EFFECT OF CASH MANAGEMENT ON THE FINANCIAL PERFORMANCE OF SMALL AND MEDIUM BUSINESS ENTERPRISES IN NAIROBI COUNTY, KENYA

BY

ODHIAMBO STEVEN OUMA

RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE AWARD OF THE MASTERS DEGREE OF BUSINESS ADMINISTRATION, SCHOOL OF BUSINESS, UNIVERSITY OF NAIROBI

OCTOBER, 2021

DECLARATION

I declare that this research proposal is my own work and it has not been submitted for any degree or examination in any other university.
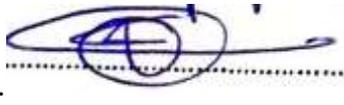
Signature…   Date: 29th October, 2021

Odhiambo Steven Ouma

Reg. No: D61/34280/2019

This research proposal has been submitted for examination with my approval as the University Supervisor.
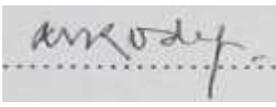
Signature: …   Date: 29th October, 2021

Mr. Martin Odipo

Lecturer,

Department of Finance and Accounting,

University of Nairobi.
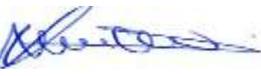
Signature: Date: 2nd November 2021

Dr. Kennedy Okiro

Lecturer,

Department of Finance and Accounting,

University of Nairobi.

ACKNOWLEDGEMENT

I am grateful to God for the good health which enabled me to complete this research project in time.

I wish to sincerely thank my supervisor, Mr. Martin Odipo for his professional guidance and support he accorded me throughout the research process. I would also like to extend my gratitude to the staff and fellow students at the University of Nairobi who sacrificed their time to assist me from time to time.

DEDICATION

This research project is dedicated to my family, supervisor, lecturers and friends for their endless support, love and encouragement during the study.

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

LIST OF ABBREVIATIONS

ANOVA	-	Analysis of Variance
CBK	-	Central Bank of Kenya
CCC	-	Cash Conversion Cycle
GDP	-	Gross Domestic Product
KES	-	Kenya Shillings
KNBS	-	Kenya National Bureau of Statistics
LDC	-	Least Developed Countries
MSEA	-	Micro and Small Enterprises Authority
MSME	-	Micro, Small and Medium Enterprises
OECD	-	Organization for Economic Co-operation and Development
SME	-	Small and Medium Enterprises
US	-	United States

ABSTRACT

This study focused on assessing the effects of cash management on financial performance of small and medium enterprises in Nairobi County, Kenya. This study identified liquidity management, receivable collection and cash cycle management (cash conversion cycle) as the independent variables. The dependent variable of the study was Net Profit Margin. There are several research studies done on cash management and financial performance. Nonetheless, a large number of these studies majored on diverse industries like insurance and manufacturing and not SMEs. This study therefore sought to fill this gap.

This study used descriptive research design with the population consisting of 43,432 licensed Small and Medium Enterprises in Nairobi County, Kenya. Data was collected from primary sources using Questionnaires and from secondary sources using publications. Stratified Random Sampling method was employed to select a sample size of 208 Small and Medium Enterprises in Nairobi County, Kenya. The study also carried out correlation analysis and multiple regression on the data to find the relationships between cash management components and financial performance of SMEs in Nairobi County, Kenya.

The findings of the study show that majority of SMEs (56.7%) were involved in Receivable Collection. However, only 46.2% and 45.7% were involved in liquidity management and cash cycle management respectively. There was a weak positive correlation between receivable collection (r=0.271), cash cycle management (r=0.147), liquidity management (r=0.035) and financial performance of SMEs in Nairobi County. 17.9% of financial performance could be attributed to receivable collection and 9.2% attributed to cash cycle management. However, -1.4% of financial performance could be attributed to liquidity management. The relationship between cash management and financial performance was significant (The F-value of 6.523). However, with a weak R squared value of 0.088, it was concluded that there are other variables affecting financial performance of SMEs in Nairobi County other than cash management.

CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

Cash is an essential resource as well as a means for entities to acquire more resources. To manage cash means to manage a firm's ability to buy assets, pay workers, service debt, and regulate tasks. As a result, effectively managing cash is directly related to the entity's aptitude to achieve the objectives, mission and goals.

Treasury management, another term for cash management, entails the process of accumulation and management of cash flows generated by a company's actions through operating, financing and investing. Cash management is quite an important aspect of managing working capital in business. Because cash is the firm's most liquid asset, it allows it to meet maturing obligations thus enhancing stability. Cash, according to Hansen (2005), improves a company's financial stability and solvency. Because cash is said to be the life line of any entity's, cash management is essential in every firm as observed by CIMA (2002). No business operation, according to Abioro (2013), can operate without managing its cash. Individuals and firm's use cash as their main asset in settling their obligations on a regularly. However, because cash, like any other resource, is in short supply, it must be managed sensibly to adequately maintain an entity's stability, construct a plan for payments in future and settle an entity's obligations.

Cash is the backbone of every business and it plays a critical role in decision making. A business cannot operate without cash and its management. The amount of cash held by an entity at a given time is determined by various factors such as growth opportunities, sale of asset, dividend to shareholders etc. According to Keynes in his General theory developed in 1990, businesses hold cash in order to fulfill various motives as follows; precautionary motive which means holding cash to meet future emergencies that may arise, transaction motive which means holding cash to meet current transaction needs and lastly speculative motive which entails holding cash with the objective of securing profit in future. Better cash management entails proper and timely decision-making pertaining spending, earlier

banking, collecting revenue and accurately forecasting cash flow. This reduces the cost of unnecessary borrowing and makes it easier to invest excess funds for sufficient overall return as observed by Barret (1999).

The primary goal of almost all business enterprises is cash management. To enhance the continuity of any business, good managerial strategies that assure continuous cash flow must be put in place. According to Kongolo (2010), SMEs in developing nations play a critical role in poverty reduction and economic growth. However, these SME's face myriad of challenges, one being limited knowledge on cash management by stakeholders. Attom (2014) notes that critical factor that affects financial performance of SMEs is management of cash. Recently, there has been a lot of discussion among government stakeholders, researchers and policymakers on the role SMEs play in enhancing economic growth, creating employment and eradicating poverty. According to Attom (2014), shortage of cash is a continuing impediment to most entities and its management is vital to their growth and survival.

1.1.1 Cash Management

Cash management entails collecting, handling, controlling and investing of an entity's cash and its equivalents so as to exploit the entity's liquid resources. Money is the sustenance of a firm and thus it's vital to uphold a healthy cash flow situation in the firm. Barret (1999) defines cash management as a set of processes adopted by an entity to maximize the value of its cash flow. Cash management, according to Storkey (2003), is possessing the precise volume of cash in the right place and time to achieve an entity's commitments in the best cost-effective way. Based on Scarborough, Zimmerer & Wilson (2008), cash management entails collection of funds, forecasting, distributing them, investing and planning for the money that a firm requires to run efficiently and seamlessly.

Since cash is such an important component of any entity, it must be managed effectively. If cash is not managed in an effective way, even profitable enterprises can go into bankruptcy. According to Akinyomi (2014), success of every entity is determined by how cash flow is controlled and planned. In as much as cash is important, it is also the least productive asset

a business owns. Amount of cash held by businesses is dictated by various factors such as the size of the business, and business needs. An entity must hold sufficient cash to achieve its financial goals or it might run to bankruptcy. According to Kasim, et al. (2015), cash management strategies have an influence on financial performance hence finance decision makers should embrace efficient cash management practices as a way of enhancing financial performance and survival in an unpredictable business environment.

According to Soaga (2012), the goal of cash management is to ascertain the optimum level of cash to attain the highest performance levels for the organization. Effective cash management principles involve timely decision-making pertaining expenditure, prompt collecting and banking revenue and accurately forecasting the flow of cash. According to Barett (1999), this aids in reducing the cost of any unnecessary lending as well as enhancing investment of excessive funds to attain sufficient overall return. When the inflows of cash are increased, the cost of collecting and managing cash is bound to decrease whereas profitability will increase. Shortening the time span of credit may negatively affect sales subsequently leading to minimized profits and sales revenue.

1.1.2 Financial Performance

Financial performance, according to Harash, Alsaad & Ahmed (2013), are measures of an entity's financial situation or financial results emanating from managerial decisions made by members of the firm. Financial performance measures how well an organization uses its assets to generate revenue. Various ratios used to evaluate financial performance include profitability ratios, gearing ratios and liquidity ratios. Profitability ratios relates to how efficient an organization uses its resources, gearing ratios measures degree of financial leverage while liquidity ratios measure the entity's ability to attain its interim goals as and when they become due. The key determining factor of financial statement is an entity's financial performance which entails an assembling of reports on the financial outcomes of the firm for a specific time period. The statement of comprehensive income, financial position statement, cash flows statement and statement of changes in equity are the four main financial statements

3

Managerial performance assessment is relative and doesn't rely on any particular item. Profitability, according to Wire (2015), is a determining factor of financial performance. Return on equity (ROE), net profit and, return on assets (ROA), are among the metrics for profitability as suggested by him. Wire (2015) pinpoints net profit as the superlative mean of assessing financial performance because it entails the ratio of an entity's net profit to its sales.

