# WORKING CAPITAL MANAGEMENT AND PROFITABILITY OF SELECTED SMALL AND MEDIUM ENTERPRISES (SMES) IN KAMPALA UGANDA.

A Thesis

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In Partial Fulfillment of the Requirements for the Degree

Master of Business Administration

By:

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**DECLARATION A**

This Thesis is my original work and has not been presented for a degree or any other academic award in any university or institution of learning.

NGANGA RACHEL

Name and Signature of the candidate

31/10/2012

Date

## DECLARATION B

I/We confirm that the work reported in this thesis was carried out by the candidate under my/our supervision.

Kasozi Geoffrey

Name and signature of the supervisor

31st October, 2012

Date

**APPROVAL SHEET**

This Thesis entitled 'working **capital management practices and profitability of Selected Small and Medium Enterprises (SMEs) in Kampala Uganda'** prepared and submitted by **Ng'ang'a Rachel Muthoni** in Partial fulfillment of the requirements for the degree of **Masters in Business Administration (Finance and Accounting Option)** has been examined and approved by the panel on oral examination with a grade of PASSED

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## DEDICATION

This piece of work is dedicated to my family for all the love, support and encouragement during my study.

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## ABSTRACT

The study sought to establish the relationship between the working capital management practices and profitability of selected Small and Medium Enterprises (SMEs) in Kampala, Uganda. The study was guided by four objectives namely; Determine the profile of the respondents in terms of age, gender, position, period of stay at workplace and highest educational qualification; Determine the extent of working capital components in the selected SMEs; To determine the level of liquidity and profitability of the selected Small and Medium Enterprises in Kampala, Uganda; And To establish the relationship between working capital management and profitability of SMEs in Uganda. The study utilized descriptive correlation survey design using questionnaire as the research instrument. A sample of 198 employees/owners of Small and Medium Enterprises were used as the respondents for the study. Purposive sampling method was used to identify the respondents. The data collected was analyzed using SPSS for means to determine level of dependent and the independent variables. Using the Pearson's Linear Correlation Coefficient, the correlation between the two variables was determined. The study established that there is a high level of working capital management practices namely cash management, inventory management, accounts receivables management and accounts payables management among the selected SMEs. The findings revealed that a significant relationship exists between working capital management and profitability of the selected SMEs. The null hypothesis was rejected. The researcher recommends that SMEs take advantage of trade credit as a source of financing, seek to reduce the period debtors take to pay for their debts, the period it takes to receive cash after sales are made and the time it takes to sell off their stocks so as to increase their profitability.

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## CHAPTER ONE

## THE PROBLEM AND ITS SCOPE

### Back ground of the study.

Working capital management is a very important component of corporate finance because it directly affects the liquidity/risk, profitability and consequently the value of a firm and the shareholders wealth. There are two important elements of working capital management: decision on the amount of current assets to be held by the firm for efficient operations of its business and decision on financing working capital requirement. Inadequacy or mismanagement of working capital is the leading cause of many business failures. Working capital is that portion of assets of a firm which are used in current operations .They are used in the operating cycle of the firm. Working capital is defined as the excess of current assets over current liabilities and provisions. Working capital management is essential for the long-term success of an SME. No SME can survive if it cannot meet its day to day obligations. An SME must therefore have clear policies for the management of each component of working capital. Excessive levels of current assets can easily result in a firm's realizing a substandard return on investment. However firms with too few current assets may incur shortages and difficulties in maintaining smooth operations (Horne and Wachowicz, 2000). Working capital has two concepts: gross working capital and Net working capital. Gross working capital refers to the firm's investment in current assets while net working capital refers to the difference between current assets and current liabilities (Pandey, 2005).

Investment in current assets should be just adequate to the needs of the firm. This is because excess investment in current assets impairs the firm's profitability, as idle investment earns nothing. While inadequate working capital threatens the solvency of the firm due to its inability to meet current obligations. Working capital needs for a firm keeps fluctuating which causes shortage or excess of working capital. Therefore management of working capital should be able to correct such imbalances (Pandey, 2005). Similarly, whenever need for working capital increases due to the increasing level of business activity, arrangement for financing should be made quickly. If some surplus funds arise they should not be allowed to remain idle and should be invested in short-term securities (Pandey, 2005).

Profitability is the primary goal of all business ventures. Without profitability the business will not survive in the long run. So measuring current and past profitability and projecting future profitability is very important. Working capital management affects the profitability and liquidity/risk of a firm. A decision that tends to increase profitability tends to increase risk and conversely, decisions that focus on reduction of risk will tend to reduce potential profitability. Therefore working capital management should ensure a good tradeoff between risk and profitability. To have higher profitability, the firm may sacrifice solvency and maintain relatively low level of current assets. This increases profits because fewer funds are tied up as idle current assets but its solvency will be threatened and would be exposed to greater risk of cash shortage and stock-outs (Pandey, 2005).

Efficient working capital management is vital for the survival of Small and Medium Enterprises (SMEs). This is premised on the fact that having too much working capital signifies inefficiency whereas too little cash at hand signifies that the survival of the SME is shaky. Working capital management is particularly important to SMEs because most of their assets are in form of current assets. Also current liabilities are one of their main sources of external finance because they encounter difficulties in obtaining funding in the long term capital markets (Garcia and Martinez, 2007).

Small scale enterprises have been recognized as great contributors to growth and development of countries worldwide. There has been an effort to support these enterprises so as to contribute to employment and Gross domestic growth of the nation. The global market is dominated by world class competitors in the form of multinationals and for the developing countries; SMEs appears to be the way to compete (Director MUBS "Entrepreneurship and small scale businesses in Uganda"). In Uganda, it is estimated that there are more than 1,069,000 SMEs which constitute 90% of the private sector. They contribute 75% of the Ugandan GDP and employ about 2.5million workers (BID network, 2008).SMEs are preferred because of ease of formation, capital requirements, flexibility and mobility. The problems faced by SMEs in Uganda are poor savings and credit management culture, poor entrepreneurship and inadequate skills, lack of good corporate governance among others .Challenges faced by SMEs are: low productivity and profitability, Poor accounting and financial records, poor planning, poor human resource delegation, lack of strategy for pricing and costing, and short term outlook among others (Hatega, 2007).

The study therefore sought to explore the relationship of working capital and profitability in SMEs. This is has been motivated by the fact that most of the financing of SMEs is in form of working capital because they lack access to long-term financing and the fact that profitability is crucial for survival of a business.

**Problem statement**

Good management of working capital should generate cash which will help improve profits and reduce risks of an enterprise; this is because it ensures an adequate cash flow to meet its short-term expenses and obligations. The more an enterprise expands the more cash it is supposed to generate. The SMEs in Uganda have policies and guidelines for proper working capital management. These policies include well streamlined credit policies, optimal management of inventory, receivables and creditors. However these policies are not efficiently applied, leading to poor/inadequate working capital, and therefore the level of profitability remains low endangering the survival of these SMEs. Many SMEs continue to exit with an estimate of 1 out of 3 SMEs closing within a year of starting up (GEM, 2004, Hatega, 2007).If the SMEs do not allow cash to flow through the business efficiently due to poor working capital management practices, they risk starving the business of the capital needed to develop, innovate, repay capital, make distributions or, even worse, pay their creditors. Failure to manage their receivables may lead to bad debts while failure to manage their inventories may lead to increased carrying cost, loss of liquidity, loss of customers when demands are not met. These costs lead to decreased profits and consequently collapse of the SMEs. It is against this background that the study sought to find whether there is a relationship between working capital management and profitability of SMEs.

**Purpose of the study**

Determine the cause and effects of working capital management and profitability.

Test the hypothesis of whether there exist no significant relationship between working capital management and profitability of the selected SMEs in Kampala, Uganda.

Bridge the gap of previous studies and to validate existing information based on the theory to which the study is based.

**Research objective**

The main objective of the study was to establish the relationship between working capital management and profitability of Small and Medium Enterprises in Uganda.

Specific objectives were:

1) To determine the profile of the respondents in terms of age, gender, position, experience and educational level.
2) To determine the extent of working capital components in the selected SMEs.
3) To determine the level of liquidity and profitability of Small and Medium Enterprises in Kampala, Uganda.

4) To establish the relationship between working capital management and profitability of SMEs in Kampala, Uganda.

## Research Questions

1) What is the profile of the respondents in terms of age, gender, position, period of stay at workplace, and highest educational qualification?
2) What is the extent of working capital components in the selected SMEs?
3) What is the level of liquidity and profitability of the selected SMEs?
4) Is there a significant relationship between working capital management and profitability of Small and Medium Enterprises?

## Hypothesis

The null hypothesis was:

$Ho_1$: There is no significant relationship between working capital management and profitability of Small and Medium Enterprises in Uganda.

## Scope

### *Geographical scope*

The study was carried out in Uganda. It concentrated on the Small and Medium Enterprises in the Ugandan capital, Kampala. for analytical convenience the study was limited to SMEs which were defined as one employing between one to fifty persons with a turnover of less than Uganda shillings 150million per annum.

### *Content scope*

The study concentrated on working capital management practices namely: cash management, inventory management, receivables management and trade credit management and how these practices affect profitability of SMEs. Also, the study looked at the trade-off between liquidity and profitability.

*Theoretical scope*

The study used the Van Horne theory 1980 of aggressive/conservative approaches in Working capital management. Which states that in Aggressive Approach the company finances all of its fixed assets with long term capital but part of its permanent current assets with short-term credit while in conservative approach, permanent capital is being used to finance all permanent assets requirements and also to meet some or all of the seasonal demands(Van Horne, 1980). 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 lower level of liquidity and stock outs resulting in difficulties in maintaining smooth operations (Van Horne and Wachowicz 2004).

*Time scope*

The study looked at SME's profitability for the past five years; 2007-2011.

**Significance of the study**

The study deepens knowledge and understanding on the topic under study. It adds to the existing knowledge on working capital management that will be of use to the students, university communities and the public at large.

The study will benefit the finance managers of Small and Medium scale Enterprises on how to improve profitability by practicing good working capital management and also how to strike a balance of liquidity and profitability using optimal working capital management practices.

The study will benefit the business owners on how to make the best of working capital management so as to reap benefits of liquidity and profitability trade-off.

The study will benefit those people who want to start their enterprises in knowing what to expect in terms of working capital management and profitability of their enterprises.

## Operational definitions of key terms

**Cash management** refers to the collection, concentration, and disbursement of cash. The goal is to manage the cash balances of an enterprise in such a way as to maximize the availability of cash not invested in fixed assets or inventories and to do so in such a way as to avoid the risk of insolvency.

