EFFECTS OF WORKING CAPITAL MANAGEMENT PRACTICES ON
PROFITABILITY OF SMALL AND MEDIUM ENTERPRISES IN
NAIROBI COUNTY, KENYA

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NOVEMBER, 2013
DECLARATION

Declaration by candidate:

I declare that this research project is my original work and has not been presented for a degree in any other University or for any other award.

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

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DEDICATION

I wish to dedicate this Research Project to my wife Monicah and my parents for their moral support during the period I undertook this research project. God bless you all.
ACKNOWLEDGEMENT

I am heartily thankful to my supervisor, Mr. Anthony Thuo, for his guidance and tireless efforts in the supervision of my research work and writing of this research project.

I would also like to acknowledge my friends and entire Kenyatta University staff for their support and timely update of the required information.
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OPERATIONAL DEFINITION OF TERMS

**Working Capital** - Refers to that part of firms’ capital which is held in current assets such as cash, receivables, inventory and marketable securities.

**Working Capital Management** - Refers to the management of current assets and current liabilities of a firm to meet its short term liquidity needs.

**Profitability** - This is measured by Return on Assets ratio which measures a Company’s Earnings before Interest and taxes (EBIT) against its total net assets.

**Cash Conversion Cycle** - refers to the amount of time that elapses from the point when the firm makes a cash outlay to purchase raw materials to the point when cash is collected from the sale of finished goods produced using those raw materials.

**Inventory period** - This is the average number of days of stock held by the firm.

**Accounts Receivable Period** - This is the average number of days that a firm takes to collect payments from its customers.

**Accounts Payable Period** - This is the average time it takes firms to pay suppliers.
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<td>SMEs</td>
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ABSTRACT
Proper working capital management is essential for business survival. This is based on the fact that a firm’s inability to identify relevant working capital management practices can be its source of inability to perform. The general objective of this study was to determine the effects of working capital management practices on profitability of Small and Medium Enterprises (SMEs) in Nairobi County which was guided by the following specific objectives; to determine the effect of cash conversion cycle on profitability of SMEs of Nairobi County, to establish the influence of inventory holding period on profitability of SMEs of Nairobi County, to determine the effect of accounts receivable period on profitability of SMEs of Nairobi county, to establish the effect of accounts payable period on profitability of SMEs of Nairobi county and, to establish the effect of the approaches of working capital management on profitability of SMEs of Nairobi county. The study provided insight on which working capital management practices are efficient and necessary for the success of SMEs. The study adopted a cross-sectional survey research design and in depth interviews which allowed the collection of primary quantitative data through structured questionnaires. A population of SMEs operating in Nairobi County was targeted. The study used stratified random sampling method by dividing the population into six subpopulations or strata. A simple random sampling method was then used to select the specific respondents for the study. Data was analyzed for descriptive and inferential statistics. Descriptive statistics such as tables, graphs, charts and percentages analysis were used for presentation of data. Also, a linear regression model was used to analyze quantitative data and was developed and tested to explain the relationship between various proxies of working capital management practices and profitability of SMEs of Nairobi County. The study results of the regression analysis indicated that the dependent variables are significant and have an effect on profitability of SMEs. The study concluded that managers of SMEs should adopt the correct working capital management practices and identifying critical areas that may improve the profitability of SMEs. The study recommended that SMEs managers should be thoroughly trained on working capital management skills. The managers should also undergo continuous development programs through interactive symposiums, conferences, and open forums. The study advocated for increased government support to the SMEs sector. This can be done through resource allocation in this sector. The government in conjunction with it agencies should also assist SMEs in sorting out the problems of managing working capital by setting out guidelines and regulations on proper corporate governance in this sector. The study suggested that further researcher should be conducted for the same study in other counties so as to compare the findings of this study with those of other counties. The study also recommends that in future researchers should do a follow up study in the same area so as to monitor and evaluate for improvements in the management of working capital management practices.
CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Working capital management deals with the management of all aspects of both current assets and current liabilities to minimise the risk of going bankrupt and at the same time increasing returns on assets (FTC Foulks Lynch, 2005). It involves planning and controlling current assets and current liabilities in a manner that eliminates the risk of inability to meet short term obligations as they fall due and avoiding excessive investment in the current assets (Eljelly, 2004). This requires a combination of techniques which include cash management, inventory management, payables management and receivables management. According to Filbeck and Krueger (2005), the main objective of working capital management is to maintain an optimal balance between each of the working capital components. The findings contend that business success heavily depends on the ability of financial executives to effectively manage receivables, inventory and payables.

Most of the previous literature carried out in the corporate world has traditionally concentrated on the study of long term financial decisions and focused much on large firms. This has seen researchers concentrate on analyzing investments, capital structure, dividends and company valuations. However, many of the recent surveys carried out have indicated that managers spend a considerable amount of time in solving day to day problems that involve working capital decisions (Raheman and Nasr, 2007). In addition, 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 asset size. Management and control of working capital is one of the most effective measures of
Companies’ financial health. Some previous researches indicated that poor financial management is a major cause of small business failures (Matoha, 2007).

Small and medium-sized enterprises (SMEs) depend on working capital figures to make decisions on additional financing requirements. Proper and efficient working capital management can predict and sometimes prevent potential financial difficulties. However, poor working capital management can lead to financial distress, which increases the probability of bankruptcy. According to Padachi (2006), working capital is a significant source of liquidity which is a predictive measure of whether a firm is able to meet its short-term obligations and its continued flow can be guaranteed from a profitable venture.

For the purposes of this study, enterprises were categorized as per the Government of Kenya’s 1989 Development Plan and the Sessional Paper No.2 of 2005 (GOK, 1989, 2005). In these documents, Firms which employ less than five full-time workers are referred to as micro enterprises. Those employing between 5 and 99 workers are called Small and Medium Enterprises (SMEs) and those with 100 and above full time workers are referred to as large enterprises (LEs) (GOK, 1989, Sessional Paper 2, 2005). In Kenya, the fast growth in SMEs sector is due to extensive promotion and support by the government, availability of grants and subsidies, raw material procurement, rising export demand for Kenyan products and rising domestic demand which is the result of overall economic growth. However, the growth rates can increase further if more development policies are put into action to improve the technology and marketing side of SMEs and consequently SMEs can construct the most dynamic and vibrant sector of the economy (Michael B. 2009).

The knowledge and understanding of the working capital management practices of small, medium and large companies are presently not enough and many firms have gone into
liquidation over the years as a result of running a deficit cash flow from operations, (Matoha, 2007).

Management of working capital aims at maintaining an optimal balance between each of the working capital components, that is, cash, receivables, inventory and payables. This is a fundamental part of the overall corporate strategy to create value and is an important source of competitive advantage in businesses (Deloof, 2003). The existence of efficient working capital management practices can make a substantial difference between the success and failure of an enterprise and it is of particular importance to the managers of SMEs as they strive for finances. The existence of efficient working capital management practices can make a substantial difference between the success and failure of an enterprise and it is of particular importance to the managers of small scale enterprises, because it is they who strive for finances and the opportunity cost of finances, for them is usually on the higher side (Kwame, 2007). As observed by Padachi (2006), efficient management of working capital is important for the success and survival of the SMEs.

According to Atrill (2006), there is evidence that many small and medium enterprises are not very good at managing their working capital despite their high investments in current assets in proportion to their total assets and this has been a major cause of their high failure rates as compared to large businesses. According to him, majority of the small scale enterprises operate without credit control department implying that both the expertise and the information required to make sound judgments concerning terms of sales may not be available. They also lack proper debt collection procedures, hence, they tend to experience increased risks of late payment and default by debtors who tend to increase where there is an exclusive concern for growth; in this case, small scale enterprises may not be too willing to extend credit to customers who have poor credit.
risks. In a recent study by Bowen et al. (2009), debt collection was identified by 55% to be among the top five major challenges facing micro and small businesses.

Small and medium enterprises in Kenya are acknowledged 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, 2000).

The aim of Working Capital Management is to sustain the optimum balance of all components of working capital and it is necessary for companies to monitor overall trends so as to detect areas that require closer management. In achieving this, different methods and strategies are applied to effectively control each component of working capital.

1.2 Statement of the Problem

In order for the Kenyan economy to achieve its millennium goals of becoming an industrialized country and also achieve its vision 2030, contributions from the SMEs sector are critical. SMEs have contributed greatly to the Gross Domestic Product (GDP), employment and innovations of the economy. Small and Medium Enterprises (SMEs) comprise the largest proportion of businesses in most economies and frequently offer the greatest potential for job creation (Asquith et al, 1994). The government of Kenya has placed a lot of emphasis on the development of SMEs as a means of encouraging self employment, poverty reduction and accelerating economic growth. Despite their significance, recent studies show that 60% of the SMEs fail within the first few months of operation (KNBS, 2007). It is hard for the SMEs to access finances from the financial institutions since they lack proper working capital management skills Atrill (2006).
The major problem that arises is on how working capital management practices affect the profitability of SMEs. Most of the Small and Medium Enterprises face challenges in balancing between surplus and shortage of working capital. As a result, these firms have been experiencing slow growth because of inability to pay daily expenses of their operations and difficulty to exploit new markets and undertake profitable projects due to shortage of working capital mainly because of poor working capital management. There is, therefore, a need for firms to have efficient working capital management practices. This study sought to find out the effect of working capital management practices on profitability of SMEs in Nairobi County.

1.3 Objectives of the Study

1.3.1 General Objective

The main objective of this study was to determine the effects of working capital management practices on the profitability of Small and Medium Enterprises in Nairobi County, Kenya.

1.3.2 Specific Objectives

The specific objectives of the study were:-

i. To determine the effect of cash conversion cycle on profitability of SMEs of Nairobi County.

ii. To establish the influence of inventory holding period on profitability of SMEs of Nairobi County.

iii. To determine the effect of Accounts Receivable Period on profitability of SMEs of Nairobi County.

iv. To establish the effect of Accounts Payable Period on the profitability of SMEs of Nairobi County.
v. To establish the effect of the approaches of working capital management on profitability of SMEs of Nairobi County.