Gao (2010), and Miller, Boehije & Dobbins (2013) note that an entity's financial performance measures its ability to efficiently operate, enhance sales and profit as well as survival in the competitive environment. Free flow of cash is among the financial metrics adopted to assess a company's financial performance. According to Frank & James, (2014), free cash flow shows a firm's available cash after taking into consideration the amounts spent on development and recurrent expenditure. For the purpose of this study, net profit margin was used to measure financial performance. Net profit margin is obtained by dividing operating profit with sales.

1.1.3 Cash Management and Financial Performance

Businesses, large and small, use a variety of resources to keep their operations running. Cash is one of the key resources that can positively impact a company's performance and success. According to Oluoch (2016), proper management of cash is needed by entities to efficiently and effectively take care of its cash as it is a rare resource. The aim of managing cash is to guarantee enough cash on hand to carry out business operations, fund investments and settle any other financial obligations. This ultimately improves profitability. Sinclair & McPherson (2017) note that several studies have focused on connecting cash management with other areas such as bankruptcy, liquidity, working capital and financial performance. The connection between cash management and financial performance is an immediate issue to the managers and key stakeholders. As a result, this is the basis of the study. It however focuses on SMEs in Nairobi County, Kenya.

Based on Miller, Boehije & Dobbins (2013), liquidity is a precondition for entities to be able

to attain their interim goals as they come due while also maintaining profitability. Effective cash management not only boosts a company's chances of survival but also aids in attracting investors to provide funds for enlargement since that is the principal aspect that investors consider when assessing a company and its flow of cash, which replicates cash management strategy (Miller, Boehije & Dobbins, 2013).

Cash is the backbone of any entity. To enhance financial health of any business, effective cash management is very important. Miller-Orr model advanced by Miller and Orr in 1961, requires that businesses should maintain optimal cash balances and in case of cash flow crunch, businesses should prioritize and divert from their past investment decisions based on how important they are. Cash conversion theory states that the lesser the cash conversion cycle, the superior the performance financially (Gitman, 1974). This means that businesses should shorten the cash conversion cycle as much as possible in order to increase availability of cash at regular intervals. Availability of cash (capital) means that more products can be made and sold leading to more profits.

1.1.4 Small and Medium Enterprises

Small and medium enterprises do not have a single definition that is universally accepted. It largely depends on the region. According to OECD (2015), SMEs are non-subsidiary, self-governing entity that employs less than a certain number of workers which differs in different regions. For instance, in Europe, the higher limit is 250 workers while in other countries especially in Africa, upper limit is set at 200 workers. However, the US considers SMEs to entail entities with at most 500 workers. According to Onyando (2018), the definition guidelines of SMEs is founded on assets, number of workers and revenue. The Inter-American Development Bank defines SMEs by noting they are entities with a maximum of 100 workers and a revenue not exceeding $3 million (Normah, 2007). The World Bank defines SMEs as businesses with no more than 300 workers, a maximum yearly revenue of $15 million and no more than $15 million in assets (Normah, 2007).

In Kenya, the definition of SMEs is not clear either as there is no standalone law on SMEs. Mostly, it is categorized as businesses having between 1 and 99 employees, which is where

most businesses in Kenya lie. In Kenya, SMEs are termed as Micro, Small and Medium Enterprises (MSMEs). Small enterprises amass a yearly turnover that lie between 500,000 and 5 million Kenyan shillings with 10-50 workers based on the Micro and Small Enterprise Act (2012). Medium enterprises, on the other hand, are not enclosed by the Micro and Small Enterprise Act (2012) but have been categorized as firms with a turnover of 5 million to 800 million Kenya shillings and 50-99 workers.

The Kenya National Bureau of Statistics defined Micro, Small, and Medium Enterprises (MSMEs) as businesses with one to ninety-nine workers in its 2016 national survey on SMEs in Kenya. The study also defined small businesses as entities with 10 to 49 employed personnel and medium enterprises as those with fifty to ninety-nine workers. For the purposes of this study, the researcher relied on the definition of SMEs as defined by the national survey of SMEs. This study only considers small and medium enterprises and not micro enterprises.

Small and medium-sized enterprises (SMEs) are crucial in every economy, especially in emerging countries. Small and medium-sized enterprises form the enormous portion of entities globally and they contribute immensely to global economic and employment through jobs created. Based on World Bank, SMEs makes up approximately 90% of all businesses and exceeding 50% of all jobs globally. In emergent economies, formal SMEs can contribute up to 40% of GDP. According to Onyando (2018), the role of SMEs in motivating socioeconomic development has been heavily associated with development goals and quick industrialization in developing countries (Prillwitz & Barr, 2011).

In Kenya, just like the other developing nations, SMEs are crucial in developing economies and creating jobs. According to Central Bank of Kenya (CBK), SMEs makes up 98% of the entire businesses in the country. Most SMEs in Kenya fall under the informal sector. According to KNBS (2019) economic survey, Kenyan economy created over 800 thousand new jobs in 2018, with SMEs mostly in informal industry representing 83.6 percent of the overall employment generated. According to the same survey, Real GDP increased by 6.3%

as of 2018 as compared to 4.9% in 2017. The growth as per the survey, was attributed to increased SME activities in agriculture, manufacturing, transport and service sectors.

1.2 Research Problem

The vital current asset required to operate a business is cash. Profit is important in business but cash is king. A business might be profitable yet it's constantly in dire need of cash due to poor cash management practices. As a result, no business operation is independent of cash management. In order to maximize a company's value, SMEs must implement proper cash management strategies. Without proper cash management practices, SMEs might find it difficult to operate smoothly. Amongst the key challenges for SMEs in management of cash is determining a suitable source of funds for working capital. SMEs also face difficulties in determining the best investment for idle funds and determining the optimal balance of cash to be kept by the business to support operations. According to Kesseven (2006), most finance managers face the challenge of accomplishing a preferred trade-off between profitability and liquidity. As a result, he cautioned that mainly focusing on profitability may result in a mismatch between assets and liabilities thus causing an upsurge in profitability in the short-term while risking insolvency in the long haul.

Effective cash management not only focuses on profitability but also ensures liquidity is maintained at optimal levels that can support operations. SMEs adopt cash management techniques in order to enhance profitability, maintain optimal cash levels and ensure effective investment of cash. However, this is not usually achieved as most SMEs become insolvent due to poor management of cash. The problem of poorly managing cash among SMEs is linked to lack of managerial skills especially in areas of financial management. According to Wanjohi & Mugure (2008), 70 percent of SME owners or managers have no formal training on working capital management.

A survey by KNBS (2019) shows that about 400,000 MSMEs did not reach their second anniversary in the past five years and 2.2 million of them shut down during period of review. The failure of these SMEs is linked to various challenges one being inadequate knowledge

7

and skills especially in areas of cash management. Based on Chong (2008), 60% of SMEs have not employed financial personnel who are experienced and well trained to oversee their working capital management. Further studies on SMEs indicate that the failure of many SMEs is due to inadequate financial record keeping system which is part of cash management practice. It is evident that so many SMEs continue to underperform and some even close operations due to cash flow problems. These cash flow problems are linked to poor cash management techniques. Recently in Kenya, retail giants Tuskys and Nakumatt supermarkets have had to close due to liquidity concerns. The performances of Uchumi Supermarkets have also been hampered due to liquidity concerns. It is against these surroundings that this paper aims to determine if cash management affects financial performance.

Extensive research has been done on the correlation amongst financial performance and financial management. Majority of the research have majored on working capital management and economic performance. Mwangi (2013) focused on correlating working capital management and financial performance of Nairobi Securities Exchange listed manufacturing firms. Kabethi (2013) analysis was on working capital management and its impact on financial performance of SMEs. Louw, Hall & Brummer (2016), in South African retail firms, focused on the impact of working capital management on profitability whereas Kinuthia (2015) examined the impact of working capital management on the financial performance of Nairobi's retail supermarkets. There are, however, only a few studies that confine working capital management to cash management. This has created a knowledge gap that the research aims at filling. As a result, the study's purpose is to determine the impact of cash management on financial performance and to investigate how liquidity management, receivable collection, and cash cycle management affect the financial performance of SMEs in Nairobi County, Kenya.

1.3 Research Objective

The major objective of the research is to assess the effects of cash management on financial performance of SMEs in Nairobi County, Kenya.

1.3.1 Specific Objectives

Specific objectives guiding this research are;

i. To ascertain the impact of liquidity management on financial performance of small and medium enterprises in Nairobi County.

ii. To determine the impact of receivable collection on financial performance of small and medium enterprises in Nairobi County

iii. To assess the effect of cash cycle management on financial performance of small and medium enterprises in Nairobi County

1.4 Value of Study

Effective cash management ensures that businesses maintain optimum cash balances that is able to establish an equilibrium between liquidity and profitability. This study will help business owners to come up with various cash management strategies that enhance their financial health. For example, shortening the cash conversion cycle in order to enhance availability of cash that is used make and sell more products thus improving profitability.

Secondly, this study can enable investors make cognizant investment judgments. Stakeholders will always want to invest in businesses with efficient cash management models in order to maximize their returns.

Knowledge of cash management and impact of SMEs on economy will enable policy makers to draft diverse policy parameters that enhance the growth and development of SMEs. Any programs aimed at developing the SMEs industry will only be improved if the state is knowledgeable about cash management practices of SMEs and how they operate.