**Receivables management** refers to selling on credit, tracking invoices, processing receipts, analyzing customers and minimizing bad debts.

**Inventory management** is the process of efficiently overseeing the constant flow of units into and out of an existing inventory. This process usually involves controlling the transfer in of units in order to prevent the inventory from becoming too high, or dwindling to levels that could put the operation of the company into jeopardy. It also seeks to control the costs associated with the inventory, both from the perspective of the total value of the goods included and the tax burden generated by the cumulative value of the inventory.

**Creditor management** is maximizing the period from purchasing goods and services to paying for them, thereby reducing the working capital requirement in the business. This objective of maximizing the credit period must be carefully managed to ensure relationships with suppliers are not damaged and stock levels are optimized.

**Gross Working capital** refers to a firm's investment in current assets

**Net working capital** refers to difference between current assets and current liabilities

**Liquidity** is the ability of a firm to meet short-term obligations as they fall due

**Profitability** is excess of sales over costs

**Current assets** are those assets that, in ordinary course of business, can be converted into cash within one year without undergoing any diminution in value. The major current assets are cash, marketable securities, accounts receivable, and inventory.

**Current liabilities** they are those claims by outsiders which are expected to mature within an accounting year. Examples of current liabilities are: accounts payable, bills receivable, bank over-draft and outstanding expenses.

**Cash conversion cycle** is the average number of days between the date one must start paying its suppliers and the date one must begin collecting money from the customers.

**Operating cycle** is time required to convert sales after the conversion of resources into inventories into cash. In a manufacturing firm, it involves acquisition of resources, manufacture of the product and sale of the product

**Inventory conversion period** is total time needed for producing and selling the product. It includes raw material conversion period, work in Progress conversion period and finished goods conversion period.

**Debtors/receivables conversion period** is time required to collect the outstanding amount from the customers.

**Creditors' deferral Period** is length of time the firm is able to defer payment on various resource purchases.

# CHAPTER TWO

# LITERATURE REVIEW

## Concepts, Ideas, Opinions from Authors/ Experts

### Working capital management

Working capital management is concerned with the problems that arise while managing current assets, current liabilities, and inter-relationship that exists between them .There are two concepts of working capital: Gross working capital which is equal to the total investment in current assets; and Net working capital which is the difference between current assets and current liabilities. It can be described as that part of a firm's current assets which is financed with the help of long-term funds. Both of these concepts have significance in working capital management. Gross working capital helps in analyzing ways to optimize investment in current assets and methods for financing current assets. Net working capital indicates the liquidity position of the firm and the extent to which the working capital needs should be financed by long-term sources of funds.

The goal of working capital management is to manage the current assets and liabilities in such a way that an acceptable level of net working capital is maintained. Working capital management determines the level of working capital to be maintained. According to Rao (2009), The exact amount of working capital that should be maintained varies from firm to firm and depends on various factors like nature of business, degree of competition , seasonality of operations, production cycle , production policy, credit policy, market conditions, conditions of supply, size of the SME, Age, growth opportunity and leverage. Keeping in view the uncertainty associated with the dynamic environment in which a firm operates, the amount of investments in current assets should be made in such a manner that it not only meets the needs of the forecasted sales but also provides a built-in cushion in the form of safety stocks to meet unforeseen contingencies arising out of factors such as delays in the arrival of raw materials, sudden spurts in sales demand etc. If a firm follows a conservative approach, then it will make a higher level of investment in current assets. But this would also mean that the company will not have sufficient amount to invest in profitable avenues. On the other hand, if the finance manager opts for an aggressive approach, the firm will have lesser investment in current assets thus leaving more amounts for investing in profitable alternatives. Thus, conservative approach provides more liquidity but less profitability and aggressive approach provides more profitability and less liquidity.

Working capital management makes decision regarding financing of current assets. Once the appropriate level of working capital is chosen, the next decision pertains to determining the finance-mix for current assets. Some of the sources that are used to finance current assets are: Spontaneous liabilities i.e. Short-term liabilities and provisions that arise during the normal course of business that serve as non-interest bearing source of financing current assets; and Bank borrowings, Public deposits and long-term sources of finance .The difference between the amounts of current assets and liabilities is usually financed through a combination of bank borrowings by way of cash credit/overdraft arrangement and long-term sources of finance such as debentures and equity capital. Companies can also opt for fixed deposits (obtained for a period of one to three years) for financing current assets. The decision regarding the financing of current assets using the above sources of finance depends on the attitude of the company towards risk. A firm can use conservative financing policy which increases liquidity as well as the cost of financing because it uses long –term financing e.g. equity; or aggressive financing policy which reduces liquidity and cost because it uses short-term financing sources e.g. bank borrowing. Hence, depending upon the attitude of management towards risk and keeping in view the constraints imposed by banking sector with respect to short-term credit, the firm should choose the appropriate financing policy.

Working capital ratio should lie between 1.2 and 2.0. A ratio lower than 1.2 threatens a firm's liquidity and a ratio above 2.0 means there are idle assets. Working capital ratio can be increased with shorter credit period to clients, and asking for longer credit itself. Maintaining an optimum level of inventory will ensure good working capital ratio while holding too much cash also tends to make your working capital ratio suffer.

**Cash management and profitability**

Mansueto (2009), states that cash is the lifeblood of an SME and managing it efficiently is essential for success. Cash management involves; managing cash flows into and out of the SME, Managing cash flows within the SME and financing deficit or investing surplus cash and thus controlling cash balance at a point in time. In some ways, managing cash flow is the most important job of business managers. If at any time a company fails to pay an obligation when it is due because of the lack of cash, the company is insolvent. Insolvency is the primary reason firms go bankrupt. Obviously, the prospect of such a dire consequence should compel companies to manage their cash with care. Moreover, efficient cash management means more than just preventing bankruptcy. It improves the profitability and reduces the risk to which the SME is exposed. Cash management is particularly important for new and growing SMEs. Cash flow can be a problem even when an SME has numerous clients, offers a product superior to that offered by its competitors, and enjoys a sterling reputation in its industry. SMEs suffering from cash flow problems have no margin of safety in case of unanticipated expenses. They also may experience trouble in finding the funds for innovation or expansion. It is, somewhat ironically, easier to borrow money when you have money. Finally, poor cash flow makes it difficult to hire and retain good employees.

According to Pandey (2005), Cash conversion cycle is the cash measure for working capital. It is the time between collections from sale of the product and cash payment for the resources acquired by the firm. It also represents the time interval over which additional funds should be obtained in order to carry out the SME operations. It is calculated as inventory conversion period plus debtors' conversion period minus creditors' deferral period. Shortening the cash conversion cycle will free up more working capital for your SME which is likely to lead to higher profits. When the cash conversion cycle shortens, cash becomes free for other uses such as investing in new capital, spending on equipment and infrastructure, as well as preparing for possible share buyback down the road. On the flip side, when the cash conversion cycle lengthens, cash remains tied up in the firm's core operations, leaving little leeway for other uses of this cash flow.

### Accounts receivables management and profitability

This is money due from all customers for merchandise or services delivered on credit. Management of this amount, shown as an asset on your company's balance sheet, can make or break your company. Methods for managing accounts receivable differ as widely as business types; however, processes should achieve three objectives: create a daily record of sales and receipts; generate invoices and statements on a recurring basis; and Track current and overdue balances on customer accounts.

According to Charlie (2009), to be able to effectively manage debtors one needs to have some policies in place like: Credit policies: Establish a credit policy and stick to it. Define the conditions under which you will extend credit, how much credit you'll give, and to whom. Choose your preferred methods of payment, how you will determine credit worthiness for new customers, requirements for deposits, and interest charges on late accounts. Billing policies: Generally, the frequency with which you bill dictates the frequency with which you'll receive payment. Choose your invoicing intervals, clearly communicate billing terms to customers, and consider offering discounts for early paying customers. Monthly statements: statements serve more than one purpose: sent early, they are a proactive step. They remind customers, and they serve as documentation in instances when an account falls into collections. Aging accounts:

Regularly review your customers' accounts, categorizing them as either current, or past due 30, 60, or 90 days or more. Have policies in place to handle servicing of aging accounts. The SME administration should take action as soon as invoices become past due based on the company's definitions. This requires a defined policy and process alongside an awareness of practical and legal steps you can take to collect what you're owed.

According to Rauscher and Wheeler (2011) the main aim of debtor's management is to reach an optimal average collection period such that cash is not held by debtors for long. Average collection period is calculated as (accounts receivable x360)/ credit sales. The longer the collection period, the more SMEs lose due to inflation and the likelihood of bad debts which in turn increases costs thus reducing a SME's profitability. Lazaridis and Tryfonidis (2006) Garcia and Martinez (2007) established a negative relationship between gross operating profit and accounts receivables therefore managers can improve profitability by reducing the credit period granted to their customers.

**Inventory Management and profitability**

Inventory management is the process of efficiently overseeing the constant flow of units into and out of an existing inventory. This process usually involves controlling the transfer in of units in order to prevent the inventory from becoming too high, or dwindling to levels that could put the operations of the company into jeopardy. Competent inventory management also seeks to control the costs associated with the inventory, both from the perspective of the total value of the goods included and the tax burden generated by the cumulative value of the inventory. High inventory levels reduce the cost of interruptions in production process and of loss of business due to scarcity of products, reduce supply costs and protects against price fluctuations.

According to Pandey (2005), inventories constitute the most significant part of current assets of a large majority of enterprises. Because of the large size of inventories maintained by enterprises, considerable amount of funds is required to be committed to them. It is therefore imperative to manage inventories efficiently and effectively in order to avoid unnecessary investments. It is possible for an enterprise to reduce its levels of inventory to a considerable degree without any adverse effect on production and sales by using simple inventory planning and control techniques. Such reduction in excessive inventories carries a favorable impact on an enterprise's profitability.

The objective of inventory management should be to avoid excessive and inadequate inventories. Excessive inventories have dangers like; unnecessary tie-up of the firm's funds and loss of profits, excessive carrying costs and risk of liquidity. Excessive level of inventory consumes an enterprise's funds that cannot be used for any other purpose and thus it involves opportunity cost. Carrying costs such as storage, handling, insurance, recording and inspection increase with volume of inventory and these costs impair an enterprise's profitability further. Inventories carried for long periods lose liquidity as it may not be possible to sell all inventories in time or at the same value as some lose value and seasonal factors may cause prices to go down. Inadequate inventory also cause dangers like production hold-ups and failure to meet delivery commitment causing customers to move to competitors which amounts to permanent loss to the enterprise (Pandey, 2005).

