR (ej) = c that, is, the variance of the error of residual term of each point j

is equal to the variance for all residuals. The Gauss-Markov theorem states that when all the methodological assumptions are met, the least squares estimator regression parameters are unbiased and efficient, that is, the least square estimators said to be BUE: Best linear Unbiased Estimators (Van, 2010).

4.9.4 Correlation Results

A correlation model was computed to identify the effects of Cash Management (CM), Receivable Management (RM), and Inventory Management (IM) on the financial performance of SMEs in Kenya (Table 4.32). The correlation model illustrated indicates a significant positive relationship between cash management (r=0.759 and p-value=0.000<<α=0.01) and the financial performance of SMEs in Kenya . This implies that Cash management has 75.9% positive and significant relationship with the financial performance of SMEs in Kenya

The correlation table also shows that there is a significant positive relationship between receivable management and customer satisfaction(r= 0.178 and p-value=0.008<<α=0.01). This result indicates that receivable management has 17.8% positive and significant relationship with the financial performance of SMEs in Kenya. At the same time, the study revealed that inventory management has a positive and significant relationship with the financial performance of SMEs in Kenya (r= 0.235 and p-value=0.000<<α=0.05).As such, there is 23.5% positive relationship with the financial performance of SMEs in Kenya with a unit increase in Inventory management.

The findings provided enough evidence to suggest that there was linear relationship between Cash management, Receivable management, and Inventory management with the financial performance of SMEs in Kenya. Generally most researchers have showed that businesses' performance is correlated positively to the working capital management practices (Padachi, 2006; Benjamin & Kamalavali, 2006; Kotut, 2003; Sushma & Bhupesh, 2007) and are therefore supported by this research finding

Table 4.32 Correlation Results

Factor	Test	Financial Performance	Cash management	Receivable management	Inventory management
Financial performance	Pearson Correlation	1			
	Sig. (2-tailed)				
Cash management	Pearson Correlation	.759**	1		
	Sig. (2-tailed)	0.000			
Receivable management	Pearson Correlation	.178**	0.049	1	
	Sig. (2-tailed)	0.008	0.464		
Inventory management	Pearson Correlation	.235**	.570**	.343**	1
	Sig. (2-tailed)	0.000	0.000	0.000	

** Correlation is significant at the 0.01 level (2-tailed).

4.9.5 Model summary

The results from table 4.33 shows that the study multiple regression model had a coefficient of determination (R^2) of about 0.715. This means that 71.5% variation of the financial perfomance of SMEs in Kenya is explained/predicted by joint contribution of Receivable management, Inventory management, and Payable management and Cash management. The remaining 28.5% of financial performance of SMEs is caused by other factors not explained in the model. Comparing the value of R^2 and adjusted R^2 gives a difference of 0.01 which is too small. This shows that the validity of the model is very good since its shrinkage is less than the 0.5 threshold suggested by Field (2005).

Durbin–Watson statistic is within the thumb rule value of 1 to 2, thus from the table Durbin Watson statistics value was 1.832 indicating lack of serial correlation.

Table 4.33 Model summary

R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
.839a	0.715	0.714	0.56031	1.832

a Predictors: (Constant), Receivable management, Inventory management, Payable management and Cash management

b Dependent Variable: Financial Performance of SMEs in Nairobi county,Kenya

4.9.6 ANOVA Model

Table 4.34 reveals that the F-value of 130.088 with a p value of 0.00 significant at 5% indicate that the overall regression model is significant, hence, the joint contribution of the independent variables was significant in predicting the financial performance of SMEs in Kenya

.Table 4.34 ANOVA Model

Type	Sum of Squares	Df	Mean Square	F	Sig.
Regression	163.36	4	40.84	130.088	.000b
Residual	68.439	218	0.314		
Total	231.8	222			

a Dependent Variable:Financialperformance of SMEs in Kenya

b Predictors: (Constant)Receivable management, Inventory management, Cash management

4.9.7 Hypothesis Testing

Ho_1 revealed that Cash management has no significant effect on the financial performance of SMEs in Kenya. However, research findings showed that Cash management had coefficients of estimate which was significant basing on $\beta 1 = 0.888$(p-value = 0.000 which is less than $\alpha = 0.05$) implying that we reject the null hypothesis stating that Cash management has no significant effect on the financial performance of SMEs in Kenya. This indicates that for each unit increase in Cash management, there is 0.888 units increase in the financial performance of SMEs in Kenya. Furthermore, the effect of Cash management was

stated by the t-test value = 14.919 which implies that the standard error associated with the parameter is more than the effect of the parameter.