1.4 Research Questions:

The study was guided by the following specific research questions:-

i. What is the effect of cash conversion cycle on profitability of SMEs of Nairobi County?

ii. To what extent does inventory holding period influence profitability of SMEs of Nairobi County?

iii. How does Accounts Receivable Period affect profitability of SMEs of Nairobi County?

iv. How does Accounts Payable Period affect profitability of SMEs of Nairobi County?

v. What are the effects of the approaches of working capital management on profitability of SMEs of Nairobi County?

1.5 Significance of the Study

The purpose of this research was to study how working capital management practices affect profitability of small and medium enterprises in Kenya. This research would help owners of SMEs in understanding the proper working capital management practices and how they can use them to increase profitability of their enterprises. The research would also be useful to company managers in understanding funds maintenance and setting standards for efficient working capital levels. Prospective researchers would also gain useful information from the findings of this research in that it would provide relevant data that can be used in further studies in the area. The research if done as a whole entirely, would give overall view of the organization and it is useful in further expansion decision to be taken by management. The outcome of this research would also be resourceful to
the government agents and policy makers within Small and Medium Enterprises in Kenya, which would assist in better resource allocation in the SME sector. The research would also add knowledge to the existing literature on Working Capital Management in Small and Medium Enterprises in Kenya and form basis for future research.

1.6 Scope of the Study

The study focused on the SMEs registered and operating in Nairobi County. Nairobi County was chosen since it’s the capital city of Kenya and the economic city of Kenya where most of the Kenyan SMEs have their headquarters. The study area was therefore good enough to give ground for generalization of the findings on the whole industry of SMEs in Kenya. The study used stratified random sampling method by dividing the population into six strata which included retail shops, Transport and communication, agriculture, hotels and restaurants, services sector and the industrial sectors. A simple random sampling was then used to select the specific respondents for the study. The research was carried out in the month of June to October 2013. The research used owners and top managers as respondents. The study was limited to the effects of Working Capital Management practices on profitability of Small and Medium Enterprises in Nairobi County.
CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter provides summarized information from other researchers who have carried out their research in the same field of study. The specific areas covered here are theoretical review, empirical review, research gaps and conceptualization.

2.2 Theoretical Review

2.2.1 Finance Theory

According to Aksoy (2005) finance theory is under three main threads: capital budgeting, capital structure and working capital management. Capital budgeting and capital structure decisions are mostly related with financing and managing long-term investments. However, financial decisions about working capital are mostly related with financing and managing short-term investments that undertake both current assets and current liabilities simultaneously. In most cases short-term financial management is referred to as working capital management.

Efficiency in working capital management is important especially for production firms whose assets are mostly composed of current assets (Horne and Wachowitz, 2004) as it directly affects liquidity and profitability of any firm (Raheman and Nasr, 2007). According to Kargar and Bluementhal (1994) bankruptcy may also be likely for firms that put inaccurate working capital management procedures into practice, even though their profitability is constantly positive. Hence, it must be avoided to recede from optimal working capital level by bringing the aim of profit maximization in the foreground, or just in direct contradiction, to focus only on liquidity and consequently pass over profitability.
While excessive levels of working capital can easily result in a substandard return on assets, inconsiderable amount of it may incur shortages and difficulties in maintaining day-to-day operations.

Working capital is also a major external source of capital especially for small and medium sized and high growth firms. These firms have relatively limited access to capital markets and tend to overcome this complication by short-term borrowing. Working capital position of such firms is not only an internal firm-specific matter, but also an important indicator of risk for creditors. Higher amount of working capital enables a firm to meet its short-term obligations easier. This results to increased borrowing capability and decrease in default risk and consequential decrease in cost of capital and increase in firm value. Therefore, efficiency in working capital management affects not only short-term financial performance in terms of profitability, but also long-term financial performance, i.e., firm value maximization (Moyer et al., 1992).

2.2.2 Liquidity Theory

According to Jose (1996), liquidity theory as a function of current assets and current liabilities is an important factor in determining working capital policies and indicates firm’s capability of generating cash in case of need. Current ratio, acid-test and cash ratios as traditional measures of liquidity are incompetent because these balance sheet based measures cannot provide detailed and accurate information about effectiveness of working capital management. Formulas used for calculating these ratios consider both liquid and operating assets in common. Besides, mentioned traditional ratios are also not meaningful in terms of cash flows (Richards and Laughlin, 1980).

Boer (1999) has insisted on using ongoing liquidity measures in working capital management. Ongoing liquidity refers to the inflows and outflows of cash through the
firm as the product acquisition, production, sales, payment and collection process takes place over time. As the firm’s ongoing liquidity is a function of its cash conversion cycle, it would be more appropriate and accurate to evaluate effectiveness of working capital management by cash conversion cycle, rather than traditional liquidity measures (Pinches, 1992).

2.2.3 Corporate Risk Management Theory

According to Minton (1999), the theory of corporate risk management states that shareholders are better off if a firm maintains smooth cash flows. Smooth cash flows can add value by reducing a firm's reliance on costly external finance. Empirically, it has been shown that cash flow volatility is costly as it affects a firm's investment policy by increasing both the likelihood and the costs of raising external capital. While previous research finds that cash flow volatility is costly, no direct evidence exists linking financial statement volatility to firm value. Such a link is important because, in order for risk management to matter, smooth financials must be valued at a premium to more volatile ones. Investors value firms with smooth cash flows at a premium relative to firms with more volatile cash flows. Consistent with risk management theory, strong evidence shows that cash flow volatility is negatively related to proxies for firm value.

There are a number of reasons why earnings volatility may matter to the firm independently of cash flow volatility. For instance, prior empirical work suggests that analysts tend to avoid covering firms with volatile earnings, as it increases the likelihood of forecast errors. Similarly, it is imperative that institutional investors avoid companies that experience large variations in earnings. High earnings volatility also increases the likelihood of negative earnings surprises. Managers have engaged in extensive earnings smoothing. It should be noted that earnings smoothing may likely reduce a company's perceived probability of default and therefore a firm's borrowing costs. A firm may
smooth earnings so as to reduce the informational advantage of informed investors over uninformed investors and, therefore, protect these investors who may need to trade for liquidity reasons. It has also been found that firms with greater earnings smoothing have a lower cost of capital even after accounting for cash flow volatility.

Under certain specifications the market appears to punish firms for undertaking smoothing behavior preferring earnings volatility mirror cash flow volatility. These results are important and suggest managers focus their actions on smoothing cash flows rather than necessarily utilizing accruals to smooth earnings. There are a number of other ways in which financial uncertainty interacts with firm value. According to the CAPM, systematic risk should be negatively related to value, since higher discount rates yield a lower value, all things being equal.

Further, recent empirical work suggests that not only does systematic risk affect value, but also idiosyncratic risk may be priced (Shin and Stulz, 2000). Empirical evidence suggests that there is a negative relationship between systematic risk and firm value, as well as a negative and significant association between unsystematic risk and firm value.

The two alternative types of risk, namely, cash flow and earnings volatility are of primary importance since unlike financial market variables they reflect the actual stability of the firms' financial statements and are directly affected by managerial decisions and the firms' risk management policies.

2.3 Empirical Review

2.3.1 Cash conversion cycle and profitability of SMEs

According to Brigham & Houston (2007), Cash conversion cycle represents the length of time that funds are tied up in working capital. The cash conversion cycle (CCC) is taken as a standard measure for working capital management. Cash conversion period reflects
the time span between disbursement and collection of cash. It is measured by estimating the inventory conversion period and the receivable conversion period, less the payables conversion period. According to Ross et al (2008), reducing the time cash is tied up in the cash operating cycle improves a business’s profitability and market value, hence the significance of efficient cash management practices in improving business performance.

In recent empirical finance literatures, some in-depth studies have been conducted in discovering and providing the alternatives of explaining corporate cash conversion periods. Teruel & Solane (2005) analyzed Spanish SMEs Corporate cash holdings and found out that those firms with more liquid assets tend to reduce their cash levels because these assets can be used as cash substitutes and firms with a higher proportion of short-term debt will hold higher levels of cash, so that it lowers the risk of non-renewing short-term debts.

Abel (2008) on the other hand studied 13,287 Swedish manufacturing SMEs and found out that high efficiency in the management of working capital accelerates the current assets quickly being transferred into cash so that the balance from average investments in inventory and accounts receivable are converted into cash leading to high cash holdings. Empirical studies have observed that firms that reduce their inventories, accounts receivable are able to speed up their cash conversion cycle in both large and SME firms. Teruel & Solano (2007) tested the effects of working capital management on SME profitability by using 8,872 small and medium-sized enterprises of period 1993-2002. They were able to demonstrate that managers can create value to firms and shareholders by reducing the number of days in inventory and accounts receivable. They found out that shortening the cash conversion cycle also improves the firms’ profitability.
Manoj Anand and Keshar Malhotra (2007) carried out an empirical study on working capital performance of corporate firms in India by employing the methodology developed by Anand and Gupta (2003) and provided estimates by using the data of non-financial companies with at least three years of publicly available records over the period of 2001 to 2002 to 2003 to 2004 for each company and industry. During the period of study, corporate India had achieved a compound Annual Growth rate of 26.3 % in the net sales and 1.6 % in the three year average cash operating margin. The length of the operating cycle and cash conversion cycle had reduced by 10.2 % and 12.7 % respectively on compounded annual basis. The paper found very little evidence on the positive relationship between working capital management and profitability.

Reheman (2007) investigated the impact of working capital management on profitability of 94 Pakistan firms listed on Islamabad Stock Exchange for the period of 1999-2004. He studied the impact of the different variables of working capital management including average collection period, inventory turnover in days, average payment period and cash conversion cycle on the net operating profitability of firms. He concluded that there is a strong negative relationship between working capital ratios mentioned above and profitability of firms. Furthermore, it was noted that managers can create a positive value for the shareholders by reducing the cash conversion cycle (CCC) up to an optimum level.