Lastly, this study will be utilized as a basis for prospect research. Other than providing a reference point for literature review, it can also be used as a basis for further research in related topics leading to more insights on Cash Management.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This segment explores existing information from diverse studies relating to current research topic. Specifically, this chapter covers theoretical and empirical literature on cash management, cash management practices, conceptual framework, study gaps and summarizes reviewed studies.

2.2 Theoretical Review

Theories of cash management are subsequently explained. Cash is an asset that does not earn and holding it instead of revenue-making asset incurs a cost in term of foregone income through interest. Thus, an entity ought to optimally maintain an equilibrium in cash that will make it achieve its obligations when they become due while also delivering safety of margin. The following theories of cash management enable organizations maintain optimum level of liquidity that enhances improved financial performance. These theories include, Baumol's theory developed by Baumol in 1952, Miller –Orr theory developed by Miller and Orr in 1948, Cash Conversion Cycle Theory developed by Gitman in 1974, Liquidity Preference theory developed by Keynes in 1936.

2.2.1 Baumol's Theory

This model is a cash management application of Economic Order Quantity stock model developed by Baumol in 1952. Baumol's model determines desirable cash balances under certainty. This theory assumes that firm uses and receives cash at a steady predictable rate with a known and unchanging time of holding the cash (Baumol, 1952). The entity incurs the same cost of transacting each time securities gets converted to cash and the company is aware of the opportunity cost required for holding cash.

For maintaining a certain cash balance, the entity incurs a cost called holding cost. It is referred to as opportunity cost because it is the interest paid on marketable securities that is foregone. A transaction cost is sustained whenever the firm transforms to cash its marketable securities. Baumol's model approach thus heavily depends on the compromise amongst the liquidity availed by withholding money and the foregone interest by maintaining cash that does not accrue interest (Baumol, 1952). The nominal interest rate, actual income levels and fixed cost of moving wealth between cash and marketable securities are the main variables influencing cash demand. Optimally holding cash balance, as per the model, has a direct and noteworthy influence on financial performance (Ndirangu, 2017).

2.2.2 The Miller-Orr Theory

In contrast to the Baumol's model, the Miller-Orr theory (MOT) is a probabilistic theory that assumes a more accurate uncertainty in flow of funds (Moraes & Nagano, 2013). Miller and Orr developed the theory in 1961 for entities with unclear cash flow in and out. The tactic enables businesses to set lower and upper cash balance limits and also the return point of cash balances, which influences financial performance.

When the entity's cash randomly varies and reaches the upper limit, the entity purchases enough marketable securities to reinstate the balance of funds to normal hence the return point. Correspondingly, when the flow of an entity's cash reaches the lower limit, it trades enough marketable securities to restore the cash equilibrium to its normal state hence the return point. The lower cash limit is determined by management based on the minimal safety margin of cash. This theory is founded on the subsequent assumptions: the in and out flows of cash are uncertain or stochastic in nature, day to day balancing of cash balances happens randomly, idle cash can be invested in marketable securities, when marketable securities are either sold or bought, cost of transacting is associated and lastly businesses maintain the lowest tolerable cash balance, known as the lower limit. Better financial performance would be achieved with optimal cash balance, according to this model.

2.2.3 Cash Conversion Cycle Theory

Gitman developed the theory in 1974 and it is concerned with the amount of time a company takes to convert its resource into cash (Gitman, 1974). The cycle of converting cash assesses a company's efficiency in managing working capital by calculating the number of days that money is devoted to stocks and accounts receivable less the number of days the vendors are not paid. The theory, according to Siddiquee, Khan & Mahmud (2009) measures the time between the cash outlay and its retrieval.

The shorter a firm's cash conversion cycle, the healthier and efficient it is. Entities attempt to lower the cash conversion cycle through increasing client's collections and reducing payment to vendors. A longer cash conversion cycle, on the other hand, means that the growth of sales is large translating to increased returns and thus better performance financially.

2.2.4 Liquidity Preference Theory

In his publication "The General Theory of Employment, Interest and Money", English economist John Maynard Keynes introduced this theory in 1936. According to Keynes liquidity

Preference theory developed in 1936, the rate of interest can be determined based on supply and demand of funds. This theory details that demand for money depends on interest forgone by not holding bonds. Interest is therefore not a remuneration for saving but a return for doing away with liquidity. However, interest earned on bonds will vary based on maturity period of bonds. This theory therefore helps determine the optimal cash balance (cash position) to be held by businesses.

According to the Keynes theory money is the most liquid asset and its demand is determined by 3 motives; transaction motive which entails holding money to meet current transactions, precautionary motive which involves holding money to meet unforeseen emergencies and finally speculative motive which involves holding money to speculate on bond prices or interest change.

2.3 Cash Management Practices

Practical management of cash guarantees small businesses the capability of meeting their financial responsibilities as they become due (Attom, 2014). These obligations include both expenses and debt. According to Murkor, Muturi & Oluoch, (2018), finance managers should develop mandatory policies controlling flow of cash to aid the firm in having crystal policies for managing flow of cash by investing excess funds when necessary. Cash management involves many activities with the goal to control and efficiently manage the firm's flow of cash. According to Kinyanjui, Kiragu & Riro (2017), the two most important aspects of managing cash are financial management and reporting. Cash management tools under financial reporting include cash books, cash flow statement, bank reconciliation and money. According to Katz & Green (2009), Cash management components covered under financial management include controlling credit, position of cash, cash planning and cash flow forecasting. The cash management practices identified for this study include liquidity management, receivables collection and management of cash cycle.

2.3.1 Liquidity Management

Liquidity refers to the ease with which a business is able to use the liquid assets available to it to settle its financial obligations which are short term in nature as and when they fall due. Cash is the main liquid asset deployed to meet various financial obligations. According to Collis & Jarvis (2000), liquidity management refers to the process whereby owners or managers of a business plan and control business cash flows in order to meet their financial needs. The purpose of liquidity management is to ensure that there's no mismatch between current liabilities and current assets.

Liquidity is also known as current assets management. Current assets are made up of cash and other liquid assets such as debtors and inventory. The level of current assets held by a business affects its profitability, risk and liquidity. A business is said to be more liquid if it has more current assets. This reduces the risk of insolvency. However, since current assets do not generate any income, the firm will have less profit. Maintaining adequate liquidity is therefore crucial to operation of any business.

Measurement of liquidity is based on the level of current assets a firm has against its current liabilities. This gives rise to net working capital. Various liquidity ratios adopted for liquidity measurement are current ratio, quick ratio/acid-test ratio and cash ratio. A business' ability to fulfil its current liabilities from its total current assets is measured by current ratio. Quick ratio measures the level which total current assets, except inventory, can settle the total current liabilities of a business. Lastly, cash ratio measures the extent to which cash and cash equivalents can settle total current liabilities.

2.3.2 Receivables Collection

Receivables collection (also known as debt collection) refers to the process whereby a business recovers cash from its customers that owe it money. Prompt receivables collections from debtors is preferred to ensure that bad debt is minimized, less cash is locked up in accounts receivable and the that the entity has enough cash to attain its operating expenditure. Pandey (1993) notes that cash management in contemporary corporations involve 2 simple rules; speed up cash collection and slow down cash disbursement. Control of cash collections and disbursements ensures that no significant deviations exist amongst predicted flow of cash and actual cash flows. A business can speed up collections by 2 means; decentralizing cash collection systems and formulating policies that minimize debt collection period.

Decentralizing debt collection involves setting up various collection centers through concentration banking technique and lock box system. This is done to ensure prompt invoice dispatch, promptly remitting receipt, fast entries posting, promptly forwarding remittances to be collected by the bank, prompt collection by banks as well as lump-sum relocation of debtor collections to the concentration bank. The time it takes for an entity to receive payments owed to it by its client's is called debt collection period. It is therefore the amount of time that passes before a company collects its accounts receivables and it is usually measured as average collection period. The period of average collection is obtained by dividing average accounts receivable with net sales and then multiplying the outcome with the number of days in a year.

According to Lantz (2008), a low average collection period is desirable to maintain a shorter cash conversion cycle.

It's important to monitor the average collection period in order to ensure that an entity has sufficient cash available to settle its financial duties. It enables a business to hold a given liquidity levels which allows it to settle its immediate expenses and plan on how to meet its future expenses. If debt collection standards are relaxed, the probability of bad debts increases. Businesses must therefore ensure that systems are put in place that ensure effective and efficient receivables management. Delays in collecting cash from debtors leads to financial problems. If collection is not done in time, firm's profitability is eroded and if collection is not done at all, the company incurs losses in form of bad debts.

2.3.3 Cash Cycle Management

Cash cycle can be defined by the period taken by a business to turn inventory or raw materials into cash. According to Jordan (2003), cash cycle is a measurement of the days it takes a business to collect cash from customers and make payments to suppliers from which inventory or raw materials were purchased from on credit. Cash cycle is measured in days and the shorter it is the better. Short cash cycle ensures that the company has less cash tied in inventory and accounts receivable and is less dependent on borrowed cash to finance its operations.