Pandey (2005) defines inventory conversion period as the days taken to convert inventory into finished goods and selling them. This is calculated as raw material conversion period plus Work in progress conversion period plus finished goods conversion period. Inventory conversion period tells a SME business owner how quickly, on average, inventory goes from being purchased to being sold. This is calculated as; (average inventoryx365)/cost of goods sold. This calculation is important because it helps a SME business owner understand how quickly he usually needs to purchase new inventory. There is a negative relationship between inventory conversion period and profitability. Meaning if SMEs take shorter time to convert raw materials and work in progress to finished good and then selling, it's likely to increase its profitability

**Accounts payable management and profitability**

Creditor management is about maximizing the period from purchasing goods and services to paying for them, thereby reducing the working capital requirement in the business. This objective of maximizing the credit period must be carefully managed to ensure relationships with suppliers are not damaged and stock levels are optimized.

According to Morris (2009), all businesses should set a clear policy on creditor management that will under line their approach to sourcing and negotiating terms and conditions. That policy should take account of optimal stock holding levels (including the importance of holding buffer stocks to avoid stock outs) and timing of other cash flows within the business. The purchasing strategy should be aligned to business goals and priorities should be set. Firm's ability to optimize the credit period will be driven by a range of factors, including the relative importance and dependence of the business on particular suppliers and their dependence on the business as a customer. If a supplier is heavily dependent on your business you will be in a strong position to negotiate extended terms. Where goods required in the business can be sourced from a number of suppliers there may also be opportunities to negotiate favorable terms with existing or new suppliers, who will be keen to retain or win your custom.

According to Rauscher and Wheeler (2011); Garcia and Martinez (2007), more profitable SMEs take shorter time to pay their creditors compared to less profitable SMEs. Lazaridis and Tryfonidis (2006) established that there is a negative relationship between gross operating profit and accounts payables. This is so since the longer a firm delays its payments the higher level of working capital levels it reserves and uses in order to increase profitability (The no of days of creditors is calculated as; (creditors x 360)/ credit purchases.

## Liquidity and profitability

Working capital management is important because of its positive effects on the firm's profitability and liquidity/risk, and consequently its value .More aggressive working capital policies are associated with higher return and higher risk, while conservative working capital policies are concerned with lower risk and return. The greater the investment in current assets, the lower the risk, and also the lower the profitability obtained. Working capital management has an important impact on the profitability and liquidity of the firm. Firms can choose to minimize working capital investment or they can adopt policies designed to increase sales. Therefore the SMEs management has to evaluate the trade-off between expected profitability and risk before deciding the optimal investment in current assets.

According to Pandey (2005), the goal of working capital management is to manage the firm's current assets and liabilities in such a way that satisfactory level of working capital is maintained. This is so because if an SME cannot maintain satisfactory level of working capital, its likely to become insolvent and may even be forced into bankruptcy. The current assets should be large enough to cover its current liabilities in order to ensure a reasonable margin of safety. Each of the current assets must be managed efficiently in order to maintain the liquidity of the firm while not keeping too high level of any of them as this will reduce on the profits. Each of the short-term sources must be continuously managed to ensure that they are obtained and used in the best possible way.

## Theoretical Perspectives

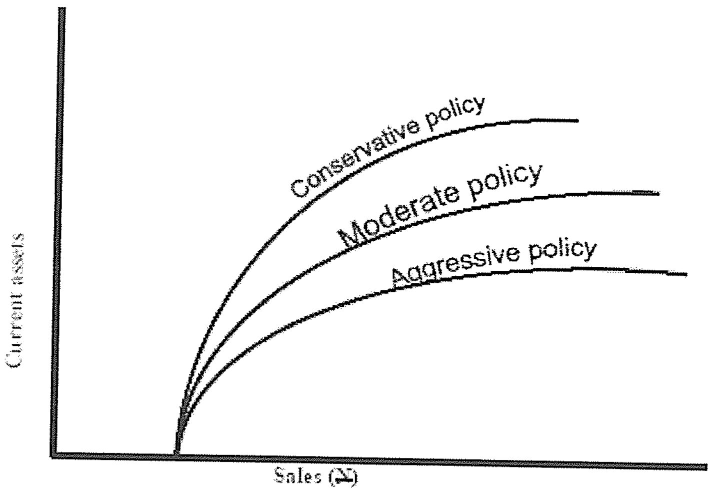
The study used the Van Horne theory 1980 of aggressive/conservative approaches in Working capital management. Which states that in Aggressive Approach the company finances all of its fixed assets with long term capital but part of its permanent current assets with short-term credit while in conservative approach, permanent capital is being used to finance all permanent assets requirements and also to meet some or all of the seasonal demands(Van Horne, 1980). Under the aggressive policy, the company holds relatively small portion of its total assets in form of current assets. The implication of the aggressive approach is that it yields higher profitability resulting in a higher risk and lower working capital (Nwankwo and Osho, 2010). Minimizing working capital investment would positively affect profitability of a firm by reducing the proportion of its total assets in form of net current assets. However, if the inventory levels are reduced too much, the firm risks losing increases in sales. Also, significant reduction of the trade credit granted may provoke a reduction in sales from customers requiring credit. Similarly, increasing supplier financing may result in losing discount for early payments (Garcia and Martinez, 2007).

The Conservative approach; in this approach permanent capital is being used to finance all permanent assets requirements and also to meet some or all of the seasonal demands. In view of conservative approach to working capital management, a company will keep a large quantity of current assets in relations to the total assets of the company. The implication of this approach is that it yields a lower expected profitability resulting in a lower risk. This type of policy will also increase the company's net working capital situation but the firm will be short of funds to be used in other productive sectors (Nwankwo and Osho, 2010). This approach results in higher profitability by; maintaining high inventory levels reduces the cost of possible interruptions in the production process and loss of business due to scarcity of products, reduces supply costs and protects price fluctuations. Granting credit favors the firm's sales in that, credit acts as an effective price cut incentives to customers to acquire merchandise at times of low demand, allow customers to check that the merchandise they receive is as agreed and to ensure that contracted services are carried out, and helps strengthen long-term relationship with their customers. However these benefits have to offset the reduction of profitability due to the increase of investment in current assets (Garcia and Martinez, 2007).

The Moderate Approach: This strategy minimizes the risk that the company will be unable to pay off its matured obligations. At this limits, a company could attempt to match exactly the maturity structure of its assets and liabilities. The implication of this approach is that it yields moderate expected profitability resulting in moderate risk, and the working capital position of the company will be in optimum balance.

The optimal level of working capital is reached when the degree of returns expected maximizes the shareholders wealth and it must be pointed out that there is no best working capital theory or policy to suit every organization at all times.

The graph below explains the approaches discussed above.




Source: Scribd.com

Fig 1: Different Theories of working capital management

**Related Studies**

Sweetman (2000) studied Working capital management: theory and evidence from New Zealand listed limited liability companies, and established that working capital management is also strategic as it impacts on the liquidity, solvency/bankruptcy, efficiency, profitability and shareholder wealth maximization of the business.

Rahmen and Nasr (2007) studied working capital management and profitability of Pakistani firms and established that there is a negative relationship between gross profitability on one hand and the measures of working capital management on the other hand. This is consistent with the view that the time lag between expenditure for purchases of raw material and the collection of sales of finished goods can be too long, and that decreasing this time lag increases profitability. Relationship between the average collection period and net operating profitability was negative meaning if the average collection period increases it will have a negative impact on the profitability and it will decrease. Correlation results between inventory turnover in days and the net operating profitability also indicated the same type of result. It also indicated that if the firm takes more time in selling inventory, it will adversely affect its profitability. Correlation results among the payable turnover in days or average payment period also indicated the same trend meaning that less profitable firms wait longer to pay their bills. The cash conversion cycle which is a comprehensive measure of working capital management also had a negative coefficient meaning that if the firm is able to decrease cash conversion cycle period, it can increase its profitability. They found that there was a negative relationship between liquidity and profitability and suggested that Pakistan firms have to make a trade-off so that none of either liquidity or profitability suffers.

Mensah (2010) in his study working capital management practices of small firms in the Ashanti region of Ghana established that SMEs in Ghana made use of cash budgets, but most SMEs had problem in surplus cash rather than shortages of cash and how to invest the surplus cash. This in turn affected the profitability of the SMEs. On receivable management most SMEs experienced bad debts to about 20% of their sales. The study revealed that SMEs relied on manual methods of inventory and majority did not know anything about economic order quantity model (EOQ). Owners/managers experience was found to be more important than application of theories of both inventory and cash balances in majority of the SME in the study. The SMEs lack resources to manage their receivables, no proper debt collection and no credit officers were employed. This careless working capital management led to a majority of failures of SMEs in Ashanti region in Ghana.

Garcia and Martinez (2007) in their research on effects of working capital management on SME profitability, a research on SMEs in Spain, they found that managers can create value by reducing their inventories, and the number of days for which their accounts are outstanding. Moreover shortening the cash conversion cycle also improves the firm profitability.

Nobanee (2009), in his research on Working Capital Management and Firm's Profitability: An Optimal Cash Conversion Cycle, found out that cash conversion cycle is a comprehensive measures of working capital management efficiency that considers all financial flows associated with inventory, receivable and payables. Reducing cash conversion cycle improves firm's profitability and market value. This could happen by shortening the inventory conversion period via processing and selling goods to customers more quickly, by shortening the receivable collection period by speeding up collections, or by lengthening the payable deferral period via slowing down payments to suppliers. On the other hand, he found that shortening the cash conversion cycle could harm the firm's profitability i.e. reducing the inventory conversion period could increase the shortage cost, reducing the receivable collection periods could makes the company's to lose it's good credit customers, and lengthening the payable period could damage the firm's credit reputation. He however found that achieving the optimal levels of inventory, receivable, and payable will minimizes the carrying cost and opportunity cost of holding inventory, receivable, and payable and leads to an optimal length of the cash conversion cycle.

Nobanee and AlHajjar (2009), in their working paper named a note on working capital management and corporate profitability of Japanese firms found a negative relationship between, cash conversion cycle and return on investment, receivable collection period and return on investment, and inventory conversion period and return on investment. They also found significant positive relations between payable deferral periods and return on investment.