Lazaridis and Tryfonidis (2006) carried out an empirical study on working capital performance of 131 companies listed in the Athens Stock Exchange (ASE) for the period of 2001-2004. They found out that there is a significant negative relationship between cash conversion cycle and gross operating profit. The findings reveal that managers can create profits for their companies by handling correctly the cash conversion cycle and keeping each component of working capital to an optimal level.
2.3.2 Inventory Holding Period and profitability of SMEs

Maintaining optimal inventory levels reduces the cost of possible interruptions and prevents loss of business arising from scarcity of products. It also reduces supply costs and protects against price fluctuations. Setting the right inventory holding period is the main goal of inventory management. A study to investigate the optimal inventory levels was carried out by Swaminathan (2001), in which the study found out that adjusting raw materials and finished goods as a component of inventory is faster than the inventory as a whole to reach the reasonable levels. AutuKaite and Molay (2011) found out that there are some other methods that can ease inventory management such as order quantity method and just-in-time inventories.

Empirical studies have shown that inventory conversion period has a negative effect on a business’s performance. For instance, shortening the inventory conversion period could increase stock out costs of inventory which results in losing sales opportunities and leads to poor performance (Deloof, 2003). Managers of firms should therefore keep their inventory to an optimum level since mismanagement of inventory will lead to tying up excess capital at the expense of profitable operations (Lazaridis and Dimitrios, 2005).

Dimitrios (2008) points out that too much inventory could demand more physical space, could lead to a financial distress, and increases the possibility of inventories damages, deterioration and losses. Moreover, holding large amount of inventory frequently indicates inefficient and careless management practices and procedures. On the other hand, too little inventories might lead to the interruption of operation in manufacturing, increase the possibility of losing sales and consequently lower the profitability of the firms.

Singh (2008) studied the relationship between inventory management and working
capital management focusing on the importance of inventory management. He found out that firms with a poor inventory management can cause serious problems which destroy the long-term profitability and firms’ survival chances. Also firms with well-thought inventory management can reduce the inventory to an optimal level which has no negative effect on production and sales. The study also indicates that the size of inventory directly affects the working capital and its management.

2.3.3 Accounts Receivable Period and profitability of SMEs

Provision of trade credit is normally used by businesses as a marketing strategy to expand or maintain sales (Pandey, 2004). Efficient receivables management augmented by a shortened creditor’s collection period, low levels of bad debts and a sound credit policy often improves the businesses’ ability to attract new customers and accordingly increase financial performance hence the need for a sound credit policy that will ensure that SMEs’ value is optimized (Ross et al., 2008). Costs of cash discounts, losses of bad debts and costs of managing credit and credit collections constitute the carrying costs associated with granting credit which increases when the amount of receivables granted is increased. Lost sales resulting from not granting credit to customers constitute the opportunity cost which decreases when the amount of receivables is increased. Firms that are efficient in receivables management usually determine their optimal credit levels which minimizes the total costs of granting credit (Ross et al., 2008).

As observed by Michalski (2007) in his study, 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 may lead to a decrease in the value of the firm. A study by Lazaridis and Dimitrios (2005) found out that firms which pursue increased levels of accounts receivables to an optimal level increase their profitability resulting from increase sales and market share. A study by Juan and Martinez (2002) emphasized
that firms can create value by reducing their number of days of accounts receivable, as also confirmed by the findings of Deloof (2003) who established that the length of receivables collection period has a negative effect on a firm’s performance. A study by Sushma and Bhupesh (2007) 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 the firms. Teruel and Solano (2005) suggested that managers can create value by reducing their firm’s days of accounts receivable and inventories.

Baveld (2012) carried out a study on the relationship between profitability and accounts receivables during current global crisis period. The study aimed at investigating how public listed firms in the Netherlands manage their working capital. The study compared two periods; the non-crisis period of 2004-2006 and the financial crisis period of 2008 - 2009. Baveld's findings reflected significant negative relationship between accounts receivables and gross operating profit during non-crisis period. On the other hand, during crisis period, no significant relation between these two variables was observed. The results of this study may suggest that the relationship between accounts receivables and firm’s profitability is changed in times of a crisis in a way that some firms should not keep their accounts receivables at minimum in order to maximize profitability during crisis periods.

Mathuva (2009) studied the influence of working capital management components upon corporate profitability by using a sample of 30 companies listed on the Nairobi Stock Exchange (NSE) from 1993 to 2008. The findings of his study indicated that there is a highly significant negative relationship between accounts collection period and profitability. In regard to the relationship between profitability and the inventory
conversion period or the average payment period, the results were positive and significant.

2.3.4 Accounts Payable Period and profitability of SMEs

Wilson, et al (1997) in an empirical study of the demand for trade credit by small UK firms, also found strong evidence of a financing demand for trade credit. They found out those small firms that pay trade credit liabilities late appear to do so when they reach their limit on short-term bank finance. These credit rationed firms were typically growing and export oriented. In consequence, if the imposition of statutory interest significantly reduces the trade credit offered to smaller firms, this may lead to severe liquidity problems and increased failure rates unless alternative finance is readily available.

A number of other solutions to the problem of late payment have been put forward. For example, it has been argued that credit management is a neglected function in many problems and increased failure rates unless alternative finance is readily available. Wilson et al (1995) identified poor credit management practices as one of the underlying causes of late payment. Deloof (2003) examined 1009 large Belgian non-financial firms for 1992-1996 periods and found that managers can increase the profitability of firms by reducing the days in accounts receivable and inventories. According to his research, less profitable firms stretch their accounts payable.

Nobanee and AlHajjar (2009b) analyzed a sample of 2,123 Japanese non-financial companies listed in the Tokyo Stock Exchange for the period 1990-2004 and concluded that company managers can increase profitability by shortening the cash conversion cycle, the receivables collection period and the inventory conversion period. The results also suggested that extending the payables deferral period could increase profitability. However, managers should be careful because extending the payables deferral period could damage the company’s credit reputation and harm its profitability in the long run.
Delaying payments to suppliers allows companies to assess the quality of the products that were bought and can be an inexpensive and flexible source of financing. But we should bear in mind that late payment can have a very high implicit costs whenever early payment discounts are available. Since money is also locked up in working capital, the greater the investment in current assets, the lower the risk but also the lower the profitability obtained (Falope and Ajilore, 2009).

2.3.5 Approaches of working capital management and profitability of SMEs

The optimal level of working capital is determined to a large extent by the methods adopted for the management of current assets and liabilities.

The aggressive approach is considered to be more risky because of the frequent need to refinance to support permanent current assets as well as fluctuating current assets. Moyer et. Al (2005) observed that if a firm relied on overdraft, it will be vulnerable to a rapid withdrawal of the facility and if stock and cash are reduced to pay back the overdraft the firm may experience severe disruption, loss of sales and output, and additional costs because of failure to maintain the minimum required working capital to sustain optimum profitability. Previous studies have shown that a firm can adopt an aggressive working capital management policy with a low level of current assets as a percentage of total assets or it may also be used for financing decisions of the firm in the form of high level of current liabilities as percentage of total liabilities. According to Van Horne and Wachowicz (2004), excessive levels of current assets may have a negative effect on the firm’s profitability whereas a low level of current assets may lead to a lower level of liquidity and stock-outs resulting in difficulties in maintaining smooth operations.

The conservative approach is considered low risk since it makes long term financing which covers the total investment in the life of the assets. Sometimes, however, during the year when surplus cash is available it is invested in short term investments. Many
managers feel comfortable under the conservative approach because of the lower risk of being unable to pay bills as they arise. However, such policy may not be of the best interest to the owners of the firm. The short term funds invested in the short term securities is unlikely to earn satisfactory return relative to the cost of the long term funds. In all likelihoods, shareholders would be better off if the firm reduced its long term financing through returning cash to shareholders or paying off some long term loans.

The moderate or balanced capital approach, according to Gitman (2005) falls midway between aggressive and conservative policies. With a moderate policy the level of investment of current assets is neither lean nor excessive. Following a moderate policy, long term funds are used to finance investment in fixed assets and the permanent components of current assets investment. The moderate policy is less risky than the aggressive but more risky than conservative. The firm can only resort to short term financing when seasonal and other temporary demands require it.

According to a study by Weinraub & Visscher (1998), aggressive liquidity policy combines the higher levels of normally lower cost with short-term debt and less long-term capital. Although capital costs are reduced, this increases the risk of a short-term liquidity problem. Aggressive working capital management is characterized by minimizing the current assets, inventory and accounts receivables as well as holding less cash and cash equivalents and stretching the accounts payable. However, firms have been observed to increase their cash holdings instead of reducing the cash levels which implies the characteristic of conservative financial policy. It is arguable that aggressive working capital management generates more internal cash reserve, but it arise greater liquidity risk. Moreover, firms have to reserve cash to secure the risk due to the lower level of inventories and accounts receivable which are the most liquid and cash convertible assets as well as the hedge against the risk aroused from the shortage of these assets and
increased exposure to trade credit risk to suppliers. Harris (2005) states that it is important to understand the role and drivers of working capital management so as to reach the right levels of working capital. If firms can minimize risk effectively, they are able to prepare for uncertainty and improve overall performance which will minimizes the adverse effects of unforeseen events and provide financial flexibility in uncertain times by having working capital as a ready source of cash.

In their study, Afza and Nazir (2007) investigated the relationship between the aggressive and conservative working capital policies for seventeen industrial groups and a large sample of 263 public limited companies listed at Karachi Stock Exchange for a period of 1998-2003. The study found out a significant difference among their working capital investment and financing policies across different industries. The study also found out a negative relationship among the profitability measures of firms and degree of aggressiveness of working capital investment and financing policies.

2.4 Summary of Literature Review and Research Gaps

Working capital management has long been an important financial management aspect in large and SME firms. Much of what has been written about working capital management practice relates to entities actively dealing in the manufacturing sector. Just as Teruel & Solano (2008) argue, most of the previous studies have focused on analysis of larger firms, but the management of current assets and liabilities is important issue in the case of small and medium-sized companies. Most of these companies’ have current assets and current liabilities as their main sources of external finance since SMEs have difficulties in obtaining funds and accessing to the long-term capital markets. There have also been conflicting arguments on different working capital management practices and their effects on profitability. For instance, while most studies support that shorter cash conversion
cycles increases profitability, some studies have proved otherwise. (Nobanee, 2009) argues that sometimes shorter cash conversion cycles are associated with high opportunity costs and longer cash conversion cycles are associated with high carrying costs and hence longer cash conversion cycle might increase profitability.