Cash conversion cycle (CCC) is a metric employed to measure cash cycle. According to Keown et al., (2003), cash conversion cycle is the sum of days taken to collect debts and days of converting raw materials to finished inventory for sale less days taken to settle accounts payable. The following equation is used to measure the cash cycle;

Cash Conversion cycle = Debtors collection period + Inventory conversion period – Payables payment period.
Whereby;
Debtors' collection period = Average Accounts Receivable/Net Sales * 365 days
Inventory conversion period = Average Inventory/Cost of Goods Sold * 365 days
Payables Payment period = Average Accounts Payable/Purchases * 365 days

A business with shorter cash conversion cycle is said to be more efficient as it is able to convert more times its working capital in a year thereby generating more sales and profit. According to Ramezani & Soenen (2007), a firm will rely more on external borrowing to finance its operations

if it has a longer cash conversion cycle. Since SMEs have limited access to external finances, it's advisable they keep their cash conversion short in order to sustain their operations.

2.4 Empirical Review

Onyando (2018) on establishing the correlation amongst cash management and financial performance in Nakuru's SMEs adopted a cross-sectional survey of 73 SMEs by factoring in 45 medium and 28 small enterprises. Primary data gathered embraced interviews and questionnaires. It was noted that proper planning of cash, banks and cash reconciliation, cash position and properly managing credit were used to operationalize cash management with financial performance being measured through net profit margin. A robust positive correlation was ascertained as existent amongst cash management and financial performance. A significant correlation was noted amongst cash management, credit management, and cash management with financial performance. It was noted that SMEs in Nakuru failed to formally carry out cash management in as much as they formally undertook part in managing cash where they lacked written-down policies concerning cash management.

Ndirangu (2017), on entities registered at the NSE, majored on the cash management and financial performance using descriptive design and secondary data acquired from NSE, Capital Markets Authority and the individual financial statements for periods between 2010 to 2016 availed from their website. The outcome indicated that cash conversion cycle affirmatively but insignificantly influenced financial performance, company's size negatively and unimportantly influenced financial performance and leverage positively and substantially impacted financial performance of the entities listed at the NSE.

Sila (2018) sought to ascertain the correlation between profitability and free cash flows of organizations listed in the NSE by adopting descriptive design with a targeted population of 15 NSE entities. Published financial statements from 2010 to 2016 obtained from individual firm's website was regressed to obtain the outcome of the study. A positive but insignificant correlation was ascertained amongst cash conversion cycle and financial performance, entity's size having a negative and insignificant influence on the financial performance while leverage had an affirmative and substantial impact on the financial performance.

Wire (2015) aimed at determining the bearing of managing working capital on financial performance of Nairobi's small and medium manufacturers. A survey design using and quantitative data were employed. It was determined that SMEs strongly buttressed all concepts

of working capital management as stock and cash budgets were prepared regularly with receivable levels and inventory being regularly reviewed. Low management knowledge was observed and experience of owner/manager's was perceived to be more relevant than theory application of financial management by the SMEs. Sales and profit growth which enhanced financial performance was also observed. Better working capital management expedited the creation of wealth through which majority of the stakeholders working under SMEs have their livelihood improved. This implies that properly managing working capital enhances economic growth.

Abioro (2013) studied the influence of cash management on the performance of Nigerian manufacturing sector using secondary and primary data. Descriptive statistics and correlation coefficients techniques were utilized and the outcome of the study indicates an existing noteworthy correlation between cash management and performance. It is argued that just having cash without properly managing it is not enough to influence performance thus the need for effectively managing an entity's funds to boost performance.

Malik, Waseem & Kifayat (2011) focused on establishing the link between managing working capital and profitability of Pakistan textile industry. Secondary data was gathered from 25 entities in Karachi registered by the stock exchange for the period of 2001-2006. An affirmative correlation between profitability and cash, inventory and accounts receivable were noted where as a negative correlation was seen between accounts payable and profitability. It was determined that effectively managing working capital enhances profitability as properly managing working capital is an integral part of an entity's decision regarding managing finances.

Andy & Johnson (2010) on ascertaining the influence of cash management on financial performance of the entities in USA in agriculture, insurance and construction sectors embraced regression model. They noted the existence of a negative correlation between cash management and financial performance and that cash management had an inconsequential influence on the financial performance of the sampled entities.

Mose (2016) focused on cash management and financial performance of Kenyan insurance firms for the period of 2013 to 2015. Primary data gathered using questionnaires was embraced. It was established that for firms to effectively manage cash, cash budgets played a key role and it was also pertinent for entities to practice budgeting to control the entities activities. Proper cash management improved accountability thus enhancing financial performance.

Ali & Mukhongo (2016) pursued to examine the impact of managing cash flow on Financial Performance of SMEs in Mogadishu by adopting descriptive design. The study noted that cash control and cash planning had a strong correlation with financial performance although there existed a negative association between managing liquidity and financial performance.

Hamza et al. (2015) majored on cash management practices and their influence on financial performance of Ghanaian SMEs by embracing cross-sectional survey using primary data gathered through questionnaires. It was discovered that SMES' financial performance was affirmatively connected to efficient cash management.

Raheman & Mohamed (2007) sought to determine the bearing of working capital management on profitability of firms in Pakistan. Ninety-four Pakistani companies listed on Karachi stock exchange between 1999–2004 was used as the sample size. Analysis used Pearson's correlation and regression analysis. Cash conversion cycle, liquidity and leverage had a negative correlation with firm's profitability. Only firm size had an affirmative correlation with profitability. It is thus concluded that working capital management and profitability had strong negative correlation.

2.5 Conceptual Framework

```
┌─────────────────────────────┐
│ Liquidity Management        │
│    • Cash ratio             │
│    • Quick ratio            │──────────────┐
│    • Current ratio          │              │
└─────────────────────────────┘              │
                                             ▼
┌─────────────────────────────┐      ┌──────────────────────────┐
│ Receivables Collection      │      │ Financial Performance    │
│    • Debtors' collection    │─────▶│    • Net profit margin   │
│      period                 │      └──────────────────────────┘
└─────────────────────────────┘              ▲
                                             │
┌─────────────────────────────┐              │
│ Cash cycle management       │              │
│    • Cash conversion cycle  │──────────────┘
│      (CCC)                  │
└─────────────────────────────┘
```
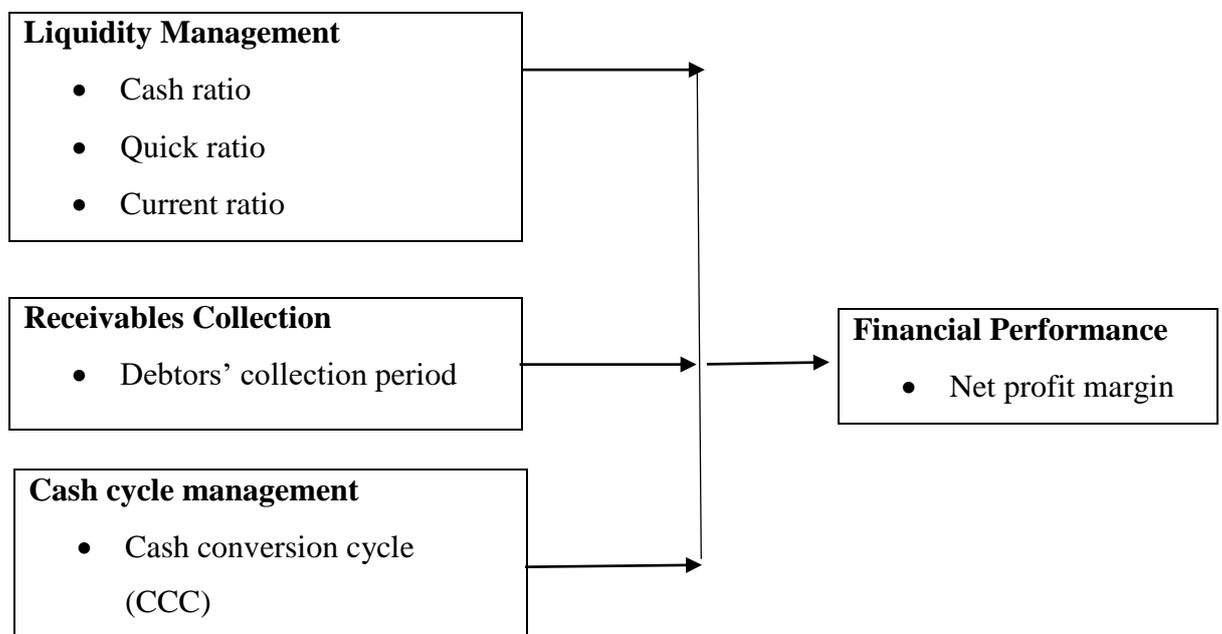
Independent Variables   **Dependent Variable**

Figure 0.1: Conceptual Framework

2.6 Research gap

As per the analysis of literature reviewed, it is clear that there are several research studies done on cash management and financial performance. Nonetheless, a large number of these studies majored on diverse industries like insurance and manufacturing and not SMEs. Additionally, several studies focused on other settings other than Kenya. For example, Malik, Waseem & Kifayat (2011) and Raheman & Mohamed (2007) were done in Pakistan. Hamza et al. (2015) was done in Ghana, Andy & Johnson (2010) was done in USA, while Ali & Mukhongo (2016), was done in Mogadishu, Somalia. These present a contextual gap which this study seeks to fill. It is also apparent that some studies focused on working capital management and financial performance. Only a few studies narrowed down working capital to cash management. This presents a knowledge gap to be filled by the study.