Bbumba 2005 in her research on the small Business sector environment in Uganda; proposed policy interventions for effective financing; she established that small Businesses can neither raise their own financing nor can they access to formal financial services. They are considered risky ventures by financiers while the lending rates are too high for the small businesses.

Kasekende and Opondo (2003) in their working paper named Financing Small and Medium-Scale Enterprises (SMEs): Uganda's Experience established that SMEs are seen as playing a strategic role in economic growth and development, but they suffer from liquidity problems arising from late payments by debtors. Furthermore, they usually experience difficulties in accessing loans from the banking sector and other financial intermediaries to finance working capital and to provide credit for a smooth transition through liquidity cycles. He also established that SMEs find difficulties in accessing finance due to limited management and technical skills, lack of collateral, poor technology, lack of credible financial accounts.

Kakuru (2008) in his study of the supply-demand factors interface and credit flow to small and micro enterprises (SMEs) in Uganda, established that three factors of hierarchy, lending guidelines and facility layout were found to be the main determinants of the loan officer's decisions in lending to SMEs. Also that borrower knowledge and character does influence the loan officer's decision to extend credit to SMEs. He found that the attitude and competence of the loan officer as well as the loan terms and conditions are the critical factors that determine willingness of SME borrowers to seek credit from banks.

## Research Gap

In spite of the touted impact efficient working capital management may have on business survival and growth, not much has been done in the area of the provision of empirical evidence in support of the claims of working capital management on profitability of SMEs in Uganda. Given this paucity of empirical studies, it is hoped that this study will fill a gap and provide useful support for understanding the determinants of SMEs profitability in Uganda.

# CHAPTER THREE

# RESEARCH METHODOLOGY

## Research Design

The study used a survey design; specifically descriptive comparative and descriptive correlation. Descriptive in that the data to be collected was used to describe a phenomena; co-relational in that it was interested in relating working capital management to firms' profitability; Comparative in that it sought to determine the level of working capital management and profitability of small and medium firms in Uganda . The study also took a quantitative approach in that it was based on variables measured with numbers and analyzed with statistical procedures.

## Research Population

The target population for the study was 392 small and medium enterprises in Kampala Uganda. The study sought information from the business owners and /or the finance officer/manager

## Sample size

The minimum sample size was computed using Sloven's formula which states that for any given population, the required sample size is given by; $n=\mathbf{N/1+N(e^2)}$ where **n** =the required sample size; **N**= the known population size and **e**=the level of significance which is 0.05. Given a target population of 392 respondents in selected SMEs in Kampala, a sample size of 198 respondents was used.

$$n=392/1+392(0.05)^2=198$$

## Sampling Procedures

The sample size of 198 respondent was got using purposeful sampling. This is because the researcher needed to get respondents who are knowledgeable in the area of study and also those willing to give the information being sought. The respondents were selected based on ownership, type of business and willingness to participate.

## Research instrument

The questionnaire was non-standardized, constructed by the researcher and was divided in to 3 sections. The first section was to get the respondents' bio-data. The second section was to determine the extent the different components of working capital affect profitability of small and medium firms in which response modes are indicated as: strongly disagree (1); Disagree (2); Agree (3); Strongly Agree (4). The third section was to determine the level of liquidity and profitability of small and medium firms whose response modes are indicated as: strongly disagree (1); Disagree (2); Agree (3); Strongly Agree (4). The questionnaire also consisted of the main title and brief introductory letter of the researcher.

## Validity and reliability

The reliability and validity of the research questionnaire were tested to ensure they conform to the study's conceptualization. The supervisor evaluated the relevance, wording and clarity of questions and items in the instrument. Pre-testing for reliability was carried out by carrying a pilot study of 5 respondents who were not be included in the actual study.

The Content Validity Index was used to check for relevancy, clarity, simplicity and ambiguity of the instruments used in the research. The research instrument was presented for scrutiny to independent expert to test for validity. The following validity index was used:

$$CVI = \frac{\text{number of items declared valid}}{\text{Total number of items.}}$$

**Table 1**

**Determination of content Validity Index**

| | **Valid items** | **Invalid items** | **Total** |
|---|---|---|---|
| Rater 1 | 87 | 3 | 90 |
| Rater 2 | 86 | 4 | 90 |
| Rater 3 | 84 | 6 | 90 |
| **Total** | **257** | **13** | **270** |

$$CVI = \frac{257}{270} = 0.95$$

This coefficient of 0.95 is good because it is more than the minimum of 0.7.This coefficient shows that the questions were valid and reliable, and therefore could be used for data collection

**Data Gathering Procedures**

The procedure for collecting data was as follows

***Before administration of research instrument***

The researcher asked for an introduction letter from the school of postgraduate studies and research to the SMEs under study for the researcher to be allowed to conduct the study. The researcher then selected the participants of the study, after which a pretesting was done and findings discussed with the supervisor.

***During the administration of the questionnaires***

The researcher and her assistant asked the participants to sign informed consent, answer all questions and leave no unanswered; and to answer the questions objectively to avoid bias.

The researcher and her assistant administered the questionnaires and got them back within a week. On picking them up, the researcher and her assistant checked whether the questions were duly answered.

***After the administration of questionnaires***

The data collected was organized, coded, summarized, and interpreted using Statistical Package for Social Sciences (SPSS)

**Data Analysis**

After collection of data, the data was coded and entered into computer of use for Statistical Package for Social Science Software (SPSS). Both the descriptive and inferential statistics generated were used to analyze, interpret and discuss respectively according to objectives.

To determine the respondent's profile, frequency and percentages distribution were used. To determine the extent of the working capital management components on profitability, means were used. Also to determine the levels of liquidity and profitability means were used. To interpret the obtained data, the following numerical values were used:

| Mean range | response mode | interpretation |
|---|---|---|
| 3.26-4 | Strongly agree | Very High |
| 2.51-3.25 | Agree | High |
| 1.76-2.50 | Disagree | Low |
| 1.0-1.75 | Strongly disagree | Very Low |

To determine the relationship of working capital and profitability, Pearson Linear Coefficient Correlation and regression were used. The coefficient of determination $R^2$ was computed to determine the percentage of influence of the independent variable on the dependent variable in the study.

## Ethical considerations

To ensure confidentiality, the respondents shall be asked to sign consent forms, all questionnaires will be coded for anonymity, Authors quoted in the study shall be recognized through citation and referencing, and the presentation of the findings shall be generalized.

## Limitation of the study

The researcher expected a confidence level of 95% i.e.5% margin of error. However, she anticipated the following threats:

Standardization of instruments; the research instrument used were researcher's devised and not standardized. To produce a credible research tool, validity and reliability was done.

Extraneous variable; the researcher may not have had control over variables such as honesty of the respondents, personal bias and descriptive nature of the design. She therefore probed the respondent further for truthfulness. She also asked the respondents to be objective while answering the questions.

# CHAPTER FOUR

# PRESENTATION, ANALYSIS AND INTERPRETATION OF DATA

This section deals with the presentation, analysis, interpretation and discussion of findings. The study sought to examine the relationship between working capital management practices and profitability of small and medium scale enterprises in Kampala. Uganda. The study addressed the following objectives: To determine the profile of the respondents in terms of age, gender, position, period of stay at workplace and highest educational qualification; to examine the level of working capital components in the selected SMEs; to establish the relationship between liquidity and profitability of Small and Medium Enterprises in Kampala, Uganda and to find out whether there is a relationship between working capital management and profitability of SMEs in Uganda. The study hypothesized that there is no significant relationship between working capital management practices and profitability of small and medium scale enterprises in Kampala.

The chapter begins with brief description of the socio-demographic characteristics of the respondents.

## Respondents' Profile

The respondents' bio-data addressed included age, sex, marital status, education level, position held in the organization and experience. Table 1 gives an overview of the respondents' profile that composed the sample study size.

**Table 2**

**Profile of the Respondents (n=198)**

| **Gender** | **Frequencies** | **Percentages** |
|---|---|---|
| Male | 133 | 67.2 |
| Female | 65 | 32.8 |
| **Total** | **198** | **100** |
| **Marital status** | | |
| Single | 103 | 52 |
| Married | 95 | 48 |
| Divorced | 0 | 0 |
| Widowed | 0 | 0 |
| **Total** | **198** | **100** |
| **Age** | | |
| 20 – 39 years | 176 | 88.9 |
| 40 – 59 years | 22 | 11.1 |
| 60 years and above | 0 | 0 |
| **Total** | **198** | **100** |
| **Education Level** | | |
| Secondary level | 1 | 0.5 |
| Certificate | 6 | 3 |
| Diploma | 45 | 22.7 |
| Degree | 124 | 62.6 |
| Postgraduate | 22 | 11.1 |
| **Total** | **198** | **100** |
| **Position** | | |
| Officer | 87 | 43.9 |
| Coordinator | 21 | 10.6 |
| Supervisor | 31 | 15.7 |
| Manager | 34 | 17.2 |
| Director/owner | 25 | 12.6 |
| **Total** | **198** | **100** |
| **Experience** | | |
| 2 years and below | 57 | 28.8 |
| 3 – 4 years | 99 | 50 |
| 5 – 7 years | 23 | 11.6 |
| 8 years and above | 19 | 9.6 |
| **Total** | **198** | **100** |

**Source:** Primary Data

The respondents that were male were 153 (67.2%) and those that were female were 65 (32.8%). This reveals that there were distributed respondents in terms of gender although male dominance against female in evident.

The respondents who were single were 103(52%) and those who were married were 95(48%). None of the respondent was divorced or widowed.

In regards to the age bracket distribution, those between 20 -39years were 176(88.9%) and those between 40 -59years were 22(11.1%). None of the respondents were above 60 years old. This reveals that the SME sector is dominated by the younger generation.

The respondents who had reached secondary level were 1(0.5%), those with certificates were 6(3%), those with diplomas were 45(22.7%), those with degree 124(62.6%) and post graduates were 22(11.1%). This reveals that the SME sector in Kampala Uganda is dominated by the educated people.

The respondents who were officers were 87(43.9%), coordinators' were 21(10.6%), supervisors were 31(15.7%), managers were 34 (17.2%) and directors/owners were 25(12.6%). This reveals that most of the respondents were employees rather owners.

The respondents who had worked for less that 2years were 57 (28.8%), those who had worked between 3-4 years were 99(50%) those who had worked between 5-7years were 23(11.6%) and those who had worked for over 8 years were 19(9.6%).This shows that respondents were distributed in all the categories although most of them have worked for less than 5 years.