2.5 Conceptual Framework

Different working capital management practices have been found to affect profitability of Small and Medium Enterprises (SMEs). This study identified Cash Conversion Cycle (CCC), Inventory Holding Period (IHP), Accounts Receivable Period (ARP), Accounts Payable Period (APP) and Approaches of Working Capital Management as key independent variables affecting SMEs profitability. The study also included intervening variables which are internal to the business and which influenced profitability of SMEs as Growth in sales and Growth in total assets. These two variables were also partly influenced by the independent variables. Profitability of the firms was identified as the dependent variable and was measured by Return on Assets (ROA).

The model variables interrelationship was conceptualized below:-
Independent Variables

Cash Conversion Cycle
- Cash conversion policies
- Setting optimal CCC
- Setting optimal cash held
- Purchases and sales Controls

Inventory Holding Period
- Inventory management policies
- Inventory planning
- Re-order time
- Setting EOQ Levels

Accounts Receivable Period
- Debt management policies
- Advance payments from customers
- Review of levels of bad debts

Accounts Payable Period
- Credit policies
- Setting credit periods for suppliers
- Effect of Purchase discounts

Approaches of Working Capital Management
- Aggressive working capital approach
- Conservative working capital approach
- Matching working capital approach

Dependent Variable
Profitability of SMEs
- ROA

Intervening Variables
Growth in sales
Growth in total assets

Figure 2.1: Conceptual Framework
Source: Author (2013)
CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter sets out various stages and phases that were followed in completing the study. It covers an overall scheme, plan or structure conceived to aid the researcher in answering the raised research questions. The chapter specifically has the following subsections included; research design, target population, sampling design, data collection, data analysis and processing.

3.2 Research Design

Research design, according to Creswell (2003), is the scheme, outline or plan that is used to generate answers to the research problems. The study adopted a cross-sectional survey research design. The research design was preferred for this study since it provided a quick, efficient and accurate means of accessing information about the population and it is more appropriate where there is limited secondary data. In addition, descriptive cross-sectional research design was appropriate for this study since it is useful when the problem has been defined specifically and where the researcher has certain issue to be described by the respondents about the problem (Kothari, 2004).

3.3 Target Population

Mugenda and Mugenda (2003), explained that the target population should have some observable characteristics to which the researcher intends to generalize the results of the study. According to Bryman and Bell (2007), population is the larger set of observations in which the sample is derived. The population of the study was the SMEs registered and operating in Nairobi County. Nairobi County was chosen since it’s the capital city of
Kenya and the economic city of Kenya where most of the Kenyan SMEs have their headquarters. The study area was therefore good enough to give ground for generalization of the findings on the whole industry of SMEs in Kenya. In this study, the researcher employed stratified random sampling in selecting the respondents. The population of 98,608 SMEs of Nairobi County was subdivided into six mutually exclusive subpopulations or strata herein referred to as business classes as shown in Appendix VI:

List of SMES in Nairobi County.

3.4 Sampling Design

According to Ngechu (2004), it is important to select a representative sample through making a sampling frame from the target population. In this study, the proportionate stratification was used which was based on the stratum’s share of the total population to come up with the sample in each stratum. The actual SMEs interviewed was arrived at using simple random procedures to draw the sample from each stratum. A total of 300 respondents with owners, managers and senior employees, distributed proportionately was carried out for this study. As a result, 300 interviews were targeted and 350 contacts were made. Out of the 300 respondents targeted, 60 percent were owners, 30 percent were top managers and the remaining 10 percent were senior employees.

Table 3.1: Target Population and Sample response distribution

<table>
<thead>
<tr>
<th>Respondents</th>
<th>Target Population</th>
<th>Percentage of Population</th>
<th>Sample Response expected</th>
</tr>
</thead>
<tbody>
<tr>
<td>Owners</td>
<td>180</td>
<td>60%</td>
<td>171</td>
</tr>
<tr>
<td>Top Managers</td>
<td>90</td>
<td>30%</td>
<td>86</td>
</tr>
<tr>
<td>Senior Employees</td>
<td>30</td>
<td>10%</td>
<td>29</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>300</strong></td>
<td><strong>100%</strong></td>
<td><strong>286</strong></td>
</tr>
</tbody>
</table>

*Source: Nairobi City Council (NCC, 2010)*
3.5 Data Types and Collection Instruments

Ngechu (2004) observed that there are various methods used in data collection. The data collection tools and instruments selected depend mainly on the attributes of the subjects, research topic, problem question, objectives, design, expected data and results. The study used data drawn from two major sources; the primary and secondary data as noted by Donald (2006).

3.5.1 Primary Data

The research used primary data which was data collected by the researcher for a particular need. It was used when secondary data was not available or not enough to help answer the research questions. The major sources of primary data included observations, experiments, surveys and interviews. Primary data was preferred in this study since the data was usually collected for a particular use, although sometimes, it may be difficult to gain access to the target. This researcher also sourced primary data through personal interviews as well as questionnaires with respondents of the SMEs under the study.

3.5.1.1 Questionnaires

As a method of data collection, this study used questionnaires with both open ended questions and closed ended questions. Open ended questions were used because they provided detailed answers and enabled the researcher to get what was in the mind of the respondents freely. Closed ended questions were also used in some areas so as to save on time and where specific answers were required.

3.5.1.2 Interviews

To get qualitative and precise information, the study conducted interviews on owners and top management of the selected SMEs. As observed by Mark Sauders (2003), the use of interviews helped in gathering valid and reliable data that is relevant to research questions
and objectives and that qualitative interviews are essentially important where it is necessary to understand the reasons for certain attitudes and opinions. Therefore, semi-structured interviews were conducted to get more details on profitability.

3.5.2 Secondary Data

Secondary data which is data gathered and recorded by other researchers was used in this study. Mainly, the study used financial data from the SMEs annual financial statements to measure their profitability. Other sources of secondary data used in the study were textbooks and journals.

3.6 Reliability and Validity Testing

The study conducted a pilot test of the study tools in an attempt to test the reliability and validity of the research tools. The data was tested for reliability to establish issues such as data sources, methods of data collection, time of collection, presence of any biasness and the level of accuracy. The test for reliability established the extent to which results were consistent over time. Reliability test was carried out to test the consistency of the research tools with a view to correcting them. The researcher improved the instrument by reviewing items from the instrument. To test for reliability, the study used the internal consistency technique by employing the Cronbach Coefficient Alpha test for testing the research tools. Internal consistency of data is determined by correlating the scores obtained from one time with scores obtained from other times in the research instrument. The result of correlation is the Cronbach Coefficient Alpha which is value between -1 and 1. The coefficient is high when its absolute value is greater than or equal to 0.7 otherwise it is low. A high coefficient implies high correlation between these items which means there is high consistency among the items and such items should be retained in the tools. This study correlated items in the instruments to determine how best they
relate. Where the coefficient was very low, then the item was reviewed by either removing it from the tool or correcting it.

3.7 Data Analysis and Processing

Quantitative data was collected and analyzed using descriptive statistics. The raw data collected was edited to detect errors and omissions and to correct them where possible. Data collected was also coded into logical, descriptive, and meaningful categories to provide a framework for analysis. Descriptive statistics such as percentages to facilitate the change of raw data into a form that enabled understanding and interpretation in relation to the research questions were used. Also inferential statistics such as linear regressions were used to analyze quantitative data. Linear regression model was developed and tested to explain the relationship between SMEs profitability and working capital management practices. Linear regression was preferred since it’s a linear model which reveals statistical relationships between variables and can be used to predict or estimate the behavior of variables. According to McCartney et al (2006), multiple regression analysis is useful in determining whether or not a particular effect is present, in measuring the magnitude of a particular effect and in forecasting what would be of a particular effect.

3.7.1 Study Model

A variety of ratios which include Return on Asset, Return on Equity and Net Interest Margin have been used as measures of profitability of firms. This study used Return on Assets as an indicator of how the major determinants (independent variables) which are Cash Conversion Cycle (CCC), Inventory Holding Period (IHP), Accounts Receivable Period (ARP), Accounts Payable Period (APP) and Approaches of Working Capital Management (AWC) affects profitability (dependent variable) of SMEs. The Inventory
Holding Period, Accounts Receivable Period and Accounts Payable Period were used as proxies for inventory policy, collection period policy and payment policy respectively. CCC was computed as account receivable period added to inventory period less accounts payable period divided by cost of sales. ARP was computed by dividing accounts receivable by sales and multiplying the results by 365 (number of days in a year). IHP was computed as inventory divided by cost of goods sold and multiplying the results by 365 days. APP was computed by dividing accounts payable by purchases and multiplying the results by 365 days.

Intervening variables which also influenced profitability of SMEs were incorporated in the model. These included Growth in sales and Growth in total assets. These variables were included in the model as measures of business expansion. Growth in sales was computed as incremental change in sales in a year while growth in total assets was computed as incremental change in total assets in a year.

In order to analyze the relationship between working capital practices and profitability of SMES, this study used linear multiple regression model. The regression analysis helped in illustrating how the various working capital management variables affect profitability of SMEs as indicated in the conceptual framework. The regression analysis model was as follows:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \beta_7 X_7 + \pi$$

Where;

$Y =$ Profitability of SMEs as expressed by Return on Assets (ROA)

$\beta_0 =$ Intercept, which is the value of $Y$ when $X$ values are zero.

$X_1 =$ Cash conversion cycle (CCC)

$X_2 =$ Inventory Holding period (IHP)
\( X_3 = \) Account receivable period (ARP)  
\( X_4 = \) Accounts payable period (APP)  
\( X_5 = \) Approaches of working capital (AWC)  
\( X_6 = \) Growth in sales (GS)  
\( X_7 = \) Growth in total assets (GTA)  
\( \pi = \) Error term normally distributed about the mean of zero  
\( \beta_1, \beta_2, \beta_3, \beta_4, \beta_5, \beta_6 \) and \( \beta_7 \) are coefficients for CCC, IHP, ARP, APP, AWC, GS and GTA respectively.
4.1 Introduction

This chapter presents analysis and findings of the study as set out in the research methodology. The study findings are the effects of working capital management practices on profitability of SMEs.

4.2 Analysis of Response rate

A total of 300 respondents comprising of 180 business owners, 90 top managers and 30 senior employees of Nairobi County were given questionnaires. Out of this, 274 responded representing a response rate of 91%.