2.7 Summary of Literature Review

This segment covers theoretical review, cash management practices, empirical review and research gaps. Theories covered under theoretical review include; Baumol's theory (Baumol, 1952), Miller –Orr theory (Miller & Orr, 1948), Cash Conversion Cycle theory (Gitman, 1974), and Liquidity Preference theory (Keynes, 1936). Cash management practices discussed are; liquidity management, receivables collection and cash cycle management. Empirical review includes Onyando (2018), Ndirangu (2017), Wire (2015), Abioro (2013), Malik, Waseem & Kifayat (2011), Andy & Johnson (2010), Mose (2016), Ali & Mukhongo (2016), Hamza et al. (2015) and Raheman & Mohamed (2007).

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

The chapter focuses on the design to be used, the population, data collection and analysis techniques as well as the diagnostic tests to be carried

3.2 Research Design

Research design is the structure of a study that grips all elements of a research project together so as to meet the objectives as well as address the questions of the study as explained by Orodho, (2003). McCombes (2019) define it as a plan to answer a set of research questions using empirical data. The research adopted a descriptive research design as it involves accurate and systematic description of characteristics of a population, situation or phenomenon studied (McCombes, 2019). It answers the what, where, when and how questions but not the why questions.

Burns & Grove (2010) defines descriptive research as a scientific technique that entails observation and description of the behavior of a subject devoid of manipulating it. Therefore, in descriptive research design, the researcher has no control of manipulating any of the variables of study, but only observes and measures them. The research design choice is influenced by the nature of study which seeks to answer the question by identifying and describing the effects of cash management on financial performance of SMEs in Nairobi. Furthermore, the researcher collected quantitative data that was quantitatively analyzed through inferential statistics and descriptively with the research design.

3.3 Population of Study

Mugenda & Mugenda (2003) terms a population as "an entire group of people, items, events, or objects that share a mutual noticeable trait." There are about 268,100 licensed micro, small and medium enterprises operating in Nairobi County (KNBS, 2019). However, this research focused on the SMEs and not micro enterprises.

According to data obtained from Kenya National Bureau of Statistics in 2019, there are about 43,432 licensed SMEs in Nairobi County and thus they form the target population of this study from where a sample was drawn for research. The targeted respondents were owners and managers of the 43,432 SMEs in Nairobi.

Table 3.3.1; Distribution of SMEs in Nairobi County, Kenya

Category of business	Total SME in Nairobi County	Population's Percentage (%)
Small Enterprises	39,679	91.4
Medium enterprises	3,753	8.6
Total	**43,432**	**100.00**

Source; Kenya National Bureau of Statistics (2016)

3.4 Sample Design

Sampling is the systematic selection of a predetermined number of elements from a population of theoretically defined elements. The goal of sampling is to make generalizations about the entire population. Creswell (2017) defines it as a subset of the target population that the researcher intends to study in order to generalize target population characteristics. The critical experiment of a sample design is its proper representation of the characteristics of the study's target population (Kothari, 2004).

3.4.1 Sample Frame

A list of people from whom a sample will be taken from is a sampling frame. The sample frame aids in the development of a sampling unit. The sampling frame of the study was made up of owners or managers of licensed SMEs in Nairobi. As a result, the study sample was drawn from the population of 43,432 licensed SMEs operating in Nairobi County, Kenya.

3.4.2 Sampling Method

The study adopted stratified random sampling. It is a probability sampling method in which the researcher makes a division of the populace into minimal groups that does not overlap but symbolizes the whole population. Stratified sampling, based on Kothari (2004), gives chance to all participants of a study population to contribute.

Since the SMEs have been categorized as either Small or Medium Enterprises, this sampling method enabled the researcher to get a representative sample from each of these categories or strata that make up the SME population. Each stratum had a representative in the sample in proportion to its population size.

3.4.3 Sample Size

Stratified random sampling method was used by the researcher to select a sample size of 208 owners or managers of SMEs in Nairobi County. Sample size was determined using Fischer's

formula. Since the target population exceeds 10,000, the formula used is;

$$n = \frac{Z^2 * P * Q}{I^2}$$

Where;

n = Preferred size of the sample

Z = Normal deviation at the preferred confidence interval (95%),

      Z value at 95% = 1.96

P = Population's proportion with preferred characteristic, computed as;

      <u>Number of Licensed SMEs in Nairobi</u>

      Number of licensed MSMEs in Nairobi

      P = <u>43,432</u>

         268,100

      P = 0.1620

Q = Population's proportion minus preferred characteristic (1-P)

      1 - 0.1620 = 0.8380

I = statistical significance level (degree of freedom=0.05)

Therefore,

$$n = \frac{1.96^2 * 0.1620 * 0.8380}{0.05^2}$$

n = 208

Table 3.4.3.1; Number and percentage of SME sample population

Category/Type of Business	Number of SMEs in Nairobi County	Sample size	Percentage of Sample size
Small Enterprises	39,679	190	91.4
Medium enterprises	3,753	18	8.6
Total	43,432	208	100

3.5 Data Collection

The study used of primary and secondary data. Primary data was gathered through structured questionnaires comprising of closed and open-ended queries. Structured questionnaires shall be distributed to the 208 managers or owners of the SMEs sampled. Using structured questionnaire guarantees that the respondents' questions and replies are consistent. Respondents prefer

questionnaires because they become anonymous. In addition, questionnaires ensure efficient and faster response time from the respondents thus allowing for maximization of collected data from a huge number of respondents within a very minimal period using minimum resources.

The questionnaire shall be guided by a 5-point Likert scale. The scale shall be utilized to quantify replies on metrics in the questionnaire where 1 signified least approval level and 5 symbolized uppermost approval level. The choice of this scale is to ensure that respondents make a definite choice rather than be neutral in their responses.

Secondary data was collected from journals, publications, newsletters, books, previous studies and other relevant written material relating to the current topic of study. Another source of secondary data was the financial registers of the 208 SMEs sampled. These data were gathered through desk review of published records mentioned above.

3.6 Data Analysis

This research used liquidity management, receivables collection and cash cycle management in the analysis. Raw data collected through questionnaires shall be reviewed and scrutinized for consistency and comprehensiveness. Data shall be quantitatively analyzed through descriptive and inferential statistics. Percentages, means and standard deviation were used in descriptive analysis. Regression and correlation analysis such as Pearson Product Moment Correlation was used in inferential analysis. Multiple regression analysis shall be employed in establishing the existence and strength of the correlation between cash management practices and financial performance. Coefficient analysis shall be used to assess the statistical influence of cash management practices on financial performance of SMEs in Nairobi. SPSS version 22 was adopted in analyzing the data. Tables are used in presenting the analyzed data.

The correlation between cash management and financial performance was developed into a linear regression model. The model is;

$\hat{Y} = a + \beta 1X_1 + \beta 2 X_2 + \beta 3 X_3 + \varepsilon$

Where;

Y is financial performance

a is constant i.e., value of Y when $X_1 = X_2 = X_3 = 0$

β_1, β_2 and β_3 refer to fluctuations in Y with respect to unit change in X_1, X_2 and X_3 correspondingly.

X_1, X_2, X_3 are the independent variables (cash management practices) represented as follows;

X_1 is liquidity management measured by cash ratio, quick ratio and current ratio

X_2 is receivables collection measured by average debtors' collection period

X_3 is cash cycle management measured by cash conversion cycle (CCC)

ε is an error term relating to indefinite variables which may influence financial performance.

3.7 Diagnostic Tests

Diagnostic tests are performed on data collected in order to evaluate conformity with multiple regression model assumptions. This ensures that there are non-violations of multiple regression model assumptions thus leading to validity and reliability of results. This study employed linearity test, normality test, heteroscedasticity test and multicollinearity test.

3.7.1 Linearity test

Linearity means 2 variables are related by a mathematical equation. The choice of this test is due to the fact that statistical methods of data analysis require an assumption of linearity. Each of the variables of study were subjected to linearity test using SPSS.

3.7.2 Normality test

Normal data is needed for multiple regression and correlation analysis. Normality test was conducted to determine if data fits normal distribution. If data is not normally distributed, results of analysis might be distorted. Non-normally disbursed data, according to Garson (2012), may not show the accurate correlation amongst variables being studied. This study tested normality using Shapiro–Wilk test of normality. The null hypothesis ensures that data are disbursed normally. Null hypothesis is accepted when p value is greater than 5% i.e., P>0.05. When p value is less than 5%, null hypothesis is overruled.

3.7.3 Heteroscedasticity test

Heteroscedasticity test is described as lack of constant error variance. Regressing a model without considering for heteroscedasticity can result in skewed parameter estimates. Breusch-Pagan/Godfrey test was adopted to check heteroscedasticity by adopting the regression residual value of cash management. Heteroscedasticity does not exist where the significance values are larger than the value of P-value (5%).

3.7.4 Multicollinearity test

There is multi-collinearity when independent variables are associated as noted by Kothari (2004). It causes standard inaccuracies and confidence intervals to inflate, resulting in unsteady coefficient estimates for specific predictors. Independent variables therefore need to be linearly independent of each other. Variance Inflation Factor (VIF) was adopted to assess multi-

collinearity. According to Gujarati & Porter (2009), there's no existence of multi-collinearity if Variance Inflation Factor is less than 5.

CHAPTER FOUR: DATA ANALYSIS AND PRESENTATION OF FINDINGS

4.1. Introduction

The chapter presents the collected data on liquidity management, receivable collection and cash cycle management. It includes interpretation of the data and a summary of the findings to evaluate whether cash management affects the financial performance of small and medium business enterprises within Nairobi County. The chapter also discusses the findings of the data extracted, and it provides a comparison of the current study findings with other relevant studies.