Ho_2 stated that Receivable management has no significant effect on the financial performance of SMEs in Kenya. Findings showed that collateral had coefficients of estimate which was significant basing on $\beta 2 = 0.253$ (p-value = 0.000 which is less than $\alpha = 0.05$) hence we reject the null hypothesis, and conclude that Receivable management has significant effect on the financial performance of SMEs in Kenya. This implies that for each unit increase in Receivable management, there is up to 0.253 unit increase in the financial perfomance of SMEs in Kenya . Also the effect of Receivable management is shown by the t-test value of 6.233 which implies that the effect of collateral surpasses that of the error by over 6 times.

Ho_3 postulated that Inventory management has no significant effect on the financial performance of SMEs in Kenya. However, study findings showed that Inventory management had coefficients of estimate which was significant basing on $\beta 3 = 0.346$ (p-value = 0.000 which is less than $\alpha = 0.05$) hence we fail to accept the hypothesis and conclude that Inventory management has a significant effect on the financial performance of SMEs in Kenya. This indicates that for each unit increase in Inventory management, there is up to 0.346 units increase in the financial performance of SMEs in Kenya. The effect of Inventory management is stated by the t-test value = 6.116 which point out that the effect of Inventory management is over 6 times that of the error associated with it.

Ho_4 postulated that Inventory management has no significant effect on the financial performance of SMEs in Kenya. However, study findings

showed that Inventory management had coefficients of estimate which was significant basing on $\beta 4 = 0.426$ (p-value = 0.000 which is less than $\alpha = 0.05$) hence we fail to accept the hypothesis and conclude that payable management has a significant effect on the financial performance of SMEs in Kenya. This indicates that for each unit increase in Inventory management, there is up to 0.426 units increase in the financial performance of SMEs in Kenya. The effect of payable management is stated by the t-test value = 6.256 which point out that the effect of payable management is over 6 times that of the error associated with it.

The rule of thumb was applied in the interpretation of the variance inflation factor. From table 4.34, the VIF for all the estimated parameters was found to be less than 4 which indicate the absence of multi-Collinearity among the independent factors. This implies that the variation contributed by each of the independent factors was significant independently and all the factors should be included in the prediction model.

Table 4.35 Coefficient of Estimate

Factor	Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
	B	Std. Error	Beta	T	Sig.	Tolerance	VIF
(Constant)	1.833	0.345		5.308	0		
Cash management	1.122	0.075	0.888	14.919	0	0.382	2.617
Receivable management	0.249	0.04	0.253	6.233	0	0.82	1.219
Inventory management	0.655	0.107	0.346	6.116	0	0.423	2.365
Payable management	0.236	0.015	0.426	6.256	0	0.562	2.124

a Dependent Variable: Financial Performance

The findings revealed that Cash management had the greatest influence on financial performance with a unit change in the Cash Management, holding IM and RM constant,

resulting to a 88.8% increase in financial performance, whereas receivables management had the least influence with a unit change in RM holding CM , IM and PM constant, resulting to a 25.3% increase in financial performance.