Table 4.2: Questionnaire Response

<table>
<thead>
<tr>
<th>Category</th>
<th>Sample Size</th>
<th>Response</th>
<th>Percentage rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Owners</td>
<td>180</td>
<td>161</td>
<td>89%</td>
</tr>
<tr>
<td>Top Managers</td>
<td>90</td>
<td>85</td>
<td>94%</td>
</tr>
<tr>
<td>Senior Employees</td>
<td>30</td>
<td>28</td>
<td>93%</td>
</tr>
<tr>
<td>Total</td>
<td>300</td>
<td>274</td>
<td>91%</td>
</tr>
</tbody>
</table>

Source: Survey data, 2013

4.2.1 Reliability and validity

Reliability refers to the extent to which a measuring instrument contains variable errors that appear inconsistency from observation or measurement attempt or that which vary each time a given unit is measured by the same instrument. Construct validity is established by relating measuring instruments to a general theoretical framework in order to determine whether the instrument is tied to the concepts and theoretical assumptions they are employing (Kothari, 2004). Easy Reg International, a statistical programme, was used as the tool of analysis to test the relationship between the dependent variable and the
independent variables as indicated in the table below. The reliability test for cash conversion cycle, $\alpha = 0.923$, meaning 92% reliable, inventory holding period had reliability $\alpha = 0.792$, meaning 79%, reliability test for accounts receivable period, $\alpha = 0.751$, meaning 75% reliable, while accounts payable period and approaches of working capital management registered reliability $\alpha$ of 78% and 74% respectively. The Alpha reliability of the variables was therefore reasonably high and the construct validity of the instruments was considered reasonable.

Table 4.2.1 Reliability and validity

<table>
<thead>
<tr>
<th>Variable/Construct description</th>
<th>Item Means</th>
<th>Standard deviations</th>
<th>Coefficient Alpha Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash conversion cycle</td>
<td>3.0</td>
<td>3.3</td>
<td>0.923</td>
</tr>
<tr>
<td>Inventory Holding Period</td>
<td>6.2</td>
<td>6.9</td>
<td>0.792</td>
</tr>
<tr>
<td>Accounts Receivable Period</td>
<td>7.2</td>
<td>4.2</td>
<td>0.751</td>
</tr>
<tr>
<td>Accounts Payable Period</td>
<td>4.9</td>
<td>5.4</td>
<td>0.782</td>
</tr>
<tr>
<td>Approaches of working capital management</td>
<td>4.3</td>
<td>3.7</td>
<td>0.741</td>
</tr>
</tbody>
</table>

Source: Survey Data, 2013

4.3 Descriptive Analysis of the General Information

4.3.1 Gender of the respondents

The study sought to find out the gender of respondents. According to the findings, 64% of the respondents were male while 36% of the respondents were female. This is as shown in the figure below:-
4.3.2 Position in organization

The study also sought to find out the position of the respondents in the organization. According to the findings, 31% of the respondents were supervisors, 10% of the respondents were marketers while 59% of the respondents were owners. This is as shown in the figure below:-

![Bar Chart](image-url)
4.3.3 Age of respondents

The research sought to find out the age of the respondents. According to the findings, 3% of the respondents were aged between 18-20 years, 14% of the respondents were aged between 21-25 years, 27% of the respondents were aged between 26 -30 years, 26% of the respondents were aged between 31 -35 years, 12% of the respondents were aged between 36 -40 years and 18% of the respondents were aged 41 years and above. This is as shown in the figure below:-

![Figure 4.3.3: Age of respondents](source: Survey Data, 2013)

4.3.4 Academic Qualification

The study sought to find out the academic qualification of the respondents. According to the findings, 2% of the respondents had doctorate qualification, 3% had master’s degree, 9% had degree qualification, 22% had diploma qualification, 26% had no formal qualification while 38% had certificate qualification. This is as shown in the figure below:-

![Figure 4.3.4: Academic Qualification](source: Survey Data, 2013)
4.3.5 Experience at the enterprise

The study sought to establish the experience in years for the respondents. The results show majority of respondents had experience ranging from 5-7 years with 36%, with the respondents having 3-5 years representing 28%, those with experience above 7 years constituting about 21%, those with experience of 1-2 years with 9% and those with less than 1 year constituting 6%. Overall, the staffs involved in working capital management had a wealth of experience necessary for this study. This is as shown in the figure below:
4.3.6 Type of business

The study found that most enterprises are trading businesses with 71.5% and the rest are in service business as shown in the figure below.

Figure 4.3.6: Type of business  
Source: Survey Data, 2013

4.4 Study Variables

The study sought to establish the effects of various working capital management practices on profitability of SMEs.
4.4.1 Cash conversion cycle

The researcher sought to know the extent to which the respondents agreed with the statements presented in the questionnaire on cash conversion cycle. Among them the most had their extent of agreement with the statement that the length of cash conversion cycle has a material impact on the profitability of SMEs with high at 82% (mean 4.06). Other respondents had their agreement extent vary according to the statements; Management of cash conversion cycles is the work of the lower level staff with 80% (mean 3.96), Each SME should set its standard level of cash conversion cycle with 56% (mean 2.76) and Shorter cash conversion cycles are better than longer ones with 54 % (mean 2.7).

Table 4.4.1: Agreement Level with the following aspects of cash conversion cycle as affecting profitability of SMEs

<table>
<thead>
<tr>
<th></th>
<th>SA</th>
<th>A</th>
<th>UD</th>
<th>D</th>
<th>SD</th>
<th>Total</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>The length of cash conversion cycle has a material impact on the profitability of SMEs</td>
<td>Frequency</td>
<td>149</td>
<td>45</td>
<td>42</td>
<td>24</td>
<td>14</td>
<td>274</td>
</tr>
<tr>
<td></td>
<td>Percentage</td>
<td>54.4</td>
<td>16.4</td>
<td>15.3</td>
<td>8.8</td>
<td>5.1</td>
<td>100.0</td>
</tr>
<tr>
<td>Shorter cash conversion cycles are better than longer ones</td>
<td>Frequency</td>
<td>37</td>
<td>43</td>
<td>40</td>
<td>103</td>
<td>51</td>
<td>274</td>
</tr>
<tr>
<td></td>
<td>Percentage</td>
<td>13.5</td>
<td>15.7</td>
<td>14.6</td>
<td>37.6</td>
<td>18.6</td>
<td>100.0</td>
</tr>
<tr>
<td>Management of cash conversion cycles is the work of the lower level staff</td>
<td>Frequency</td>
<td>133</td>
<td>42</td>
<td>55</td>
<td>29</td>
<td>15</td>
<td>274</td>
</tr>
<tr>
<td></td>
<td>Percentage</td>
<td>48.5</td>
<td>15.3</td>
<td>20.1</td>
<td>10.6</td>
<td>5.5</td>
<td>100.0</td>
</tr>
<tr>
<td>Each SME should set its standard level of cash conversion cycle</td>
<td>Frequency</td>
<td>53</td>
<td>43</td>
<td>15</td>
<td>113</td>
<td>51</td>
<td>275</td>
</tr>
<tr>
<td></td>
<td>Percentage</td>
<td>19.3</td>
<td>15.6</td>
<td>5.5</td>
<td>41.1</td>
<td>18.5</td>
<td>100.0</td>
</tr>
<tr>
<td>Others</td>
<td>Frequency</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Percentage</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
</tbody>
</table>


Source: Survey data, 2013

4.4.2 Inventory Holding Period

To identify how the respondents thought about the effect of inventory holding period on profitability of SMEs, the researcher computed the following percentages and means; The researcher found that 82.8 % (mean of 4.13) of the respondents thought that a longer inventory holding period has a negative effect on profitability of SMEs, 76.5% (mean 3.82) of them thought that the length of inventory holding period has a material impact on the profitability of SMEs, while another 53.9% (mean 2.70) them thought that firms should set Economic Order Quantity (EOQ) to ensure adequate stocks are maintained. The least of the respondents at 47.5 % (Mean 2.38) thought that firms should ensure funds are set aside for reorder.

Table 4.4.2: Agreement Level with the following aspects of inventory holding period as affecting profitability of SMEs

<table>
<thead>
<tr>
<th></th>
<th>SA</th>
<th>A</th>
<th>UD</th>
<th>D</th>
<th>SD</th>
<th>Total</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>The length of inventory holding period has a material impact on</td>
<td>Frequency</td>
<td>110</td>
<td>67</td>
<td>54</td>
<td>24</td>
<td>19</td>
<td>274</td>
</tr>
<tr>
<td>the profitability of SMEs</td>
<td>Percentage</td>
<td>40.1</td>
<td>24.5</td>
<td>19.7</td>
<td>8.8</td>
<td>6.9</td>
<td>100.0</td>
</tr>
<tr>
<td>Firms should set Economic Order Quantity (EOQ) to ensure</td>
<td>Frequency</td>
<td>43</td>
<td>37</td>
<td>53</td>
<td>78</td>
<td>63</td>
<td>274</td>
</tr>
<tr>
<td>adequate stocks are maintained</td>
<td>Percentage</td>
<td>15.7</td>
<td>13.5</td>
<td>19.3</td>
<td>28.5</td>
<td>23.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Firms should ensure funds are set aside for reorder</td>
<td>Frequency</td>
<td>17</td>
<td>16</td>
<td>103</td>
<td>55</td>
<td>83</td>
<td>274</td>
</tr>
<tr>
<td></td>
<td>Percentage</td>
<td>6.2</td>
<td>5.8</td>
<td>37.6</td>
<td>20.1</td>
<td>30.3</td>
<td>100.0</td>
</tr>
<tr>
<td>A longer inventory holding period has a negative effect on</td>
<td>Frequency</td>
<td>150</td>
<td>51</td>
<td>39</td>
<td>26</td>
<td>8</td>
<td>274</td>
</tr>
<tr>
<td>profitability of SMEs</td>
<td>Percentage</td>
<td>54.7</td>
<td>18.6</td>
<td>14.2</td>
<td>9.5</td>
<td>2.9</td>
<td>100.0</td>
</tr>
</tbody>
</table>
4.4.3 Accounts Receivable Period

The responses from the respondents were coded with an aim of calculating the means and the percentages of the respondents with an aim of establishing the effect of accounts receivable period on performance of SMEs. The majority of the respondents 82.5 % (mean 4.12) agreed with the statement that shorter accounts receivable period are better to the firm indicating that customers came to buy on credit many times thus they paid within a short period, 76.3 % (mean 3.82) agreed that the length of accounts receivable period has a material impact on the profitability of SMEs. Other respondents agreed by 70.4 % (Mean 3.52) that firms should have a proper debt management policy and ensure that bad debts are provided for. The least of them all at 56.34 % (mean 2.82) agreed that debtor’s collection period should be reduced by granting short credit period.