4.2. Response Rate

The study was targeted at a total of 208 respondents. There was a 100% response rate from the owners and managers of the SMEs in Nairobi County. The high response assisted in getting the necessary information required to show the relationship between cash management and the financial performance of small and medium business enterprises in Nairobi.

4.3. Demographic Information

4.3.1 Gender

Table 1 shows that there are more male respondents than female respondents. The table shows that 56.1% of the respondents are men while 42% are female.

Table 4.3.1; Gender of the participants

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		4	1.9	1.9	1.9
	Male	119	56.1	56.1	58.0
	Female	89	42.0	42.0	100.0
	Total	212	100.0	100.0	

Source: Primary data

4.4. Data Presentation

4.4.1 Liquidity Management

Table 4.4.1 shows that most SMEs are involved in liquidity management practices. According to the table, 46.2% of the respondents practiced liquidity management. The results show that most SMEs in Nairobi County set cash aside to meet their current and future debts and meet their purchasing needs.

Table 4.4.1; Presence of Liquidity Management

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	5	2.4	2.4	2.4
	Rarely	47	22.2	22.6	25.0
	Sometimes	54	25.5	26.0	51.0
	Often	96	45.3	46.2	97.1
	Always	6	2.8	2.9	100.0
	Total	208	98.1	100.0	
Missing	System	4	1.9		
Total		212	100.0		

Source: Primary Data

4.4.2 Receivable collection

56.7% of the participants reported that SMEs collect cash from their debtors to avoid bad debts. Data from table 4.4.2 shows that most SMEs in Nairobi County often recover cash from customers that owe them money.

Table 4.4.2; Presence of Receivable Collection

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	6	2.8	2.9	2.9
	Rarely	37	17.5	17.8	20.7
	Sometimes	27	12.7	13.0	33.7
	Often	118	55.7	56.7	90.4
	Always	20	9.4	9.6	100.0
	Total	208	98.1	100.0	
Missing	System	4	1.9		
Total		212	100.0		

Source: Primary Data

4.4.3 Cash cycle management

Table 4.4.3 shows that most SMEs considered in the current study do cash cycle management. The table shows that 45.7% of the participants are involved in cash cycle management, which helps them turn the inventories they have to cash.

Table 4.4.3; Presence of Cash Cycle Management

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	5	2.4	2.4	2.4
	Rarely	39	18.4	18.8	21.2
	Sometimes	69	32.5	33.2	54.3
	Often	95	44.8	45.7	100.0
	Total	208	98.1	100.0	
Missing	System	4	1.9		
Total		212	100.0		

Source: Primary Data

4.5. Descriptive statistics

From table 4.5.1, the mean of the data on liquidity management is more than the median. As a result, the distribution is positively skewed. The standard deviation of the data is 0.918 showing that the data values on liquidity management are closer to the mean.

Similarly, the mean of the data on cash cycle management is more than the median showing that the distribution is positively skewed. The small standard deviation value shows that the data values associated with cash cycle management are closer to the mean. In contrast, the data on receivable collection shows the mean is lower than the median. As a result, the distribution is considered negatively skewed, and the values are closer to the mean because the standard deviation is also low.

Table 4.5.1; Descriptive Statistics

		Presence of liquidity management	Presence of receivable collection	Presence of cash cycle management
N	Valid	208	208	208
	Missing	4	4	4
Mean		3.25	3.52	3.22
Median		3.00	4.00	3.00

Mode	4	4	4
Std. Deviation	.918	.988	.834
Minimum	1	1	1
Maximum	5	5	4

Source: Primary Data

4.6. Linear regression model

4.6.1. Model summary

From table 4.6.1, the value of R square is 0.088 showing that 8.8% of the variables fit in the regression model. As a result, there is a weaker fit to the model. The value of R square shows that an 8.8% variance in financial performance can be predicted by liquidity management, receivable collection and cash cycle management. Generally, the regression model has a weaker fit to the observed data in the model.

Table 4.6.1; Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					
					R Square Change	F Change	df1	df2	Sig. F Change	Durbin-Watson
1	.296[a]	.088	.074	.727	.088	6.523	3	204	.000	.188

a. Predictors: (Constant), Liquidity management, receivable collection, cash cycle management (cash conversion cycle)

b. Dependent Variable: financial performance

Source: Primary Data

4.6.2. ANOVA

The p-value associated with the F value is 0.000 showing that the independent variable predicts the dependent variable reliably. P-values less than 0.05 show that the data is statistically significant, showing that liquidity management, receivable collection and cash cycle management reliably predict the financial performance of SMEs in Nairobi County.

Table 4.6.2; ANOVA

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	10.335	3	3.445	6.523	.000[b]
	Residual	107.742	204	.528		
	Total	118.077	207			

a. Dependent Variable: financial performance

b. Predictors: (Constant), Liquidity management, receivable collection, cash cycle management (cash conversion cycle)

Source: Primary Data

4.6.3. Regression Model Coefficients

From the model summary in table 4.6.1, the regression equation is:

Financial performance= 1.282 + 0.179 receivable collection+ 0.092 cash cycle management - 0.014 liquidity management

Table 4.6.3; Linear Regression Model Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	1.282	.300		4.272	.000
	receivable collection	.179	.047	.258	3.841	.000
	cash cycle management (cash conversion cycle)	.092	.053	.122	1.759	.080
	Liquidity management	-.014	.080	-.012	-.175	.861

a. Dependent Variable: Financial Performance

Source: Primary Data

The unstandardized coefficients show the relationship between the dependent and the independent variables. From the results, the unstandardized coefficients show the improvement in financial performance that would come from a unit increase in either receivable collection, cash cycle management and liquidity management. From table 4.6.3, a unit increase in the receivable collection would lead to a 0.179 unit increase in financial performance while holding

the other factors constant. The coefficient is statistically significant because the p-value is 0.000 showing that we reject the null hypothesis and accept the alternative hypothesis in the receivable collection.

For every unit increase in cash cycle management, there is a 0.0092-unit increase in financial performance while holding all the other variables constant. The p-value is 0.08, which is higher than 0.05 showing an insignificant relation with cash cycle management.

A unit increase in liquidity management leads to a 0.014 decrease in financial performance while holding all the other factors constant. The p-value of the coefficient is 0.861, which is higher than 0.05, showing that there is an insignificant relationship with liquidity management.

4.7. Correlation

The strength of the correlation coefficients can be interpreted by either positive or negative correlation coefficients. A strength of 0-0.1 signifies negligible correlation while 0.1 to 0.39 signifies a weak positive correlation. A rating between 0.4 and 0.69 shows a moderate correlation between the variables under study. Further, a strong correlation is shown by a rating between 0.7 to 0.89. A very strong correlation is shown by a rating between 0.9 and 1. Negative correlation has the same strength in the association of the variables but with negative coefficients. Table 4.7.1 represents Pearson's correlation coefficient analysis. The correlation of the independent and dependent variables is shown in the table, with all the variables having a weak positive correlation. The receivable collection has a weak positive correlation of 0.271 with financial performance. However, it has the strongest correlation among the variables selected in the current research. Liquidity management has the weakest correlation with a coefficient of 0.035.

Table 4.7.1; Correlation

		financial performance	receivable collection	cash cycle management (cash conversion cycle)	Liquidity management
Pearson Correlation	financial performance	1.000	.271	.147	.035
	receivable collection	.271	1.000	.106	.059

	cash cycle management (cash conversion cycle)	.147	.106	1.000	.263
	Liquidity management	.035	.059	.263	1.000
Sig. (1-tailed)	financial performance	.	.000	.017	.306
	receivable collection	.000	.	.064	.197
	cash cycle management (cash conversion cycle)	.017	.064	.	.000
	Liquidity management	.306	.197	.000	.
N	financial performance	208	208	208	208
	receivable collection	208	208	208	208
	cash cycle management (cash conversion cycle)	208	208	208	208
	Liquidity management	208	208	208	208

Source: Primary Data

4.8. Discussion of Findings

The current research shows a positive relationship between cash management and financial performance, as shown by the correlation coefficients. The research findings are similar to Ndirangu (2017), who found an insignificant relationship between the cash conversion cycle and financial performance. Similarly, Sila (2018) noted an insignificant relationship between the cash conversion cycle and financial performance. The research is similar to the current research, which showed an insignificant and positive relationship between cash cycle management measured in cash conversion cycles and financial performance. Further, the current research is similar to Ali and Mukhongo's (2016) research, which noted a negative relationship between liquidity management and financial performance. The unstandardized coefficients of the current research show a negative relationship between liquidity management and financial performance. Therefore, there is a similarity between the current research and Ali and Mukhongo's (2016) research. The research findings show a weak positive relationship existing between cash management and financial performance. Also, the results are similar to Hamza et al. (2015) research, which showed a connection between cash management and financial performance.

CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1. Introduction

The chapter summarizes all the findings, the policy recommendations, conclusions, suggestions for further studies and limitations of the current study.

5.2. Summary of Findings

From the findings, most of the owners and managers reported that the SMEs had liquidity management practices. Table 4.4.1 shows that 46.2% reported being often involved in liquidity management when managing SMEs. The results also show that the owners and managers operating the SMEs set aside liquid cash to meet the future and current debt obligations. The results also show that SMEs can pay the goods and services because they are involved in liquidity management practices.