## Extent of Working Capital Management Components in SMEs

The second objective of the study was to determine the extent of working capital components in the selected SMEs. This questionnaire were divided into five sections each for the components of working capital management practices namely: extent of working capital management, extent of cash management, extent of inventories management, extent of accounts receivables management, and extent of accounts payables management. The questions were rated using a 4 point scale of: strongly disagree (1); Disagree (2); Agree (3); Strongly Agree (4).Table 3 presents the extent of working capital management components in the selected SMEs.

**Table 3A**
**Extent of Working Capital Management Components**

| Components of Working Capital | Mean | Interpretation | Overall Rank |
|---|---|---|---|
| **Cash Management** | | | |
| The enterprise reduces its cash collection period by encouraging cash payments or bank transfers. | 3.76 | Very high | 1 |
| Payments in cheque increases the cash collection period due to time of delivering the cheque, clearing time and cases where cheques bounce. | 2.99 | High | 6 |
| When the period between selling and actual receiving of cash is short, the enterprise is able to conserve cash and reduce on its requirement for cash balances. | 3.43 | Very High | 3 |
| When the period between selling and actual receiving of cash is long, the enterprise is unable to conserve cash and has to increase on its requirement for cash balances. | 3.44 | Very High | 2 |
| Surplus cash is normally invested in profitable avenues which earn the enterprise more funds | 3.36 | Very High | 5 |
| Surplus cash is never invested and is maintained is the enterprise's bank account. | 1.94 | Low | 8 |
| The enterprise normally considers the risk, maturity and marketability of securities before investing its surplus cash. | 3.38 | Very High | 4 |
| Increasing the cash conversion period has increased profit margin of the enterprise in the last five years | 2.10 | Low | 7 |
| **Average mean for cash management** | **3.18** | **High** | |

| **Mean range** | **response mode** | **interpretation** |
|---|---|---|
| 3.26-4 | Strongly agree | Very High |
| 2.51-3.25 | Agree | High |
| 1.76-2.50 | Disagree | Low |
| 1.0-1.75 | Strongly disagree | Very Low |

## Table 3B
## Extent of Working Capital Management Components

| **Accounts Receivables Management** | **Mean** | **Interpretation** | ***Overall Rank*** |
|---|---|---|---|
| Making sales on credit increases sales | 2.79 | High | 10 |
| Only a few sales are made on credit, most of our sales are in cash | 2.94 | High | 9 |
| All our sales are normally in cash | 2.14 | Low | 12 |
| Most of our sales are made on credit and only a few are made in cash | 1.74 | Very low | 14 |
| Our collection policy states that sales made on credit should be paid within 30days | 2.52 | High | 11 |
| Our collection policy states that sales made on credit should be paid within 45days | 1.35 | Very low | 18 |
| Our collection policy states that sales made on credit should be paid within 60days | 1.36 | Very low | 17 |
| Our collection policy is tailor made as per customers needs/merit. Meaning while some are given 30 days to pay, others are given 45 days and others 60 days. | 1.64 | Very low | 16 |
| The longer it takes to collect payment from debtors, the more the debtors are likely to default causing losses due to bad debt. | 3.62 | Very high | 1 |
| We have a good system for recording sales, invoicing, generating statements and tracking current and overdue balances on customers. | 3.35 | Very High | 5 |
| We have a credit policy in place in which conditions for extending credit are stated and are applied consistently to all customers. | 2.79 | High | 8 |
| The customers are assessed for credit worthiness before extending credit to them. | 3.06 | High | 7 |
| Extending credit to customers' increases sales but also increases production and selling costs, administration costs and bad debt losses. | 3.41 | Very High | 3 |
| The shorter it takes for customers to pay; the lower is our investment in accounts receivable. | 3.28 | Very High | 6 |
| The longer it takes for customers to pay, the higher the costs related to credit sales such as selling, production and administration costs. | 3.39 | Very High | 4 |
| The increase in sales due to extending credit is higher than the costs related to the credit sales | 3.51 | Very High | 2 |
| The costs related to credit sales are higher than the increment in sales due to extending such credit. | 1.68 | Very low | 15 |
| Increasing the receivables collection period has increased profit margin of the enterprise in the last five years | 1.97 | Low | 13 |
| **Average mean for Accounts receivables** | **2.62** | **High** | |

| **Mean range** | **response mode** | **interpretation** |
|---|---|---|
| 3.26-4 | Strongly agree | Very High |
| 2.51-3.25 | Agree | High |
| 1.76-2.50 | Disagree | Low |
| 1.0-1.75 | Strongly disagree | Very Low |

**Table 3C**

**Extent of Working Capital Management Components**

| **Inventory Management** | **Mean** | **Interpretation** | **Overall rank** |
|---|---|---|---|
| Holding inventories causes us to incur carrying costs, loss of liquidity and tie-up of funds | 3.28 | Very High | 9 |
| Lack of inventories causes us to lose customers when we don't meet delivery demands. | 3.55 | Very High | 1 |
| We have techniques in place to ensure we do not hold excessive or inadequate inventories | 3.30 | Very High | 7 |
| A reduction in inventories held releases funds which is invested in profitable avenues | 3.21 | High | 10 |
| A reduction in inventories held reduces on carrying costs greatly | 3.43 | Very High | 5 |
| When the period between ordering and sale of the inventories is short, the enterprise reduces on carrying costs of inventories because it does not have to hold a lot of inventories. | 3.29 | Very high | 8 |
| When the period between ordering and sale of the inventories is short, the enterprise is able to meet customers' delivery demands on time | 3.4 | Very High | 6 |
| When the period between ordering and sale of the inventories is short, the enterprise does not suffer loss of liquidity of its inventories arising from failure to sell on time and seasonal downward price changes | 3.47 | Very High | 2 |
| When the period between ordering and sale of the inventories is short, the enterprise reduces on the funds tied-up in inventory. | 3.43 | Very High | 5 |
| When the period between ordering and sale of inventories is long, the enterprise has to hold a lot of inventories which increase carrying costs and a lot of funds are tied-up in these inventories. | 3.45 | Very High | 3 |
| When the period of ordering and selling the inventory is long, the enterprise is forced to hold a lot of inventories for long which may not be sold on time and may lose value due to price changes. | 3.44 | Very High | 4 |
| Increasing the inventory conversion period has increased profit margin of the enterprise in the last five years | 2.12 | Low | 11 |
| **Average mean for inventory management** | **3.39** | **Very High** | |

| **Mean range** | **response mode** | **interpretation** |
|---|---|---|
| 3.26-4 | Strongly agree | Very High |
| 2.51-3.25 | Agree | High |
| 1.76-2.50 | Disagree | Low |
| 1.0-1.75 | Strongly disagree | Very Low |

**Table 3D**
**Extent of Working Capital Management Components**

| **Accounts Payables Management** | **Mean** | **Interpretation** | **Overall Rank** |
|---|---|---|---|
| The enterprise does not take trade credit, it pays for its supplies in cash | 2.2 | Low | 8 |
| Trade credit from our suppliers act as a source of financing for the enterprise. | 2.8 | High | 7 |
| Trade credit is the preferred source of financing because it is easily available; it is flexible and does not require negotiations and formal agreements. | 2.81 | High | 6 |
| Trade credit financing is preferred by the enterprise because it is cheaper compared to other long-term financing like the bank loans. | 3.09 | High | 1 |
| When the enterprise buys supplies on credit, it loses on cash discount provided for cash payments. | 2.94 | High | 4 |
| The suppliers always provide the enterprise with credit terms indicating the beginning and end of the credit period. | 2.81 | High | 5 |
| The enterprise always pays for its supplies within the first half of the credit period. | 3.02 | High | 2 |
| The enterprise always pays for its supplies within the second half of the credit period. | 1.86 | low | 10 |
| The enterprise pays for its supplies after the expiry of the credit period. | 1.92 | Low | 9 |
| Increasing the creditor's deferral period has increased profit margin of the enterprise in the last five years | 2.97 | High | 3 |
| **Average mean for Accounts payable** | **2.60** | **High** | |

| **Mean range** | **response mode** | **interpretation** |
|---|---|---|
| 3.26-4 | Strongly agree | Very High |
| 2.51-3.25 | Agree | High |
| 1.76-2.50 | Disagree | Low |
| 1.0-1.75 | Strongly disagree | Very Low |

**Source:** Primary data

## Cash Management

The findings in Table 3A indicate an overall average mean of 3.18 in cash management. This implies that cash management to a high extent affect profitability of the selected SMEs. Specifically to note from the table is that the selected SMEs work towards reducing the period for them to collect cash. This is shown by a mean of 3.76 on use of bank transfers and cash payments to reduce the cash collection period implying a very high agreement that SMEs use cash payments and bank transfers to reduce on cash collection period; A mean of 2.99 that cheque payments increase the cash collection period implying a high agreement that cheque payments increase cash collection period because of the time it takes to process the cheque, and delivery/mailing and cases when cheques bounce. The findings indicated a mean of 3.43 and 3.44 on to ability to conserve cash when collection period is short and inability to conserve cash when its cash collection period is long respectively. These findings imply very high agreement that the shorter the collection period the more SMEs are able to conserve cash. This is because requirements for cash balances reduce if an enterprise is able to get cash for their sales fast. The findings indicated a low agreement that increasing the cash collection period help to improve profits with a mean of 2.10. The finding indicated a mean of 3.36 and 3.38 on investment of surplus funds and consideration of risk, marketability and maturity of securities respectively. This implies a very high agreement that SMEs invest their surplus cash in profitable avenue and before they invest, they always consider the risk, marketability and maturity of their investments. More findings on not investing the cash and maintain it in the enterprise's bank account indicated a mean of 1.94 implying a low agreement.