Table 4.4.3 Agreement Level with the following aspects of accounts receivable period as affecting profitability of SMEs

<table>
<thead>
<tr>
<th>Aspect</th>
<th>SA</th>
<th>A</th>
<th>UD</th>
<th>D</th>
<th>SD</th>
<th>Total</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>The length of accounts receivable period has a material impact on the profitability of</td>
<td>Frequency</td>
<td>121</td>
<td>59</td>
<td>42</td>
<td>28</td>
<td>24</td>
<td>274</td>
</tr>
<tr>
<td>Shorter accounts receivable period are better to the firm indicating</td>
<td>Percentage</td>
<td>44.2</td>
<td>21.5</td>
<td>15.3</td>
<td>10.2</td>
<td>8.8</td>
<td>100.0</td>
</tr>
<tr>
<td>customers came to buy on credit many times thus they paid within a</td>
<td>Frequency</td>
<td>165</td>
<td>35</td>
<td>31</td>
<td>28</td>
<td>15</td>
<td>274</td>
</tr>
<tr>
<td>short period</td>
<td>Percentage</td>
<td>60.2</td>
<td>12.8</td>
<td>11.3</td>
<td>10.2</td>
<td>5.5</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Survey data, 2013
Firms should have a proper debt management policy and ensure that bad debts are provided.

<table>
<thead>
<tr>
<th>Frequency</th>
<th>83</th>
<th>69</th>
<th>64</th>
<th>24</th>
<th>34</th>
<th>274</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage</td>
<td>30.3</td>
<td>25.2</td>
<td>23.4</td>
<td>8.8</td>
<td>12.4</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Debtors collection period should be reduced by granting short credit period.

<table>
<thead>
<tr>
<th>Frequency</th>
<th>28</th>
<th>51</th>
<th>39</th>
<th>150</th>
<th>6</th>
<th>274</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage</td>
<td>10.2</td>
<td>18.6</td>
<td>14.2</td>
<td>54.7</td>
<td>2.2</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Others

<table>
<thead>
<tr>
<th>Frequency</th>
<th>0</th>
<th>0</th>
<th>0</th>
<th>0</th>
<th>0</th>
<th>0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
</tbody>
</table>

Source: Survey data, 2013

4.4.4 Accounts Payable Period

Table 4.4.4: Agreement Level with the following aspects of accounts payable period as affecting profitability of SMEs

<table>
<thead>
<tr>
<th></th>
<th>SA</th>
<th>A</th>
<th>UD</th>
<th>D</th>
<th>SD</th>
<th>Total</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>The length of accounts payable period has a material impact on the profitability of SMEs</td>
<td>Frequency</td>
<td>131</td>
<td>55</td>
<td>33</td>
<td>31</td>
<td>24</td>
<td>274</td>
</tr>
<tr>
<td></td>
<td>Percentage</td>
<td>47.8</td>
<td>20.1</td>
<td>12.0</td>
<td>11.3</td>
<td>8.8</td>
<td>100.0</td>
</tr>
<tr>
<td>Creditors should be paid as late as possible in order to maximize returns</td>
<td>Frequency</td>
<td>161</td>
<td>42</td>
<td>38</td>
<td>21</td>
<td>12</td>
<td>274</td>
</tr>
<tr>
<td></td>
<td>Percentage</td>
<td>58.8</td>
<td>15.3</td>
<td>13.9</td>
<td>7.7</td>
<td>4.4</td>
<td>100.0</td>
</tr>
<tr>
<td>Firms should negotiate for a longer credit period with the suppliers</td>
<td>Frequency</td>
<td>97</td>
<td>69</td>
<td>62</td>
<td>24</td>
<td>22</td>
<td>274</td>
</tr>
<tr>
<td></td>
<td>Percentage</td>
<td>35.4</td>
<td>25.2</td>
<td>22.6</td>
<td>8.8</td>
<td>8.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Proper creditors' management policies can help a firm to enjoy benefits of credit discounts</td>
<td>Frequency</td>
<td>7</td>
<td>24</td>
<td>39</td>
<td>53</td>
<td>151</td>
<td>274</td>
</tr>
<tr>
<td></td>
<td>Percentage</td>
<td>2.6</td>
<td>8.8</td>
<td>14.2</td>
<td>19.3</td>
<td>55.1</td>
<td>100.0</td>
</tr>
</tbody>
</table>
The responses from the respondents were coded with an aim of calculating the means and the percentages of the respondents with an aim of establishing the effect of accounts payable period on profitability of SMEs of Nairobi County. Most of the respondents at 83.30% (mean 4.16) thought that creditors should be paid as late as possible in order to maximize returns. Another significant respondents with percentage of 77.32% (mean of 3.87) thought that the length of accounts payable period has a material impact on the profitability of SMEs. Another 74.11% (mean 3.71) of the respondents thought that firms should negotiate for a longer credit period with the suppliers while 37.05% (mean 1.84) of the respondents felt that proper creditors’ management policies can help a firm to enjoy benefits of credit discounts.

4.4.5 Approaches of working capital management

Table 4.4.5: rating on the effect of approaches of working capital management on profitability of SMEs

<table>
<thead>
<tr>
<th>Approaches of working capital management</th>
<th>Frequency</th>
<th>SA</th>
<th>A</th>
<th>UD</th>
<th>D</th>
<th>SD</th>
<th>Total</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>The use of matching, aggressive or moderate approaches in managing working capital affects profitability of firms.</td>
<td>Frequency</td>
<td>136</td>
<td>55</td>
<td>33</td>
<td>28</td>
<td>22</td>
<td>274</td>
<td>3.93</td>
</tr>
<tr>
<td></td>
<td>Percentage</td>
<td>49.6</td>
<td>20.1</td>
<td>12.0</td>
<td>10.2</td>
<td>8.0</td>
<td>100.0</td>
<td></td>
</tr>
<tr>
<td>The conservative approach is appropriate for of long-term projects</td>
<td>Frequency</td>
<td>26</td>
<td>42</td>
<td>142</td>
<td>35</td>
<td>29</td>
<td>274</td>
<td>3.00</td>
</tr>
<tr>
<td></td>
<td>Percentage</td>
<td>9.5</td>
<td>15.3</td>
<td>51.8</td>
<td>12.8</td>
<td>10.6</td>
<td>100.0</td>
<td></td>
</tr>
<tr>
<td>Firms relying more</td>
<td>Frequency</td>
<td>15</td>
<td>28</td>
<td>56</td>
<td>40</td>
<td>135</td>
<td>274</td>
<td>2.08</td>
</tr>
</tbody>
</table>
From the responses the researcher sought to establish the the effect of approaches of working capital on profitability of SMEs of Nairobi County. The findings showed that most respondents at 84.62% (mean 4.24) felt that matching financing approach may not lead to high returns. Another significant response was that the use of matching, aggressive or moderate approaches in managing working capital affects profitability of firms represented by 78.57% (mean 3.93). 64.12% (mean of 3.20) of the respondents agreed that aggressive financing approach leads to high returns. Some respondents also felt that the conservative approach is appropriate for long-term projects by 60% (mean 3.00) while 41.61%(mean 2.08) felt that the firms relying more on short term financing (aggressive financing approach) increases their financial risk and possibility of bankruptcy.

### 4.5 Mean and standard deviation of the variables

The study evaluated the overall mean and standard deviation of each of the variables used in this study in the questionnaire. The result of the analysis is presented in Table 4.5 below.
Table 4.5 Mean and standard deviation of the variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Return on Asset</td>
<td>7.81</td>
<td>1.599</td>
</tr>
<tr>
<td>Inventory Holding Period</td>
<td>21.30</td>
<td>1.029</td>
</tr>
<tr>
<td>Average Receivables Period</td>
<td>17.54</td>
<td>2.274</td>
</tr>
<tr>
<td>Average Payables Period</td>
<td>18.14</td>
<td>1.284</td>
</tr>
<tr>
<td>Cash Conversion Cycle</td>
<td>23.74</td>
<td>2.077</td>
</tr>
<tr>
<td>Approaches of Working Capital</td>
<td>1.99</td>
<td>.780</td>
</tr>
<tr>
<td>Growth in Sales</td>
<td>13.28</td>
<td>1.050</td>
</tr>
<tr>
<td>Growth in Total Assets</td>
<td>17.31</td>
<td>1.375</td>
</tr>
</tbody>
</table>

Source: Survey data, 2013

It was established that the variable with the lowest deviation was approaches of working capital while the variable with the highest standard deviation was cash conversion cycle.

4.6. Inferential analysis

4.6.1 Correlation analysis

Table 4.6.1 Correlation coefficient of variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Correlation Coefficient (r)</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash Conversion Cycle</td>
<td>-0.834</td>
<td>0.000</td>
</tr>
<tr>
<td>Inventory Holding Period</td>
<td>-0.930</td>
<td>0.000</td>
</tr>
<tr>
<td>Average Receivables Period</td>
<td>-0.975</td>
<td>0.000</td>
</tr>
<tr>
<td>Average Payables Period</td>
<td>0.806</td>
<td>0.000</td>
</tr>
<tr>
<td>Approaches of Working Capital</td>
<td>0.200</td>
<td>0.000</td>
</tr>
<tr>
<td>Growth in sales</td>
<td>0.941</td>
<td>0.000</td>
</tr>
<tr>
<td>Growth in total assets</td>
<td>0.954</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Source: Survey data, 2013

The results of correlation analysis showed that there was a significant negative relationship between Cash conversion cycle and the profitability of SMEs of Nairobi.
County (p=0.000, r=-0.834). Also, the results of correlation analysis showed that there was a significant negative relationship between Inventory Holding period and the profitability of SMEs of Nairobi County (p=0.000, r=-0.930). Similarly, results of correlation analysis showed that there was a significant negative relationship between accounts receivable period and the profitability of SMEs of Nairobi County (p=0.000, r=-0.975). The negative correlation means that an increase in Cash conversion cycle, Inventory holding period and average receivables period led to a decrease in profitability of SMEs.