4.9.8 Multi-linear Regression Equation

The overall equation as suggested in the conceptual framework can be represented by use of unstandardized coefficients as follows:

$$Y= \beta_o+ \beta_1X_1+ \beta_2X_2+ \beta_3X_3+\varepsilon$$

Financial performance= $1.833+ 0.888X_1+0.253X_2+ 0.346X_3+ 0.426X_4$

Financial Performance = 1.833+ 0.888 Cash Management +0.253 Receivable Management + 0.346 Inventory Management + 0.426 Payable Management

The equation reveals that financial performance would be 1.833 when other independent variables are zero and if cash management is changed by one unit, then financial performance would change by 0.888. At the same time, for a unit change in receivable management, the financial performance would change by 0.253 whereas when there is a unit change in inventory management, financial performance will change by 0.346. the equation further revealed that for a unit change in payable management, the financial performance would change by 0.426.

4.10 Discussion

The results indicated that there is a strong relationship between independent variables and dependent variables. Therefore as cash management receivable management and inventory management increases, the business annual sales and profitability increases. These findings indicate that there is a relatively high support for the existence of a positive significant relationship between financial performance and working capital management practices. Generally, most researchers have established a positive

relationship between efficiency in working capital management practices and business performance (Kotut, 2003; Padachi, 2006; Lazaridis & Dimitrios, 2005; Kwame, 2007; Peel & Wilson, 1996). Moreover, based on the findings of this study, the central role of working capital management to the success of SMEs has been demonstrated by the empirical data from SMEs in Nairobi county. The data analysis indicated that, those businesses whose managers were more efficient in managing the working capital elements had higher financial performances; hence, emphasizing the pronouncement that efficient working capital management is an indispensable component for the success of SMEs. The finding by Waweru (2003) which showed that there is no relationship between cash management problems and how firms managed their cash contradicts the study finding that showed that, a 26.4% increase in financial performance could result for every unit change in efficiency of cash management. The findings also reinforces the establishment by Deloof (2003) which showed that, the way working capital is managed has a significant effect on the overall performance of businesses.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This section summarizes conclusions related to the research questions and testing the model analyzed and presented in chapter 4. Summary and conclusions of working capital management and SME financial performance are respectively presented in sections 5.2 and 5.3 while section 5.4 presents the recommendations.

5.2 Summary

The main objective of this study is to find out the role of working capital management on financial performance of Small and Medium manufacturing Enterprises in Nairobi County in Kenya. The study has been summarized according to the specific study objectives.

5.2.1 Cash Management Practice

The findings found that about 51.3 percent of SMEs often prepare cash budgets, and preparing and reviewing cash budgets are frequently based on monthly periods. The opinions of many researchers were supported by results of the survey , which demonstrated that most of the owners or managers of SMEs have rarely been trained in skills of financial management. However, this research showed that SMEs are familiar with using cash budgets as a tool to plan and control cash flows of the firm. On the other hand, about 65.4 percent of SMEs determined cash balance based on the owner/manager's experience. This suggests that experience is viewed as more important than theory in practicing cash management.

The study revealed that 4.9 percent of responding SMEs always or often face cash shortages for expenditure, while about 39.7 percent sometimes have a surplus of cash. Nevertheless, only 19 percent of SMEs deposit cash surpluses in bank accounts while up to 34.7 percent often incur cash surpluses for profits. This finding reveals that cash surpluses rather than cash shortages are the major problem for SMEs. Another problem reported was how to invest the temporary cash surplus for profitable purposes. According to Waweru (2009) SMEs have to keep high cash balances is acceptable under conditions of business environment uncertainty. However, this affects SME profitability and a trade-off between liquidity and profitability needs to be considered. Only 17.3 percent of SMEs invest cash surpluses in treasury bills and bonds for profitable purposes.

An explanation may be the fact that the money market has not fully developed in Kenya. Therefore, SMEs do not have access to money market instruments such as treasury bills, commercial papers, bank acceptances and similar instruments for short-term investment purposes. SMEs have not had opportunities to invest rather than not knowing how to invest temporary cash surpluses for profits. This conclusion suggests the need to develop money markets, which should be developed simultaneously with capital or stock markets instead of being separately developed as has happened in recent years. In addition to developing money markets, a recommendation for policy makers is that links between components of financial market including money market, capital market and foreign exchange market need to be developed and fostered. Therefore it can be concluded that proper cash management plays a significant role in small and medium enterprises financial performance in Kenya.