Table 4.4.2 shows the receivable collections, with most SMEs reporting that they have been involved in collecting money from their debtors. The table shows that 56.7% of the SMEs were involved in collecting debts from debtors to avoid bad debts. The percentage is high compared to the other independent variable showing that the SMEs are primarily involved in collecting money from debtors to prevent losses.

Table 4.4.3 shows that most SMEs are involved in cash cycle management. The results show that 45.7% of SMEs are involved in cash cycle management. The results prove that majority of the SMEs are involved in collecting cash from customers, and they make payments to suppliers on time.

The correlation between SMEs' receivable collection and financial performance is 0.271, as shown in table 4.7.1. The results show a weak positive correlation between receivable collection and the financial performance of SMEs in Nairobi County. Further, the linear regression analysis in table 4.6.3 shows that a unit increase in receivable collection leads to a 0.179 increase in financial performance. The variable shows a statistically significant relationship because the p-value is less than 0.05. Therefore, the receivable collection impacts the financial performance of SMEs in Nairobi County.

Table 4.7.1 shows that the correlation between cash cycle management and financial performance is 0.147. The results indicate a weak positive relationship exists between cash cycle management and the financial performance of SMEs in Nairobi County. The regression analysis in table 4.6.3 shows that a unit increase in cash cycle management leads to a 0.092 increase in financial performance. The coefficient is not statistically significant, but there is a relationship between cash cycle management and financial performance because of a weak positive

correlation. Therefore, cash cycle management affects financial performance.

There is a weak positive correlation between liquidity management and financial performance, as shown in table 4.7.1. The correlation between the variables is 0.035 showing that liquidity management has a weak relationship with financial performance. Table 4.6.3 shows that a unit increase in liquidity management leads to a decrease in financial performance by 0.014. The coefficient is not statistically significant, but there is a relationship between liquidity management and financial performance because of a weak positive correlation.

The analysis shows that receivable collection, cash cycle management and liquidity management positively correlate with financial performance. The F-value is 6.523, and it is statistically significant, showing that the linear regression model fits the data better. Therefore, it means that receivable collection, cash cycle management and liquidity management are reliable predictors of financial performance in SMEs in Nairobi County. Therefore, cash management has a positive relationship with the financial performance of SMEs in Nairobi County.

5.3. Conclusion

The study findings prove that receivable collection, cash cycle management, and liquidity management positively affect SMEs' financial performance in Nairobi County. The research also concludes that most SMEs use receivable collections, cash cycle management and liquidity management to control their operations. Moreover, the study's findings showed that receivable collection has the highest effect on the financial performance of SMEs in Nairobi County. Cash cycle management had the second-highest impact on the financial performance of SMEs in Nairobi County. Lastly, liquidity management had an almost negligible effect on the financial performance of SMEs in Nairobi County.

The results show that it is justified to reject the null hypothesis and accept the alternative hypothesis because cash management positively correlates with financial performance. However, there is a low positive correlation between the independent variables and dependent variables, as shown by the correlation coefficients. Also, the value of R squared is 0.088 showing a weak relationship between cash management and financial performance. Therefore, it is justified to conclude that other variables apart from cash management lead to an increase in the financial performance of SMEs in Nairobi County.

5.4. Policy Recommendations

The research shows that the managers and owners have to get involved in the receivable collection, cash cycle management and liquidity management to run the SMEs successfully. The

SMEs, therefore, have to formulate procedures to implement the processes to remain profitable. Also, managers can support the procedures with policies meant to make the processes mandatory for the SMEs in Nairobi County.

The study results also show that cash management is ineffective in enhancing financial performance, as shown by the weak positive correlation. Therefore, SMEs have to focus on other measures such as promotions, pricing, and competition strategies to improve their financial performance. It is also recommended that the SMEs' owners and managers have to analyze the failures and successes in cash management to improve its financial performance. Therefore, analysis of the receivable collection, cash cycle management and liquidity management would effectively strengthen the weak areas of the SMEs.

5.5. Limitations of the Study

Most of the respondents in the research provided non-committal answers such as "sometimes", a fact which limited the accuracy of the study's findings. The study was also limited because it involved SMEs from Kenya, and most owners and managers do not offer accurate information about their businesses. The owners do not expose their financial information, making it hard to extract the required information.

Extraction of the data took 5 minutes to interrogate each owner or manager involved in the research. Therefore, it took more time to talk to 208 participants because most of them had to reschedule the sessions leading to more delays. The duration of the research was also small, which made the research focus on a few study variables and a smaller sample size of the SMEs in Nairobi County.

5.6. Suggestions for Future Research

More studies on the effect of cash management on financial performance have to be done to support the existing studies and the current study. Future research can include more research variables and more respondents to get conclusive results. Adding more participants would increase the accuracy and reliability of the findings. More research has to be done on the effects of cash management on the financial performance of parastatals and other non-governmental organizations to find whether the receivable collection, cash cycle management and liquidity management affect financial performance. Also, more research has to be done on other factors affecting financial performance apart from cash management to find whether there was a significant relationship.

REFERENCES

Abioro, M. (2013). The Impact of Cash Management on the Performance of Manufacturing in Nigeria. *Uncertain Supply Chain Management*, 1(2013), 177-192.

Akinyomi, O. J (2014). Influence of competition on Activity-based costing system implementation in Nigeria. *International Journal of Information, Business and Management, 6(1),11*

Ali, A. T. A., & Mukhongo, A. L. (2016). Effects of cash flow management on the financial performance of the small and medium enterprise in Mogadishu Somalia (A case study of Bakara market). *Elixir Financial. Management*, 94, 40538-40546

Andy, S., & Johnson, H. N. (2010). Effect of Cash Management on the Financial Performance of the firms in the United States of America. The Empirical Evidence. *Journal of Finance*, 42, 124-157.

Attom, E.B. (2014). Cash Management Practices by Micro and Small-Scale Enterprises At Kasoa in The Central Region of Ghana. *Asian Journal of Business and Management Sciences*, 1-12

Baumol, W. J. (1952). The Transactions Demand for Cash: a listing Theoretical Approach. *Quarterly Journal of Economics*, 66(4), 545-556.

Barrett, C. B. (1999). The effects of real exchange rate depreciation on stochastic producer prices in low-income agriculture. *Agricultural Economics*, *20*(3), 215-230.

Burns, N., & Grove, S. K. (2010). *Understanding nursing research-eBook: Building an evidence-based practice*. Elsevier Health Sciences.

Chong, H. G. (2008). Measuring performance of small-and-medium sized enterprises: The grounded theory approach. *Journal of Business & Public Affairs*.

CIMA (2002). Preparing cash budget. Retrieved January 20, 2012, from http://www.cimaglobal.com/Documents/Imported Documents/article_web_nov02.pdf.

Collis, J., & Jarvis, R. (2000). Financial Information: The Vital Spark in Small Enterprise Management. In *National Small Firms Policy and Research Conference* (Vol. 1, pp. 101-126). Leeds; ISBA; 1997.

Creswell, J. W. (2007). *Five qualitative approaches to inquiry*. Qualitative inquiry and research design: Choosing among five approaches, 2, 53-80.

Frank, B. P. & James, O. K. (2014). Cashflow and Corporate Performance: A Study of Selected Food and Beverage Companies in Nigeria. *European Journal of Accounting Auditing and Finance Research, 2(*2), 77-87.

Gao, Y. (2010). Study on Formative Mechanism of Financial Risk and Control for Agriculture Listed Companies in China. *College of Economy and Management, Southwest University, Beibei, Chongqing, China*.

Garson, G. D. (2012). Testing statistical assumptions. *Asheboro, NC: Statistical Associates Publishing*.

Gitman, L. J. (1974). Estimating corporate liquidity requirements: a simplified approach. *Financial Review*, *9*(1), 79-88.

Gujarati, D. N., & Porter, D. (2009). Basic Econometrics Mc Graw-Hill International Edition.

Hamza, K., Mutala, Z., & Antwi, S. K. (2015). Cash management practices and financial performance of small and medium enterprises (SMEs) in the Northern region of Ghana. *International Journal of Economics, Commerce and Management*, *3*(7), 456-480.

Hansen, R., Mowen, M. (2005). *Management Accounting* (7 Ed.) Singapore: South-western.

Harash, E., Alsaad, F. J., & Ahmed, E. R. (2013). Moderating effect of market practices on the government policy-Performance relationship in Iraq SMEs. *American Journal of Economics*, *3*(5), 125-130.

Jordan, R.W. (2003). *Fundamentals of Corporate Finance*, 6th ed., McGraw-Hill Companies, Boston.

Kabethi, L. W. (2013). *The Effect of Working Capital Management Practices On the Financial Performance of Small and Medium Enterprises in Kenya* (Doctoral dissertation, University of Nairobi).

Kasim, H., Mutula, Z. and Antwi. S.K (2015) Cash management Practices and financial performance of Small Medium Enterprises (SMEs) in the Northern region of Ghana.*International Journal of Economics, Commerce and Management. Vol.III, Issue 7, July 2015*

Katz, J. A., & Green II, R. P. (2021). *Entrepreneurial small business*. McGraw-Hill Education.