**Accounts Receivables Management**

The findings in Table 3B indicated a mean rating of 2.62 in accounts receivables management which implies a high extent of accounts receivable management. The findings on whether selling on credit increases sales generated a mean of 2.79 implying a high agreement. Sales go high when selling is done on credit because customers are able to buy without money and make payments at a later date when they get the money. If no credit is allowed the customer opts not to buy because he/she has no cash for paying. Findings on the proportion of sales made on credit generated means of 2.94, 2.14 and 1.74 on only a few sales, none of the sales and most of the sales respectively. These show a high agreement that SMEs make only a few of their sales on credit, and low agreement that SMEs make most of their sales on credit and very low agreement that SMEs make all their sales on credit. This may be so because if most sales are made on credit, the SMEs are likely to suffer from cash shortages as the payments will be done sometimes in the future for most of the sales made. However if only a few sales are made on credit, the sales made in cash will provide enough cash to run the enterprise without straining its resources. Findings on collection period indicated means of 2.54, 1.35, 1.36 and 1.64 for 30 days, 45days, 60 days and tailor-made/merited periods respectively. These imply high agreement to collection period of 30 days and very low agreement to collections periods of 45days, 60 days and tailor-made/merited periods. This clearly shows that SMEs endeavor to reduce receivables collection period. Further findings on costs related to credit sales showed very high agreement that credit sales increase costs (mean =3.41); the longer the clients take to pay the higher the production, selling and administrative costs (Mean=3.39); the longer it takes to pay the more likely are the bad debts (mean=3.62) and the shorter the clients takes to pay the lower is the investment in accounts receivables (mean=3.28). relating these increased cost to increase in sales, findings showed very high agreement that the increment in sales relative to the increase in costs is higher (mean=3.51).Findings on good system for recording sales, credit policy and assessing for credit worthiness indicated means of 3.35, 2.79, and 3.06 implying that SMEs have very high agreement that they have a good system for recording sales, generating invoices and tracking debtors; and high agreement that they have a credit policy and normally apply it consistent to all clients and that they assess their debtors for credit worthiness before extending credit. These practices reduce on possibility of bad debts. Good system will ensure all debtors are followed and none are forgotten and good documentation trail. A credit policy that is consistently applied make the debtors know the terms and conditions before taking credit and credit worthiness assessment ensure you only extend credit to clients who are able to pay. Table 3b also show a disagreement that SMEs have increased profitability by increasing the receivables collection period (Mean=1.97). This could be because when this period is increased, the SMEs tend to lose due to bad debt losses, held up cash and other costs.

## Inventory Management

The Findings in table 3C generated an average mean of 3.39 implying a very high extent of inventory management practices. The results on holding inventory showed a very high agreement that: holding inventory causes SMEs to incur carrying costs, loss of liquidity and tie-up of funds (mean =3.28), lack of inventories cause SMEs to lose clients when delivery needs are not met (mean=3.55), SMEs have techniques in place to ensure they do not hold excess or inadequate inventories (mean=3.30), and that reducing on inventories held greatly reduces costs (mean=3.43). High agreement that a reduction in inventories held releases funds that are invested in other profitable avenues (mean=3.21). Results on the period of ordering and selling indicated a very high agreement that when this period is short, the SMEs are able to meet customer delivery demands (mean=3.40), SMEs do not suffer loss of liquidity due failure to sell and downward price changes (Mean=3.47), SMEs reduce on funds tied up in inventories (mean=3.43), and that carrying costs reduce because they hold less inventories (mean=3.29). Similarly, when the ordering and selling period is long, the results show a very high agreement that SMEs have to hold lots of inventories which increase the carrying costs(mean=3.45) and SMEs lose liquidity to failure to sell or downward changes of prices(mean=3.44).These increased costs impact negatively on the profitability of the SMEs. Most SMEs disagreed that increasing the inventory conversion period has increased profits in the past five years (mean=2.12).This is because the more the SMEs hold inventories without selling them, the more the costs related to holding these inventories which decreases profits.

## Accounts Payable Management

Findings presented on table 3D indicate an average mean of 2.6 which indicates high extent of account payable management practices. Findings that SMEs don't take credit but prefer to pay for their supplies in cash showed a mean of 2.2 implying a low extent. This means that most respondent disagreed that their SMEs do not take trade credit. The respondents agreed highly that trade credit acts as a source of financing for

SMEs (mean=2.8), SMEs prefer trade credit for its flexibility (mean=2.81), and SMEs prefer trade credit for its cheapness (mean=3.09). The results also indicated that respondents agreed highly that they lose on cash discounts when they take trade credit (mean=2.94).Finding on credit terms showed high agreement that terms are indicated (mean= 2.81). On payment period, results indicated high agreement that most SMEs settle their debt within the first half of the credit period (mean=3.02).The respondent agreed highly that increasing the creditors deferral period increased profits in the SMEs (mean 2.97).

### Level of Liquidity and Profitability

The third objective of the study was to determine the levels of liquidity and profitability. The different questions' responses to find out the level of liquidity and profitability were ranked on a scale of 1-4 on likert scale (1 strongly disagree, 2-disagree,3-Agree and 4-strongly agree).The questions were divided to find out the current ratio and the debt ratio. The following table 4 indicates the level of current ratio and debt ratio which represents liquidity and profit margin.

## Table 4

## Levels of Liquidity and Profitability

| Current Ratio | Mean | Interpretation | Overall Rank |
|---|---|---|---|
| Our current ratio is below 0.5 | 1.47 | Very low | 12 |
| Our current ratio is between 0.5 and 1 | 1.93 | Low | 5 |
| Our current ratio is between 1 and 1.5 | 2.35 | Low | 2 |
| Our current ratio is between 1.5 and 2 | 1.95 | Low | 4 |
| Our current ratio is normally more than 2 | 1.58 | Very low | 11 |
| **Average mean** | **1.86** | **Very low** | |
| **Debt Ratio** | | | |
| Our debt ratio is normally below 0.25 | 2.8 | High | 1 |
| Our debt ratio is between 0.25 and 0.5 | 1.77 | Low | 6 |
| Our debt ratio is between 0.5 and 0.75 | 1.29 | Very low | |
| Our debt ratio is normally between 0.75 and 1 | 1.25 | Very low | 13 |
| Our debt ratio was more than 1 | 1.76 | Low | 7 |
| **Average mean** | **1.78** | **Low** | |
| **Profit margin** | | | |
| Our profit margin is less than 10% | 1.62 | Very low | 10 |
| Our profit margin is between 10% and 20% | 1.73 | Very low | 8 |
| Our profit margin is between 20% and 30% | 2.44 | Low | 3 |
| Our profit margin is above 30% | 1.65 | Very low | 9 |
| **Average mean** | **2.08** | **Low** | |

| **Mean range** | **response mode** | **interpretation** |
|---|---|---|
| 3.26-4 | Strongly agree | Very High |
| 2.51-3.25 | Agree | High |
| 1.76-2.50 | Disagree | Low |
| 1.0-1.75 | Strongly disagree | Very Low |

**Source**: Primary Data

Table 4 findings indicate an average mean of 1.86 on current ratio which implies low level of liquidity. The specific means rank current ratio between 1 and 1.5 first, current ratio between 1.5 and 2 second ,current ratio between 0.5 and 1 third, current ratio above 2 fourth and current ratio below 0.5 last. From this we can say that most SMEs current ratio is between 1 and 1.5. This shows that most of the SMEs selected are healthy consistent with the generally accepted theory of financial liquidity that those firms with current ratio of between 1.2 and 2 have an optimal level of liquidity. A ratio less than 1.2 means that the liquidity of a firm is threatened, while a ratio of more than 2 means that the firm is not efficient and has idle assets (pandey, 2005).

The findings on debt ratio generated an average mean of 1.78 implying low level of debt thus high liquidity. The specific means rank debt ratio of below 0.25 first, debt ratio of between 0.25 and 0.5 second, Debt ratio of more than 1 third, debt ratio between 0.5 and 0.75 fourth, and debt ratio between 0.75 and 1 last. From this we can say that most of the selected SMEs have a debt ratio below 0.25 this shows that these SMEs selected have very low level of debt which means high liquidity. This is consistent with the generally acceptable theory of financial liquidity that the lower the level of debt the higher the liquidity.

The findings in table 4 indicate an average mean of 2.08 which implies low level of profitability. Specific means for profit margin rank profit margin between 20% and 30% first with a mean of 2.44 which is low. This can be interpreted that the selected SMES have low levels of profitability.

## Relationship between Working Capital and Profitability

The fourth objective of the study was to find out where there is significant relationship between working capital and profitability. The results are shown in the table 5 below.

**Table 5**
**Pearson's Correlations Matrix of Working Capital and Profitability (Significance level =0.05)**

| **Variable Correlated** | **R-value** | **Sig. value** | **Interpretation** | **Decision on Ho** |
|---|---|---|---|---|
| Working Capital Management Vs profitability | 0.401 | <0.001 | Significant Relationship | Rejected Ho |

**Source:** Primary Data

Findings presented in Table 5 indicate that there is a positive significant between working capital and profitability of selected SMEs in Kampala Uganda. This significant positive relationship is indicated by R value of 0.401 and the sign value of less than 0.001. Regarding the finding on the relationship the null research hypothesis that stated 'There is no significant relationship between working capital and profitability of selected SMEs in Kampala Uganda' is rejected and this study concludes that there is a positive significant relationship between working capital and profitability of selected SMEs in Kampala, Uganda.

**Regression Analysis Between Profitability against Working Capital Management**

Regression analysis on the relationship between working capital management and profitability was done to test the strength of the relationship. Regression analysis also helped in affirming or negating the research hypothesis. The following table 6 illustrates the findings on the strength of the relationship between the two research variables.

**Table 6**

**Regression Analysis between Profitability and Working Capital Management**

| Variables Regressed | Adjusted $R^2$ | F-value | Sig. | Interpretation | Decision on Ho |
|---|---|---|---|---|---|
| Profitability Vs Working Capital Management | 0.161 | 37.61 | <0.001 | Significant relationship | Rejected Ho |

**Source:** Primary Data

The results of the regression analysis indicated in table 6 give an $R^2$ of 0.161 which implies that 16.1% of the dependent variable is explained by the independent variable. Thus, 16.1% of the profits for the selected SMEs in Kampala Uganda is explained by working capital management. The study can therefore conclude that there is significant positive relationship between working capital management and profitability of SMEs. This conclusion is consistent with other researches done on this topic (Quayyum, 2012; Al-Debi'e, 2011; Bagchi, Khamrui, 2012). This means that good working capital management practices help in increasing the SMEs profitability. The null hypothesis for the study that stated that 'There is no significant relationship between working capital and profitability of selected SMEs in Kampala Uganda' is thus rejected.

# CHAPTER FIVE

# FINDINGS, CONCLUSIONS, RECOMMENDATIONS

## Summary of Findings

The study sought to establish the relationship between the working capital management practices and profitability of selected Small and Medium Enterprises (SMEs) in Kampala, Uganda. The study's objectives were to determine the profile of the respondents in terms of age, gender, position, experience and educational level; Determine the extent of working capital components in the selected SMEs; To determine the level of liquidity and profitability of the selected Small and Medium Enterprises in Kampala, Uganda; And To establish the relationship between working capital management and profitability of SMEs in Uganda.