5.2.2 Account Receivable Management Practice

The results of data analysis and findings were presented and the following are the summaries related to receivable management practices. 51.3 percent of SMEs sometimes sell their products or services on credit and 43.1 percent often set up their credit policies

for the customers, whereas only 1.6 percent of SMEs tend never to sell on credit . This finding suggests that selling products or services on credit is a common trend for SMEs in Kenya, especially under conditions of a strong competitive market. In consequence, receivable management practices have become extremely important and reviewing levels of receivables and bad debts need to be conducted frequently by SMEs.

Therefore it was not surprising that most SMEs reported reviews of their levels of receivables and bad debts monthly. As a result, the percentage of bad debts was still controllable and maintained at an appropriate level. The majority of SMEs reported the percentage of bad debt was less than 10 percent of sales.

5.2.3 Inventory Management Practice

It can be summarized that although SMEs review inventory levels and prepare inventory budgets frequently, the ability to apply theories of inventory management in inventory budgeting is very limited. Over 58 percent of SMEs determine inventory levels based on owner/manager's experience and about 74.6 percent did not know of the "Economic Order Quantity Model". Like cash management, the owner's or manager's experience was again found to be more important than application of theories of inventory management.

In summary, the survey found that SMEs strongly supported all areas of working capital management practices. Cash and inventory budgets are frequently prepared. Levels of receivables and inventory are reviewed frequently. However, SME owners have a low level of management knowledge, and owner/manager's experience has been seen to be more important than application of theories of financial management. Therefore training skills of financial management for the owners and managers is essential.

5.3 Conclusions

The role of working capital management on financial performance of small and medium enterprises is real and practical as established by this study. The SMEs under the study experienced growth in sales and in profit which is an improvement in financial performance. Proper working capital management in SMEs facilitates wealth creation and by this, many entrepreneurs who work under SMEs have their lives improved. This is an indication that good working capital management contributes to economic growth.

The size of annual profits of SMEs was not high. Level of annual profit of SMEs in Kenya is low compared to SMEs in other countries because of small firm size in terms of total assets and labor. In relation to the types of industry and forms of ownership, the study found that the percentage of profitable SMEs in beverage industry was higher than that of the metal industries while in terms of form of ownership, the percentage of private enterprises was higher than for limited and joint stock companies. The study also revealed that the percentage of profitable SMEs was found higher for smaller businesses than for larger SMEs.

Working capital management not only assists the SMEs in successful financial performance, but also in the internal operations of the business especially in policy formulation. Proper working capital management nurtures SMEs at crucial junctures in their development and lay the foundation for an emerging generation of locally owned large enterprises.

Therefore, working capital management has a potential of assisting Kenya to achieve vision 2030 which advocates for strengthening SMEs to become key industries of tomorrow. These conclusions bring about important implications in applying working capital management and improving SME financial performance. Therefore it implies that working capital management has a significant role in the financial performance of SMEs in Nairobi County.

5.4 Recommendations

This research study has revealed that working capital management plays a significant role in the financial performance of SMEs. Therefore SMEs in Kenya should ensure that they practice the working capital management in their business ventures for greater success. To enhance this, the government should be able to come up with policy measures that ensure that working capital management practices are adhered to. This can be achieved by giving incentives to those SMEs that meet these conditions like tax waiver.

There should be working capital management courses and trainings designed for SMEs managers and employees in order to create better understanding among them on how to maximize the returns. At the same time, the government should extend more funding to the SMEs in order to achieve this noble course of training.

The government should be able to come up with the monitoring units to have the government sponsored SMEs evaluated in order to ensure that they follow the required regulations more so on the working capital management. This is because proper working capital management practices lead the SMEs to achieve a successful financial performance.

5.5 Areas for Further Research

The findings of working capital management practices and SME financial performance and conclusions related to the relationships between working capital management practices and SME financial performance could be used as the foundations for the further research. Future research should investigate generalization of the findings beyond the Kenyan manufacturing sector. The scope of further research may be extended to the working capital components management including marketable securities.