Keown, A.J., Martin, J.D., Petty, J.W. & Scott, D.F. (2003*). Foundations of Finance*, 4th ed., Pearson Education, New Jersey

Kesseven, P. (2006). *Trends in working capital management and its impact on firms' performance*. International Review of Business Research Papers.2 (2), 45-58.

Kinuthia, J. N. (2015). *The effects of working capital management on the financial performance of retail supermarkets in Nairobi county, Kenya* (Doctoral dissertation,

University of Nairobi).

Kinyanjui, D., Kiragu, D. N. U., & Riro, G. K. (2017). Cash management practices on financial performance of small and medium enterprises in Nyeri Town, Kenya.

KNBS. (2019, May 2). Kenya National Bureau of Statistics – Economic Survey 2019 | The Elephant. The Elephant; www.theelephant.info. https://www.theelephant.info/documents/kenya-national-bureau-of-statistics-economic-survey-2019/

Kongolo, M. (2010). Job creation versus job shedding and the role of SMEs in economic development. *African journal of business management*, *4*(11), 2288-2295.

Kothari, C. R. (2004). *Research methodology: Methods and techniques*. New Age International.

Lantz, B. (2008). *Operativ verksamhetsstyrning*. 2 nd edition. Lund: Studentlitteratur.

Louw, E., Hall, J., & Brummer, L. (2016). Working capital management of South African retail firms. *Journal of Economic and Financial Sciences*, *9*(2), 545-560.

Malik, M., Waseem, J. U., & Kifayat, U. (2011). Working capital management practices and profitability analysis of firms of textile industry of Pakistan. *Journal of Managerial Sciences*, 6(2), 155-165.

McCombes, S. (2019) Correlational Research. https://www.scribbr.com/methodology/correlational-research

Miller, A., Boehije, M., & Dobbins, C. (2013). Management Challenges for the 21st Century. *Key financial performance measures for farm general managers. Purdue University Cooperative Extension. West Lafayette*, 1-3.

Moraes, M. B. D. C., & Nagano, M. S. (2013). Cash management policies by evolutionary models: a comparison using the Miller-Orr model. *JISTEM-Journal of Information Systems and Technology Management*, *10*, 561-576.

Mose, A. N. (2016). Effect of Cash Management Practices on the Financial Performanceof Insurance Firms in Kenya. *Unpublished MBA Thesis of Kenyatta University*.

Mugenda, O.M. and Mugenda, A.G. (2003) Research Methods: *Quantitative and Qualitative Approaches*. ACT, Nairobi.

Muhammad, M., Jan, W. U., & Ullah, K. (2012). Working Capital Management and

Profitability An Analysis of Firms of Textile Industry of Pakistan. *Journal of Managerial Sciences*, *6*(2).

Murkor, A.S., Muturi, W., & Oluoch, O. (2018). Effect of operating cash flow management on financial performance of Mutual Funds in Kenya. *European Journal of Business, Economics and Accountancy, 6 (5), 37*, *46*.

Mwangi, M. A. (2013). *The Relationship between working capital management and financial performance of manufacturing firms listed at the Nairobi securities exchange* (Doctoral dissertation, University of Nairobi).

Ndirangu, L. W. (2017). *Effect of Cash Management on the Financial Performance of the companies listed at the Nairobi Securities Exchange*. Nairobi: University of Nairobi.

Normah, A. M. (2007). SMEs: Building blocks for economic growth. *Department of National Statistics, Malaysia*.

Oluoch, J. O. (2016). The impact of cash management practices on performance of SMEs: A survey of SMEs in Eldoret Central Business District. *IOSR Journal of Economics and Finance*, *7*(6), 1-7.

Onyando, O. P. (2018). *Cash Management and Financial Performance of Small And Medium Business Enterprises In Nakuru County, Kenya* (Doctoral dissertation, School of Business, Kenyatta University).

Orodho, A. J. (2003). Essentials of educational and social science research methods. *Nairobi: masola publishers*, *54*, 71-82.

Pandey, I.M. (1993). *Financial management (6th Ed.)*. New Delhi: Vikas Publishing House PVT Ltd.

Prillwitz, J., & Barr, S. (2011). Moving towards sustainability? Mobility styles, attitudes and individual travel behaviour. *Journal of transport geography*, *19*(6), 1590-1600.

Raheman, A., & Mohammed, N. (2007). Working capital management and profitability–case of Pakistani firms. *International review of business research papers*, *3*(1), 279-300.

Ramezani, C. A., & Soenen, L. A. (2007, May). The impact of real options on corporate cash holdings. In *11th Annual International Conference on Real Options: Theory Meets Practice, June, USA, Berkeley*.

Scarborough, N. M., Zimmerer, T., & Wilson, D. (2008). *Essentials of entrepreneurship and*

small business management: Instructor's manual with test item file & video guide. Pearson Prentice Hall.

OECD. (2015). Financing SMEs and entrepreneurs. https://doi.org/10.1787/fin_sme_ent-2015-en

Siddiquee, M., & Khan, S. M. (2009). Analyzing Working Capital Performance: Evidence from Dhaka Stock Exchange (DSE) Ltd. *Available at SSRN 1374210*.

Sila, D.M. (2018). Relationship between free cash flows and profitability of firms listed in the Nairobi Securities Exchange (MBA, UON)

Sinclair, P. D., & McPherson, B. L. (2017). Centralized cash-management and avoidance actions: Part ii. *American Bankruptcy Institute Journal, 36(*4), 48.

Soaga, H. (2012). Basics of cash management for financial management and reporting. *Available at SSRN 2200432*.

Storkey, Ian. (2003*). Government Cash and Treasury Management Reform, Asian Development Bank.* Governance Brief, Issue 7-2003

Wanjohi, A. M., & Mugure, A. (2008). Factors affecting the growth of MSEs in rural areas of Kenya: A case of ICT firms in Kiserian Township. *Kajiado district of Kenya*, *1*(2), 3.

APPENDICES

Appendix I: Introduction Letter

I am doing a research entitled "Effects of Cash Management on Financial Performance of SMEs in Nairobi County, Kenya". Kindly help me in answering the questions honestly and exhaustively.

Your responses will be highly appreciated.

Yours Sincerely,

Odhiambo Steven Ouma

Researcher

Appendix 2: Questionnaire

Section 1: General/Demographic Information

1. Kindly indicate type of business: **Small Enterprise** [ ]

   Medium Enterprise [ ]

2. What is your position in the organization? (Please tick one that applies)

   a) Manager [ ]

   b) Owner [ ]

3. Gender: Male [ ]

   Female [ ]

4. Uppermost education level: Degree [ ]

   Diploma [ ]

   Certificate [ ]

   Others (Specify) …………………

5. Have you ever attended any training program relating to financial management?

   Yes [ ]   No [ ]

6. Have you employed a finance professional in your business?

   Yes [ ]   No [ ]

7. How many employees does your business currently have?

   1 – 49 workers [ ]

   50 – 99 workers [ ]

   Over 99 workers s [ ]

8. For how long has this SME been operational?

Less than 3 years [   ]

3 - 5 years [   ]

6 – 10 years [   ]

Over 10 years [   ]

Section 2: Cash Management Practices

1. **Does your business conduct any of the following cash management practices? (Circle one that applies)**

	Never	Rarely	Sometimes	Often	Always
Liquidity management	1	2	3	4	5
Receivables collection	1	2	3	4	5
Cash cycle management	1	2	3	4	5

2. How does your business regard cash management practices? (Tick one that applies)

High regard [ ]   Low regard [ ]   No regard [ ]

Section 3: Impact of Cash management practices on financial performance

1. **Liquidity management and Financial performance of SMEs**

   a) Kindly mark the level that you concur with the subsequent liquidity management metric's impact on financial performance.

   1-Strongly disagree   2-Disagree   3-Neutral   4-Agree   5-Strongly agree

Liquidity management ratios	1	2	3	4	5
a) High cash ratio positively impacts SMEs					

financial performance					
b) High quick ratio positively impacts SMEs financial performance.	43				
c) High current ratio positively impacts SMEs financial performance					

a) If you agree, how does liquidity management affect financial performance of your business?

2. Impact of Receivables collection on financial performance

a) Kindly indicate the level that you agree with receivable collection metric's effect on financial performance.

1-Strongly disagree   2-Disagree   3-Neutral   4-Agree   5-Strongly agree

Receivables collection metric	1	2	3	4	5
a) Shortened period of collecting debt positively influences SMEs' financial performance					

b) If you agree, how does Receivables collection affect financial performance of your business?

3. Impact of Cash cycle on financial performance

a) Kindly specify the extent that you agree with cash cycle management metric's impact on financial performance.

1-Strongly disagree   2-Disagree   3-Neutral   4-Agree   5-Strongly agree

	1	2	3	4	5
a) Shortened cash conversion cycle positively influences SMEs' financial performance					

b) If you agree, how does cash conversion cycle affect financial performance of your business?

Section 4: Financial performance

1. Which one of the below listed ranges best signifies your entity's annual turnover? (Tick appropriately)

   a) Less than KES. 5 Million

   b) KES. 5 – 10 Million

   c) Over 10 Million

2. What best describes your business? (Tick one that applies)

   a) Profitable

   b) Not profitable

Appendix 3: Secondary Data Collection Sheet

1. Please indicate level of performance for the following years?

Year	2017	2018	2019	2020
Sales (KES)				
Net Profit (KES)				
Net Profit Margin (%)				