The results on respondents profile indicated that respondents were distributed in all the sexes with men (67.2%)being more than women(32.8%), the unmarried respondents(52%) were more than the married(48%), the younger people of ages 20-39years were the majority respondents(88.9%) ,The majority of the respondents were educated with 62.6% being holders of degree and 11.1% being postgraduates; The positions of the majority of the respondents were officers (43.9%); and the majority of the respondents had worked in the selected SMEs for 3-4 years (50%). This means that information provided can be trusted and relied upon since the respondents' age, educational level and years of experience renders them capable to understand and respond to the questionnaire properly.

The findings on the extent of working capital management components, where components measured were, cash management, accounts receivables management, inventory management, and accounts payables management. The findings revealed the extent of cash management as high with a mean of 2.7. This means that to a high extent, cash management does affect the working capital and hence profitability. To note from the results is that respondents very highly agreed to investing surplus cash in profitable avenues (mean =3.36) and also that they normally consider risk, maturity and marketability of securities before investing (mean=3.38). This is consistent with the generally acceptable theory of financial management that investors should consider liquidity and profitability of securities before investing (Pandey 2005). Also the respondents also agreed very highly to the effects of long and short cash collection periods, mean of 3.43 that short cash collections periods enable the SMEs to conserve cash and a mean of 3.44 that long cash collection periods hinder SMEs from conserving cash. SMEs disagreed that increasing the cash collection period increase profits. This is consistent with other studies done by Garcia and Martinez (2007), Raheman and Nasr (2007) who found that increasing the cash conversion period decreases profits. Findings on the extent of accounts receivables management revealed a high extent with a mean of 2.62. This means that to a high extent accounts receivables management does affect the working capital and hence profitability. To note specifically is that respondents agreed highly that selling on credit increases sales (mean=2.79) however, some level of caution is exercised as respondents agreed highly that only a few of the sales are done on credit (mean=2.94) and that customers are assessed of credit worthiness before extending credit (mean=3.06).Also the respondents agreed highly to a collection policy of shorter days (30 days) with a mean of 2.52. The respondents also agreed very highly that the longer it takes for a client to pay the higher the cost (mean 3.41) and a more likelihood for SMEs to suffer bad debts(mean=3.62).The respondents however agreed highly that this increment in costs is lower than the increment in sales( mean=3.51).The respondents disagreed that increasing the accounts receivables collection period increase profits, this is because of the longer the accounts receivables remain uncollected, the more the costs which decrease profits. This is consistent with the studies done by MCInnes and sweetman in 2000. Findings on the extent of inventory management indicated a very high extent with a mean of 3.39.The respondents agreed very highly to that holding inventory increases costs and ties up cash that could be invested (( mean=3.28). The respondents agreed very highly that short inventory conversion period helps the SMEs to reduce on costs in terms of carrying costs (mean=3.29), losing customers(mean=3.4) and loss of liquidity (mean=3.47). The finding on the accounts payable management indicated a high extent that accounts payable management does affect working capital and hence profitability. The respondents agreed highly to use of trade credit as a source of financing (mean=2.8) because of its flexibility (mean=2.81), and because it is cheap (mean=3.09) this is consistent with studies done by Garcia and Martinez (2007) where they found that SMEs use trade credit as a source of financing because they are unable to access other sources of financing due to the high cost. The respondents agreed highly to settling their debts within the first half of the credit period (mean=3.02).The respondents agreed highly that increasing the creditors deferral period increases profits (mean =2.97).

The findings on the level of liquidity and profitability revealed low level of each. To note specifically is the level of current ratio where the one ranked first was current ratio between1 and 1.5 with a mean of 2.35 which is low. This may reveal that liquidity of the selected SMEs is threatened. However, respondents agreed highly that their debt ratio was below 0.25(mean=2.8) which imply that the selected SMEs exercise the lowest level of debt which is strong liquidity position. The finding on profitability also revealed low level of profitability with an average mean of 2.08. The results ranked profitability margin of between 20% and 30% first with a mean of 2.44 which means a low agreement. This is consistent with studies by Uganda Bureau of statistics (2011) and Global Entrepreneurship Monitor (2004) which found the profitability of SMEs to be very low in Uganda.

The findings on whether there exist a significant relationship between working capital management and profitability of selected SMEs in Kampala, Uganda were analyzed using pearson's correlation which revealed an R value of 0.401 and significant level of less than 0.001.This means that working capital and profitability correlate at 0.401 which is a positive relationship and significantly as their significance level is below 0.01. Regression done on the two variables indicated an $R^2$of 0.161 meaning 16.1% of the profitability is dependent on working capital management. Therefore, the researcher can confidently state that she established a significant positive relationship exist between working capital management and profitability of selected SMEs in Kampala Uganda. These findings are consistent with previous studies done by Mensah (2010) that established a significant positive relationship between working capital and profitability of SMEs in Ghana. The researcher thus, rejecting the null hypothesis that there exist no significant relationship between working capital management and profitability of the selected SMEs in Kampala, Uganda

**Conclusions**

On the extent of components of the working capital management; the effects of cash management was rated to be high (mean=3.18), the effects of accounts receivables management was rated to be very high (mean=3.39), the effects of inventory management was rated high (mean=2.62) and effects of accounts payable management was rated to be high (mean =2.60), The levels of liquidity were rated to be low (mean=2.08).

It was realized that working capital management significantly affect profitability and therefore a significant relationship between working capital management and profitability.

The study found a significant positive relationship between working capital management and profitability thus rejecting the hypothesis 'there is no significant relationship between working capital management and profitability of the selected SMEs in Kampala, Uganda'.

The study agreed with the aggressive/conservative theory of Van Horne (1980) that states that excessive levels of current Assets have negative effects on profitability whereas low levels of current assets have positive effects on profitability.

## Recommendations

The researcher recommends SMEs to tap the expertise and skills that their employees possess so as to improve on the profitability of their enterprises.

Small and Medium Enterprises (SMEs) should take advantage of trade credit as a form of financing because it is cheap and flexible.

Small and Medium Enterprises (SMEs) should invest their surplus cash in more profitable investments that are less risky so as to increase their profits.

Small and Medium Enterprises (SMEs) should seek to stock level of inventories they are sure will be sold out so as to reduce costs incurred due to loss of liquidity and stock adequately to minimize costs due to loss of customers.

Small and Medium Enterprises (SMEs) should minimize giving credit to those customers who do not pay on time so as to reduce losses due to bad debts.

Small and Medium Enterprises (SMEs) should target to improve on their working capital management practices so as to improve their profitability.

## Future studies

This study looked at the components of working capital as it sought to establish their relationship with profitability. The researcher did not critically look at the measures of working capital namely cash conversion cycle, receivables conversion period, inventory conversion period and payable's deferral period. This therefore is an area of a future study.

Another area that the researcher didn't look at critically is the relationship between working capital and liquidity and this also can be a topic for future study.

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# APPENDICES

## APPENDIX 1

## TRANSMITTAL LETTER

Dear sir/Madam,

Greetings

I am a master's in Business administration Student of Kampala International University. Part of the requirements for the award is a thesis. My study is entitled **Working capital management and profitability of small and Medium scale Enterprises (SMEs) in Kampala Uganda.** May I request you to also participate in this study by answering all questions? Any data that you provide shall be for academic purposes only and no information of such kind shall be disclosed to others.

May I retrieve the questions within five (5) days?

Thank you very much

Yours faithfully

Rachel Nganga

## APPENDIX 2

## AUTHORIZATION LETTER

KAMPALA INTERNATIONAL UNIVERSITY

Ggaba Road - Kansanga
P.O. Box 20000, Kampala, Uganda
Tel: +256 - 414 - 266813 / +256 - 772 - 322563
Fax: +256 - 414 - 501 974
E-mail: admin@kiu.ac.ug
Website: www.kiu.ac.ug

**OFFICE OF THE HEAD OF DEPARTMENT, ECONOMICS AND MANAGEMENT SCIENCES**
**COLLEGE OF HIGHER DEGREES AND RESEARCH (CHDR)**

Date: 24th July, 2012.

**RE: REQUEST NGANGA RACHEL MUTHONI MBA/40672/91/DF TO CONDUCT RESEARCH IN YOUR ORGANIZATION**

The ... mentioned is a bonafide student of Kampala International University ... Masters of Business Administration (Finance and Accounting).

She is currently conducting a research entitled **"Working Capital Management And Profitability Of Selected Small And Medium Enterprises (SMEs) In Kampala, Uganda."**

Your organization has been identified as a valuable source of information pertaining to her research project. The purpose of this letter is to request you to avail her with the pertinent information she may need.

Any information shared with her from your organization shall be treated with utmost confidentiality.

Any assistance rendered to her will be highly appreciated.

Yours truly,

Mr. ... Ramadhan
**Head of Department,**
**Economics and Management Sciences, (CHDR)**

**NOTED BY:**
Dr. Sofia Sol T. Gaite
Principal-CHDR

"Exploring the Heights"

## APPENDIX 3

## ACKNOWLEDGEMENT BY RESPONDENTS

Fabulous Africa Holidays

Muyenga [illegible] Bypass,

Plot 343[illegible], Kampala

Tel: +256 [illegible] 334853

Fabulous Africa Holidays

13th Sept 2012

To The Deputy Vice Chancellor,
School of Post Graduate Studies & Research
Kampala International University
P.O. Box 20000,
Kampala, Uganda

Dear Sir/Madam

This is to confirm to you that your student named Rachel Ng'ang'a, Reg MBA/40672/91/DF has carried out research in Fabulous Africa Holidays and Safaris regarding the topic '*working capital management and profitability of selected small and medium enterprises (smes) in Kampala Uganda*' as a partial fulfilment of the award of Masters of Business Administration (Finance).

Yours faithfully,

Bernard Kanoi
Director: Business Development & Operations

## APPENDIX 4

## CLEARANCE FORM THE ETHICS COMMITTEE

Date ___________________________________

Candidate's Data

Name: Nganga Rachel Muthoni

Reg #: MBA/40672/91/DF

Course: MBA (finance and Accounting)

Title of the study: **Working capital management and profitability of selected small and medium scale enterprises in Kampala, Uganda.**

Ethical review checklist

The study reviewed considered the following

_____ Physical safety and human subjects

_____Psychological safety

_____Emotional safety

_____Privacy

_____Written request for authors of standardized instrument

_____Coding of questionnaires/anonymity/confidentiality

_____Permission to conduct the study

_____Informed consent

_____Citation/authors/recognized

Results of Ethical Review

_____Approved

_____Conditional ( to provide the ethics committee with corrections)

_____Disapproved

Ethical committee (Name and signature)

Chairperson _______________ Members_________________________

## APPENDIX 5

## INFORMED CONSENT

I am signing this documents, I am giving my consent to be part of the research study by Rachel Nganga that will focus on Working capital management and profitability of Small and medium enterprises( SMEs) in Kampala Uganda.