Additionally, findings on working capital management practices could be used as the basis for specific and detailed research into every separate aspect of financial management practices in Kenya such as financial reporting and analysis, working capital management, fixed asset management, capital budgeting, and for financial planning. The model of SMEfinancial performance developed in this study could be applied as the basis for the further research on building competitive strategies for SME.

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APPENDICES

APPENDIX 1: LETTER OF INTRODUCTION

I am a researcher carrying out research on the influence of Working Capital Management on profitability of SMEs in Nairobi County, Kenya. The purpose of the questionnaire is to gather information from the managers of SMEs on Working Capital Management Practices. You have been selected as one of the respondents who will assist to get the necessary data for the study. You are hereby assured that the information you will give will be treated with confidentiality it deserves and used strictly and only for academic purposes.

Thank you.

Yours faithfully,

Charles Weda

Researcher

APPENDIX 2 QUESTIONNAIRES

This questionnaire is given to the proprietor and managers. The information gathered from these forms will be strictly treated as

Confidential and only meant for the purpose of this study.

1. COMPANY PROFILE

(please circle the appropriate number that best answer to each question

1. owner/ manager details

1.1 What is your position in your business (please circle one that applies)?

Owner……..……...1

Manager…….……2

Chief-accountant……..…….……3

Other, please specify……..…...…4,

What is your highest education level qualification or nearest equivalent (please circle one that applies)?

High school ……1

Bachelor degree……...2

Master degree……..3

Higher degree……..4

Others ……..5, please specify……

1.2 do you ever attend management training programs related to financial management (please circle one that applies)?

Never……..…..1

Rarely (from 1 to 2 attentions)…….2

Sometimes (3 to 4 attentions)……...3

Often (more than 4 attentions)…… 4

Always……..5

1.3 What best describe your background (please circle one that applies)?

Management general……..…1

Technical field……..2

Business general……...…3

Financial management…….…....4

Others ……..5, please specify……

2. BUSINESS DETAILS

1.4 What best describes the type of industry of your business (please circle one that applies)?

Manufacturing…….……1

Trading ……...2

Service…….3

Others……..…4, please specify……

1.5 What best describes the form of ownership of your business (please circle one that applies)?

Private enterprise……..…1

Limited company……..…2

Joint stock company……..…...3

State company……...4

Others ……5, please specify……

1.6 How long has your business been established (please circle one that applies)?

Less than 2 years……1

2 - 5 years……2

6 - 1 0 years……..……3

More than 10 years……4

1.7 How many employees does your business currently have (pleas fill the number that applies)?

6-20 employees……1

2 1 - 3 0 employees ……2

3 1 - 4 0 employees……..……3

41-50 employees ……4

41-51

3. WORKING CAPITAL MANAGEMENT

3. Cash Management Practices

3.1 does your business ever conduct or occur the following ones (circle one number that applies for each described below)?

	Never	Rarely	Sometimes	Often	Always
Preparing cash budget	1	2	3	4	5
Determining the target cash balance	1	2	3	4	5
Occurring cash shortage	1	2	3	4	5
Occurring cash surplus	1	2	3	4	5
Utilizing computers in cash management	1	2	3	4	5

3.2 How often is the cash budget prepared and reviewed in your business (circle one that applies for each)?

	Never	Weekly	Monthly	Quarterly	Semiannually	Annually
Preparing cash budget	0	1	2	3	4	5
Reviewing cash budget	0	1	2	3	4	5

3.3 On what basis does your business determine target cash balance (circle one that applies)?

Based on theories of cash management ……..1

Based on historical data ……...2

Based on owner/ managers experience ……....3

Other…….4 please specify…….

3.4 Where does your business often invest the temporary cash surplus (circle one that applies)?

Bank deposit …….1

Treasury bills ……2

Both above ……3

Other……..4 please specify ……..

No where……5

3.5 In cash management, what area is the computer applied (circle one that applies)?

Preparing cash budget ……1

Recording cash transactions……2

Both above……...3

Other……4 please specify ……

3.6 Efficiency of cash management (circle one number that applies for each scale)

Here are some statements which describe how owner/manager might feel about the efficiency of cash management practices. Please indicate the most appropriate number that describes your business position on the scale.