On the other hand, the results of correlation analysis showed that there was a significant positive relationship between average payables period and the profitability of SMEs of Nairobi County (p=0.000, r=0.806). Also, the results of correlation analysis showed that there was a significant positive relationship between Growth in sales and the profitability of SMEs of Nairobi County (p=0.000, r=0.941). Similarly, results of correlation analysis showed that there was a significant positive relationship between Growth in total assets and the profitability of SMEs of Nairobi County (p=0.000, r=0.954). There was also a significant positive relationship between Approaches of working capital and the profitability of SMEs of Nairobi County (p=0.000, r=0.200). The positive correlation means that an increase in Average Payables Period, Growth in sales and Growth in total assets led to an increase in profitability of SMEs.

4.6.2 Regression analysis

In Table 4.6.2 below, the Beta values gives the values of the standardized regression coefficients. The Beta values represent the effect that a standard deviation difference in the independent variable would have on the dependent variable in standard deviation.

Table 4.6.2: Regression Coefficients
### Table 4.6.2.3: ANOVA Table for the Multiple Regression Model

<table>
<thead>
<tr>
<th>Source: Survey data, 2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>The results presented in table 4.6.2 above suggest that all the independent variables had significant regression coefficients apart from approaches of working capital. The linear regression model is as follows:</td>
</tr>
<tr>
<td>[ Y = 2.048 - 0.665X_1 - 0.606X_2 - 0.609X_3 + 0.693X_4 + 0.016X_5 + 0.581X_6 + 0.505X_7 ]</td>
</tr>
<tr>
<td>Where ( X_1 ) is Cash conversion cycle, ( X_2 ) is Inventory Holding period, ( X_3 ) is Account receivable period, ( X_4 ) is Accounts payable period, ( X_5 ) is Approaches of working capital, ( X_6 ) is Growth in sales and ( X_7 ) is Growth in total assets.</td>
</tr>
<tr>
<td>The regression model was highly significant and all the variables were important in the model. This was demonstrated in the ( p )-value of the analysis of variance of the regression model below:-</td>
</tr>
<tr>
<td><strong>Table 4.6.2.3: ANOVA Table for the Multiple Regression Model</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>690.278</td>
<td>7</td>
<td>98.611</td>
<td>3340.236</td>
<td>.000*</td>
</tr>
<tr>
<td>Residual</td>
<td>7.853</td>
<td>266</td>
<td>.030</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The ANOVA had a p-value of 0.000, meaning that the independent variables have a significant effect on the dependent variable (profitability of SMEs). This indicates that the combination of independent variables have a significant effect on the dependent variable.

4.7 Summary of Findings and Presentation

The results of the correlation analysis showed that there was a positive significant relationship between cash conversion period and profitability of SMEs of Nairobi County (p=0.000, r=-0.834). The study also found out that the relationship between Inventory Holding Period and profitability of SMEs of Nairobi County was found to be negative and significant relationship (p=0.000, r=-0.930). The study also shows that Accounts receivable period is associated with profitability of SMEs of Nairobi County. The correlation between the two variables was found to be positive and significant relationship (p=0.000, r=0.806).

The study also shows that Accounts receivable period is associated with profitability of SMEs of Nairobi County. The correlation between the two variables was found to be negative and significant (p=0.000, r=-0.975). The study also found out that the choice of
the working capital management approach depends on the risk-return perspective of SMEs.

The study also came up with a linear regression model as follows:

\[ Y = 2.048 - 0.665X_1 - 0.606X_2 - 0.609X_3 + 0.693X_4 + 0.016X_5 + 0.581X_6 + 0.505X_7 \]

Where \( X_1 \) is Cash conversion cycle, \( X_2 \) is Inventory Holding period, \( X_3 \) is Account receivable period, \( X_4 \) is Accounts payable period, \( X_5 \) is Approaches of working capital, \( X_6 \) is Growth in sales and \( X_7 \) is Growth in total assets.

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**CHAPTER FIVE**

**SUMMARY, CONCLUSIONS AND RECOMMENDATIONS**

5.1 Introduction

This chapter discusses the summary of the findings, the conclusions, recommendations of the study and the suggestions for further study.

5.2 Summary of the findings

The researcher found out that most of the respondents with 82% (mean 4.06) had highly agreed that the length of cash conversion cycle has a material impact on the profitability of SMEs. The study also found out that 54% (mean 2.7) of respondents believed that shorter cash conversion cycles are better than longer ones and therefore shortening cash conversion cycle can increase returns of a firm. This finding are in agreement with Ross et al (2008) who stated that reducing the time cash tied up in the cash conversion cycle
improves a business’s profitability and market value and hence the significance of efficient cash management practices in improving business performance. 56% of respondents (mean 2.76) agreed that each SME should set its standard level of cash conversion cycle. This means that efficient 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) and as stressed by Atrill (2006) that there is need for careful planning and monitoring of cash flows over time so as to determine the optimal cash to hold.

The researcher also found out that 82.8 % (mean of 4.13) of the respondents supported the statement that longer inventory holding period has a negative effect on profitability of SMEs. This is in agreement with Deloof (2003) who observed that inventory conversion period has a negative effect on a business’s performance. Also, the research found out that the inventory holding period had material impact on profitability of firms and firms should set their optimal economic order quantities. Managers of firms should therefore keep their inventory to an optimum level since mismanagement of inventory will lead to tying up excess capital at the expense of profitable operations (Lazaridis and Dimitrios, 2005).

The research also indicated that respondents with 82.5% (mean 4.12) agreed that a shorter accounts receivable period are better to the firm which indicates that customers buy on credit many times and pay within a short period. Also, 76.3 % (mean 3.82) agreed that the length of accounts receivable period has a material impact on the profitability of SMEs. Other respondents agreed by 70.4% (Mean 3.52) that firms should have a proper debt management policy and ensure that bad debts are provided for. The least of them all at 56.34 % (mean 2.82) agreed that debtor’s collection period should be reduced by granting short credit period. This therefore supports Ross et al (2008) observation that efficient
receivables management augmented by a shortened creditor’s collection period, low levels of bad debts and a sound credit policy often improves the businesses’ ability to attract new customers and accordingly increase financial performance hence the need for a sound credit policy that will ensure that SMEs’ value is optimized.

The findings showed that 83.30% (mean 4.16) of respondents agreed that creditors should be paid as late as possible in order to maximize returns. This was in disagreement with Falope and Ajilore (2009) arguments that extending the payables deferral period could damage the company’s credit reputation and harm its profitability in the long run. Delaying payments to suppliers allows companies to assess the quality of the products that were bought and can be an inexpensive and flexible source of financing. But we should bear in mind that late payment can have a very high implicit costs whenever early payment discounts are available. 77.32% (mean of 3.87) of respondents agreed that the length of accounts payable period has a material impact on the profitability of SMEs.

The findings showed that most respondents at 84.62 % (mean 4.24) felt that matching financing approach may not lead to high returns and that the use of aggressive or moderate approaches in managing working capital affects profitability of firms represented by 78.57% (mean 3.93). 64.12% (mean of 3.20) of the respondents agreed that aggressive financing approach leads to high returns. Some respondents also felt that the conservative approach is appropriate for long-term projects by 60% (mean 3.00) while 41.61% (mean 2.08) felt that the firms relying more on short term financing (aggressive financing approach) increases their financial risk and possibility of bankruptcy. This was in agreement with Moyer et. Al (2005) who observed that if a firm relied on overdraft, it will be vulnerable to a rapid withdrawal of the facility and if stock and cash are reduced to pay back the overdraft the firm may experience severe disruption,
loss of sales and output, and additional costs because of failure to maintain the minimum required working capital to sustain optimum profitability.

5.3 Conclusions

The results of the correlation analysis showed that there was a positive significant relationship between cash conversion period and profitability of SMEs of Nairobi County \( (p=0.000, \ r=-0.834) \). This shows that a decrease in cash conversion period would improve the performance of SMEs. This means that managers of SMEs need to have cash management skills and understand the concept of cash conversion.

The relationship between Inventory Holding Period and profitability of SMEs of Nairobi County was found to be negative and significant relationship \( (p=0.000, \ r=-0.930) \). This implies that improvement in inventory handling skills and putting in place proper inventory policies in place would lead to increased performance of SMEs.

The study also shows that Accounts receivable period is associated with profitability of SMEs of Nairobi County. The correlation between the two variables was found to be positive and significant relationship \( (p=0.000, \ r=0.806) \). This implies improvement in accounts management practices would lead to increased performance.

The study also shows that Accounts receivable period is associated with profitability of SMEs of Nairobi County. The correlation between the two variables was found to be negative and significant \( (p=0.000, \ r=-0.975) \). The negative correlation means that an increase in average receivables period leads to a decrease in profitability of SMEs.

The study also found out that the choice of the working capital management approach depends on the risk-return perspective of SMEs.
The study concludes that managers need to understand the important working capital management practices and identify the critical areas that may improve the profitability of SMEs.

5.4 Recommendations

Based on the above conclusions, the research study recommends that SME managers should be thoroughly trained on working capital management skills. The managers should undergo continuous development programme through interactive symposiums, conferences, and open forums.

The study also recommends for increased government support to the SMEs sector. This can be done through resource allocation in this sector. The government in conjunction with it agencies should also assist SMEs in sorting out the problems of managing working capital by setting out guidelines and regulation on proper corporate governance in this sector.

5.5 Suggestions for Further Research

This study sought to determine the effects of working capital management practices on the profitability of Small and Medium Enterprises in Nairobi County, Kenya. The study suggests that in future researchers should conduct the same study in other counties so as to compare with the findings of this study. The study also recommends that in future researchers should do a follow up study in the same area so as to monitor and evaluate for improvements in the management of working capital management practices.

5.6 Limitations of the Study

The study was only limited to Small and Medium Enterprises in Nairobi County. The main challenge of the study was the budget constraint and this made the researcher not to be able to collect the required data in time as it was quite expensive in terms of collecting
the data. The budget constraint limited the number of research data collection clerks employed. This was however resolved by requiring the personnel to work at lower wage rates and also for extra hours of work.