1- Extremely negative

5- Neither negative nor positive

9- Extremely positive

There are no rights or wrong answer to these questions. Just give your opinion about your business.

	Low regard								high regard
1. How does your business regard cash management practices?	1	2	3	4	5	6	7	8	9
2.	Not regularly at all							Very regularly	
3. How regularly does your business prepare cash budgets?	1	2	3	4	5	6	7	8	9
	Low involvement							High involvement	
4. How involved in the owner /manager in preparing cash budgets?	1	2	3	4	5	6	7	8	9
	Not useful at all							Very useful	
5. How involved is the owner/ manager in interpreting and using cash budgets?	1	2	3	4	5	6	7	8	9
6. How useful are cash budgets of your business in providing information for making decisions?	1	2	3	4	5	6	7	8	9
	Very poor							Very well	

7. How does your business apply theories of cash management in determining the target cash balance?	1	2	3	4	5	6	7	8	9
	Not reasonable at all							Very reasonable	
8. How acceptable is the target cash balance in your business?	1	2	3	4	5	6	7	8	9
	Low computerization							High computerization	
9. How computerized are cash management practices in your business?	1	2	3	4	5	6	7	8	9

4. Receivable Management Practices

4.1 does your business ever carry out the things listed below (circle one that applies for each)?

	Never	Rarely	Sometimes	Often	Always
Sell product or services in credit	1	2	3	4	5
Set up its credit policy to the customers	1	2	3	4	5
Use computer in receivable management	1	2	3	4	5

4.2 How often does your business review its level of receivables and bad debts (circle one that applies for each row)

	Never	Weekly	Monthly	Quarterly	Semiannually	Annually
Review its levels of receivables	0	1	2	3	4	5
Reviewing its bad debts	0	1	2	3	4	5

4.3 Which of the following ranges is the best indication your business percentage of bad debts (circle one that applies)?

Less than 5% of sales ……1

5-10% of sale …….2

10-20% of sales ……..3

More than 20%.....4

Don't know …….....5

4.4 in managing receivables, which areas are computers applied (circle one number applies for each scale)

Managing receivables……1

Managing bad debts …….2

Both …….3

Others ……..4 specify ……..

4.5 Efficiency receivable management (circle one number applies for each scale)

Here are some statements which describe how owner/ manager might feel about the efficiency of receivable management practices. Please indicate the most appropriate number that describes your business position on the scale.

1- Extremely negative

5- Neither negative nor positive

9- Extremely positive

There are no rights or wrong answers to these questions. Just give your opinion about your business.

	Low regard								High regard
How does your business regard to receivable management practices?	1	2	3	4	5	6	7	8	9
	Not regularly at all								Very regularly
How regularly does your business review debtors' credit period?	1	2	3	4	5	6	7	8	9
	Not reasonable at all								Very reasonable
How reasonable is debtors' credit period in	1	2	3	4	5	6	7	8	9

your business?									
	Not regular at all							Very regular	
How regular does your business review debtors discount	1	2	3	4	5	6	7	8	9
	Not reasonable at all							Very reasonable	
How reasonable is debtors' discount policy in your business	1	2	3	4	5	6	7	8	9
	Not regular at all							Very regular	
How regular does your business review percentage of bad DEBTS	1	2	3	4	5	6	7	8	9
	Not reasonable at all							Very reasonable	
how reasonable is the percentage of bad debts in your business	1	2	3	4	5	6	7	8	9
	Not frequent at all							Very frequent	
How frequent does your business implement theories of receivable management?	1	2	3	4	5	6	7	8	9
	Low computerization							High computerization	
How computerized are receivable management practices in your business?	1	2	3	4	5	6	7	8	9

5. Inventory Management Practices

5.1 does your business ever do the following ones (circle one that applies for each row)?