The other limitation of the study was that some of the respondents were reluctant to give information that they considered sensitive and confidential to their organization. However, as a mitigation strategy, the researcher assured respondents of data confidentiality by not obliging them to provide their identity on the collection instruments. The researcher also sought an introductory letter for data collection which was presented to the relevant respondents of questionnaires. However, despite the challenges, the study was able to get a response rate of 91%.

REFERENCES


Baveld, M. B. (2012), Impact of Working Capital Management on the Profitability of


FTC Foulks Lynch, Financial Management and Control, 2005


Weinraub HJ and S Visscher (1998). Industry Practice Relating To Aggressive

APPENDICES

APPENDIX I: FIELD LETTER
APPENDIX II: RESPONDENTS LETTER

Dear respondent,

This research intends to study the Effect of Working Capital Management Practices on profitability of Small and Medium Enterprises (SMEs) in Nairobi County. The research is
conducted under the auspices of the Department of Accounting and Finance, School of Business as a partial fulfillment of the Degree of Masters of Business Administration of Kenyatta University. The research study intends to establish the most prevalent factors affecting the performance of Working Capital Management Practices on Small and Medium Enterprises (SMEs) in Nairobi County.

Your assistance as the manager/owner/staff will be appreciated to ensure that accurate and relevant information is obtained to assist me to make the correct conclusions and recommendations.

Yours sincerely

Peter Maina Wambugu.

MBA Student, Kenyatta University, School of Business

Cell: +254 723 308 938, Email: wambugupeter@gmail.com

APPENDIX III: QUESTIONNAIRE

Instructions

Dear Sir/Madam,
You are kindly requested to answer all questions in this research study questionnaire. The information that you will provide shall be treated with a high level of confidentiality and strictly used for the purpose of this research study. This study aims at finding out the effects of working capital management practices on profitability of SMEs in Nairobi County, Kenya. Kindly do not write your name anywhere on this questionnaire.

**Part A: General Information**

Please respond to the following questions below by ticking [✓] on the appropriate option.

1. Please indicate your Gender.  
   Male [ ]  Female [ ]

2. Position:  
   Supervisor [ ]  Marketer [ ]  Sales representative [ ]  Owner [ ]  
   Others (Specify)..............................................................

3. Indicate your age bracket as shown below:  
   18-20 [ ]  21-25 [ ]  26-30 [ ]  31-35 [ ]  36-40 [ ]  
   41 and above [ ]

4. Your academic qualification:  
   Certificate [ ]  Diploma [ ]  Degree [ ]  Masters [ ]  Doctorate [ ]  
   No formal Education [ ]  others...........................................

5. Your experience at the Enterprise  
   Less than 1 year [ ]  1-2 years [ ]  3-5 years [ ]  5-7 years [ ]  
   Above 8 years [ ]

6. Type of business: Trading [ ]  Service [ ]
**Part B: Main Issues**

(Key: SA- Strongly agree, A – Agree, UD- Undecided, D- Disagree, SD- Strongly disagree) where applicable.

7. To what extent do you agree with the following aspects of cash conversion cycle as affecting profitability of SMEs?

<table>
<thead>
<tr>
<th></th>
<th>SA</th>
<th>A</th>
<th>UD</th>
<th>D</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>The length of cash conversion cycle has a material impact on the profitability of SMEs.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shorter cash conversion cycles are better than longer ones.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Management of cash conversion cycles is the work of the lower level staff</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Each SME should set its standard level of cash conversion cycle.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Others</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

8. To what extent do you agree with the following aspects of inventory holding period as affecting profitability of SMEs?

<table>
<thead>
<tr>
<th></th>
<th>SA</th>
<th>A</th>
<th>UD</th>
<th>D</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>The length of inventory holding period has a material impact on the profitability of SMEs.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Firms should set Economic Order Quantity (EOQ) to ensure adequate stocks are maintained.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Firms should ensure funds are set aside for reorder

A longer inventory holding period has a negative effect on profitability of SMEs

Others

9. To what extent do you agree with the following aspects of accounts receivable period as affecting profitability of SMEs?

<table>
<thead>
<tr>
<th></th>
<th>SA</th>
<th>A</th>
<th>UD</th>
<th>D</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>The length of accounts receivable period has a material impact on the profitability of SMEs.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shorter accounts receivable period are better to the firm indicating that customers came to buy on credit many times thus they paid within a short period.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Firms should have a proper debt management policy and ensure that bad debts are provided for</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Debtors collection period should be reduced by granting short crediting period</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Others</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

10. To what extent do you agree with the following aspects of accounts payable period as affecting profitability of SMEs?

<table>
<thead>
<tr>
<th></th>
<th>SA</th>
<th>A</th>
<th>UD</th>
<th>D</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>The length of accounts payable period has a material impact on the profitability of SMEs.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Creditors should be paid as late as possible in order to maximize returns.

Firms should negotiate for a longer credit period with the suppliers.

Proper creditors’ management policies can help a firm to enjoy benefits of credit discounts.

Others

11. To what extent do you rate the effect of approaches of working capital on profitability of SMEs?

| The use of either matching, aggressive or moderate approaches in managing working capital affects profitability of firms | SA | A | UD | D | SD |
| The conservative approach is appropriate for long-term projects. |  |
| Firms relying more on short term financing (aggressive financing approach) increases their financial risk and possibility of bankruptcy. |  |
| Others |  |

**Part C: Commentary**

Kindly answer the following questions below by ticking [✓] on the appropriate option and
comment where applicable.

12. Does your organization have cash conversion policy?
   
   Yes ( )       No ( )
   
   If Yes, comment on how it affects profitability……………………………………

13. Does your organization have Inventory policy?
   
   Yes ( )       No ( )
   
   If Yes, comment on how it affects profitability……………………………………

14. Does your organization have Accounts Receivable policy?
   
   Yes ( )       No ( )
   
   If Yes, comment on how it affects profitability……………………………………

15. Does your organization have Accounts Payable policy?
   
   Yes ( )       No ( )
   
   If Yes, comment on how it affects profitability……………………………………

16. Which working capital management approaches does your organization use?
   
   Aggressive policy ( ) Matching policy ( ) Conservative policy ( ) none ( )
   
   If Yes, please comment on how the policy has impacted on profitability………
   
   ………………………………………

   Thank you for the Response.

   APPENDIX IV: INTERVIEW SCHEDULE

1. In your own opinion, what do you think are factors to consider before determining a firm’s cash conversion period?…………………………………………………………
   
   …………
2. What do you think should be the best inventory holding period of your organization and why?

3. Which working capital management policies/approaches do you use in your organization?

4. What do you think are the dangers of having longer or shorter accounts payables period?

5. Based on opinion, what are the factors influencing Working Capital Management of an enterprise?

6. What do you think are the ways of determining the Economic order quantities?

7. In your own opinion, what combination of procedures to be employed in collecting bills receivables?

8. What do you think are the enterprise’s standing arrangements for sourcing funds to save unexpected cash flow problems?

APPENDIX V: LIST OF SMES IN NAIROBI COUNTY

<table>
<thead>
<tr>
<th>Business Type</th>
<th>Business Class</th>
<th>Total Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medium Trader Shop or</td>
<td>1</td>
<td>15,774</td>
</tr>
<tr>
<td>Service Type</td>
<td>Count</td>
<td>Number</td>
</tr>
<tr>
<td>--------------------------------------------------</td>
<td>-------</td>
<td>--------</td>
</tr>
<tr>
<td>Retail Services</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small Trader, Shop or Retail Service</td>
<td></td>
<td>53,293</td>
</tr>
<tr>
<td>Small Transportation Companies</td>
<td>2</td>
<td>2,249</td>
</tr>
<tr>
<td>Small Petrol Filling</td>
<td></td>
<td>790</td>
</tr>
<tr>
<td>Small Storage Facility</td>
<td></td>
<td>813</td>
</tr>
<tr>
<td>Small Communications Companies</td>
<td></td>
<td>158</td>
</tr>
<tr>
<td>Small agriculture Producer/Processor/Dealer</td>
<td>3</td>
<td>2,201</td>
</tr>
<tr>
<td>Medium Lodging House With Restaurant or bar</td>
<td>4</td>
<td>258</td>
</tr>
<tr>
<td>Small Lodging House With Restaurant/Bar</td>
<td></td>
<td>205</td>
</tr>
<tr>
<td>Medium Lodging House</td>
<td></td>
<td>305</td>
</tr>
<tr>
<td>Small Lodging House Basic Standard</td>
<td></td>
<td>397</td>
</tr>
<tr>
<td>Small Restaurant With Bar</td>
<td></td>
<td>917</td>
</tr>
<tr>
<td>Medium Eating House; Snack Bar; Tea House</td>
<td></td>
<td>522</td>
</tr>
<tr>
<td>Small Eating House; Snack Bar; Tea House</td>
<td></td>
<td>1,010</td>
</tr>
<tr>
<td>Medium professional services firm</td>
<td>5</td>
<td>437</td>
</tr>
<tr>
<td>Small professional services firm</td>
<td></td>
<td>5,166</td>
</tr>
<tr>
<td>Medium financial services</td>
<td></td>
<td>406</td>
</tr>
<tr>
<td>Small financial services</td>
<td></td>
<td>443</td>
</tr>
<tr>
<td>Small private health facility</td>
<td></td>
<td>52</td>
</tr>
<tr>
<td>Doctor/Dentist/Physiotherapist</td>
<td></td>
<td>871</td>
</tr>
<tr>
<td>Small Entertainment Facility</td>
<td></td>
<td>63</td>
</tr>
<tr>
<td>Description</td>
<td>Quantity</td>
<td>Amount</td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>----------</td>
<td>---------</td>
</tr>
<tr>
<td>Small Industrial Plant</td>
<td>6</td>
<td>644</td>
</tr>
<tr>
<td>Medium Workshop, Services-</td>
<td></td>
<td>2,907</td>
</tr>
<tr>
<td>Repair Contractor</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small Workshop Service</td>
<td></td>
<td>8,727</td>
</tr>
<tr>
<td>Repair Contractor</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td><strong>98,608</strong></td>
</tr>
</tbody>
</table>