	Never	Rarely	Sometimes	Often	Always
Review its inventory levels	1	2	3	4	5
Prepare its inventory budget	1	2	3	4	5
Utilize computer in managing inventory	1	2	3	4	5

5.2 On what basis is the inventory level determined (circle one that applies)?

Based on theories of inventory management ……..1

Based on historical data ……2

Based on owner/ managers experience……3

Others ……4 please specify ……

5.3. Does your business ever use "economic order quantity model" in inventory management?

Do not know this model 1

Know but never use 2

Sometimes use 3

Often use 4

Always use 5

5.4 Efficiency of inventory management (circle one that applies for each scale)

Here are some statement which describe how owner/manager might feel about the efficiency of inventory management practices. Please indicate the most appropriate number that describes your business position on the scale.

1-extremely negative

5-neither negative nor positive

9-extremely positive

There are no rights or wrong answers to these questions. Just give your opinion about your business.

	Low regard							high regard	
How does your business regard inventory management practices?	1	2	3	4	5	6	7	8	9
	Not regularly at all							Very regular	
How regularly does your business review inventory turnover?	1	2	3	4	5	6	7	8	9
	Not regularly at all							Very regular	

How regularly dos your business review inventory level?	1	2	3	4	5		6	7	8	9
	Very slow					Very fast				
How fast is inventory turnover of your business?	1	2	3	4	5		6	7	8	9
	Very unacceptable					Very acceptable				
How acceptable is inventory level of your business?	1	2	3	4	5		6	7	8	9
	Very useful at all					Very useful				
How are inventory budgets of your business useful in providing information for making the inventory decisions?	1	2	3	4	5		6	7	8	9
	Very poor					Very good				
How does your business apply theories of inventory management in determining the inventory level?	1	2	3	4	5		6	7	8	9
	Low computerized					High computerized				
How computerized are inventory management practices in your business?	1	2	3	4	5		6	7 8		9

6. Account Payable Management

6.1. How do your SME pay the creditors?

Through bank only [ ]

Through cash only [ ]

Through cash or bank [ ]

Any other [ ]

6.2 . What induces you to pay creditors in good time?

Discounts [ ]

Reduced prices [ ]

After sale service [ ]

Any other [ ]

6.3. Does your payment system affect your profit?

Yes [ ]

No [ ]

7. Financial Performance of SMEs

7.1 Which of the following ranges is the best indication of your business annual sales (please circle one that applies)?

Less than 1 million Kenya shillings ……..……1
1-5 Million Kenya shillings…….…..……...2
5-10 Million Kenya shillings …….……..…….3
More than 10 Million Kenya shillings ……..…….4

7.2 Which of the following ranges is the best indication of your business annual net profits)?

Less than 1 million Kenya shillings ……1
1-5 Million Kenya shillings …….……...2
5-10 Million Kenya shillings …….……3
More than 10 Million Kenya shillings ……..…….4

7.3 What best describes your business' please circle one that applies)?

Profitable…….…….……1
Not profitable …….…….….2

7.4 which of the following ranges is the best indication of your business annual net profits

Less than 1 million Kenya shillings ……..……1
1-5 Million Kenya shillings……...……...2
5-10 Million Kenya shillings …….……..….…….3
More than 10 Million Kenya shillings ……..…….4

APPENDIX 3: STATISTICAL TESTS

	Statistical test	value
Categories of respondents	Chi-square	5.165
	Degree of confidence	1
	p-value	0.023
Level of education	Chi-square	77.884
	Degree of confidence	4
	p-value	<0.001
Management Training	Chi-square	64.331
	Degree of confidence	4
	p-value	<0.001
Training Background	Chi-square	39.533
	Degree of confidence	3
	p-value	<0.001
Type of business industry	Chi-square	42.264
	Degree of confidence	2
	p-value	<0.001

Form of business ownership	Chi-square	30.681
	Degree of confidence	3
	p-value	<0.001
Period of business existence	Chi-square	19.655
	Degree of confidence	3
	p-value	<0.001
Business annual sales	Chi-square	44.067
	Degree of confidence	3
	p-value	<0.001