I shall be assured of privacy, anonymity and confidentiality and that I will be given options to refuse to participation do right to withdraw my participation anytime

I have been informed that the research is voluntary and that the results will be given to me if I ask

Name and signature of the respondent

Date

## APPENDIX 6

## RESEARCH INSTRUMENT

### Questionnaire

**Dear Respondent,**

This questionnaire seeks to establish the relationship between working capital management and profitability of small and medium enterprises in Uganda. You have been selected to participate in this study because the contribution you make to your organization is central to the kind of information required in this study. The information you provide will be used for only academic purposes. Your response will be kept confidential. You are kindly requested to fill/ answer the questions below.

### Instructions

Please read the questions and tick the most applicable answer to you. If you make a mistake, please cross it out sign against the new answer given.

### Part 1; Respondent's profile

1. Gender:

| | |
|---|---|
| Male | |
| Female | |

2. Marital status

| | |
|---|---|
| Single | |
| Married | |

3. Age

| | |
|---|---|
| Below 21 years | |
| 21-30 years | |
| 31-40 years | |
| 41-50 years | |
| 51 years and above | |

4. Highest educational qualification attained

| | |
|---|---|
| Secondary level | |
| Certificate | |
| Diploma | |
| Degree | |
| Postgraduate qualification | |

5. Tick your current rank /grade

| | |
|---|---|
| Officer | |
| Coordinator | |
| supervisor | |
| Manager | |
| Director/owner | |

6. Tick number of years worked in the organization

| | |
|---|---|
| Less than two years | |
| 2-4 years | |
| 4-8 years | |
| 8-12 years | |
| Above 12 years. | |

**Part 2: working capital management**

Working capital is the difference between current assets and current liabilities. Using this scale below would you agree with the following statement concerning the working capital management for your SME in the past 5 years.

**Cash management**

1. Cash conversion cycle is the time an SME takes to collect cash from sales and the time payments for the purchases is done. Using this scale below would you agree with the following statement concerning the cash management for your SME in the past 5 years? (Tick once)

| 1 | 2 | 3 | 4 |
|---|---|---|---|
| Strongly disagree | Disagree | agree | Strongly agree |

| | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| The enterprise reduces its cash collection period by encouraging cash payments or bank transfers. | | | | |
| Payments in cheque increases the cash collection period due to time of delivering the cheque, clearing time and cases where cheques bounce. | | | | |
| When the period between selling and actual receiving of cash is short, the enterprise is able to conserve cash and reduce on its requirement for cash balances. | | | | |
| When the period between selling and actual receiving of cash is long, the enterprise is unable to conserve cash and has to increase on its requirement for cash balances. | | | | |
| Surplus cash is normally invested in profitable avenues which earn the enterprise more funds | | | | |
| Surplus cash is never invested and is maintained is the enterprise's bank account. | | | | |
| The enterprise normally considers the risk, maturity and marketability of securities before investing its surplus cash. | | | | |

**Accounts receivables management**

2. Average collection period is the time an SME takes to collect cash from its debtors. Using this scale below would you agree with the following statement concerning the average collection period and accounts receivables management for your enterprise in the last five years (tick once)

| 1 | 2 | 3 | 4 |
|---|---|---|---|
| Strongly disagree | Disagree | agree | Strongly agree |

| | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| Making sales on credit increases sales | | | | |
| Only a few sales are made on credit, most of our sales are in cash | | | | |
| All our sales are normally in cash | | | | |
| Most of our sales are made on credit and only a few are made in cash | | | | |
| Our collection policy states that sales made on credit should be paid within 30days | | | | |
| Our collection policy states that sales made on credit should be paid within 45days | | | | |
| Our collection policy states that sales made on credit should be paid within 60 days | | | | |
| Our collection policy is tailor made as per customers needs/merit. Meaning while some are given 30 days to pay, others are given 45 days and others 60 days. | | | | |
| The longer it takes to collect payment from debtors, the more the debtors are likely to default causing losses due to bad debt. | | | | |
| We have a good system for recording sales, invoicing, generating statements and tracking current and overdue balances on customers. | | | | |

| | | | | |
|---|---|---|---|---|
| We have a credit policy in place in which conditions for extending credit are stated and are applied consistently to all customers. | | | | |
| The customers are assessed for credit worthiness before extending credit to them. | | | | |
| Extending credit to customers' increases sales but also increases production and selling costs, administration costs and bad debt losses. | | | | |
| The shorter it takes for customers to pay, the lower is our investment in accounts receivable. | | | | |
| The longer it takes for customers to pay, the higher the costs related to credit sales such as selling, production and administration costs. | | | | |
| The increase in sales due to extending credit is higher than the costs related to the credit sales | | | | |
| The costs related to credit sales are higher than the increment in sales due to extending such credit. | | | | |

**Inventory management**

3. Inventory conversion period is the time taken from purchase of inventory /raw material, to processing and eventually selling the final product. Using this scale below would you agree with the following statement concerning the inventory management for your SME in the past 5 years (tick once)

| 1 | 2 | 3 | 4 |
|---|---|---|---|
| Strongly disagree | Disagree | agree | Strongly agree |

| | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| Holding inventories causes us to incur carrying costs, loss of liquidity and tie-up of funds | | | | |
| Lack of inventories causes us to lose customers when we don't meet delivery demands. | | | | |
| We have techniques in place to ensure we do not hold excessive or inadequate inventories | | | | |
| A reduction in inventories held releases funds which is invested in profitable avenues | | | | |
| A reduction in inventories held reduces on carrying costs greatly | | | | |
| When the period between ordering and sale of the inventories is short, the enterprise reduces on carrying costs of inventories because it does not have to hold a lot of inventories. | | | | |
| When the period between ordering and sale of the inventories is short, the enterprise is able to meet customers' delivery demands on time | | | | |
| When the period between ordering and sale of the inventories is short, the enterprise does not suffer loss of liquidity of its inventories arising from failure to sell on time and seasonal downward price changes | | | | |
| When the period between ordering and sale of the inventories is short, the enterprise reduces on the funds tied-up in inventory. | | | | |
| When the period between ordering and sale of inventories is long, the enterprise has to hold a lot of inventories which increase carrying costs and a lot of funds are tied-up in these inventories. | | | | |
| When the period of ordering and selling the inventory is long, the enterprise is forced to hold a lot of inventories for long which may not be sold on time and may lose value due to price changes. | | | | |

**Accounts payable management**

4. Trade credit is where an SME receives inventories/supplies and then pays at a later date. Using this scale below would you agree with the following statement concerning trade credit for your SME in the past 5 years? (Tick once).

| 1 | 2 | 3 | 4 |
|---|---|---|---|
| Strongly disagree | Disagree | agree | Strongly agree |

| | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| The enterprise does not take trade credit, it pays for its supplies in cash | | | | |
| Trade credit from our suppliers act as a source of financing for the enterprise. | | | | |
| Trade credit is the preferred source of financing because it is easily available; it is flexible and does not require negotiations and formal agreements. | | | | |
| Trade credit financing is preferred by the enterprise because it is cheaper compared to other long-term financing like the bank loans. | | | | |
| When the enterprise buys supplies on credit, it loses on cash discount provided for cash payments. | | | | |
| The suppliers always provide the enterprise with credit terms indicating the beginning and end of the credit period. | | | | |
| The enterprise always pays for its supplies within the first half of the credit period. | | | | |
| The enterprise always pays for its supplies within the second half of the credit period. | | | | |
| The enterprise pays for its supplies after the expiry of the credit period. | | | | |

## Liquidity

5. Current ratio is calculated as current assets divided by current liabilities. Using this scale below would you agree with the following statement concerning the Current ratio for your enterprise in the past 5 years

| 1 | 2 | 3 | 4 |
|---|---|---|---|
| Strongly disagree | Disagree | agree | Strongly agree |

| | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| Our current ratio is normally below 0.5 | | | | |
| Our current ratio is normally between 0.5 and 1 | | | | |
| Our current ratio is normally between 1 and 1.5 | | | | |
| Our current ratio is normally between 1.5 and 2 | | | | |
| Our current ratio is normally more than 2 | | | | |

6. Debt ratio is calculated as total debt divided by total assets. Using this scale below would you agree with the following statement concerning the Debt ratio for your enterprise in the past 5 years?

| 1 | 2 | 3 | 4 |
|---|---|---|---|
| Strongly disagree | Disagree | agree | Strongly agree |

| | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| Our debt ratio is normally below 0.3 | | | | |
| Our debt ratio is normally between 0.25 and 0.5 | | | | |
| Our debt ratio is normally between 0.5 and 0.75 | | | | |
| Our debt ratio is normally between 0.75 and 1 | | | | |
| Our debt ratio was more than 1 | | | | |

**Profitability**

7. Profit margin is calculated as operating profit divided by sales multiplied by 100. Using the scale below would you agree with the following statement concerning the profit margin for your enterprise in the past 5 years?( tick once).

| 1 | 2 | 3 | 4 |
|---|---|---|---|
| Strongly disagree | Disagree | agree | Strongly agree |

| | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| Our profit margin is less than 10% | | | | |
| Our profit margin is between 10% and 20% | | | | |
| Our profit margin is between 20% and 30% | | | | |
| Our profit margin is above 30% | | | | |
| Increasing the cash conversion period has increased profit margin of the | | | | |

| | | | | |
|---|---|---|---|---|
| enterprise in the last five years | | | | |
| Increasing the inventory conversion period has increased profit margin of the enterprise in the last five years | | | | |
| Increasing the creditor's deferral period has increased profit margin of the enterprise in the last five years | | | | |
| Increasing the receivables collection period has increased profit margin of the enterprise in the last five years | | | | |

## RESEARCHER'S CURRICULUM VITAE

### Personal Profile

Name: Nganga Rachel Muthoni

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Marital status: Married

Nationality: Kenyan

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### Educational Background

| | | |
|---|---|---|
| 2009 -2012 | Kampala International University | MBA |
| 2007 | KASNEB | CPA(K) |
| 1999-2003 | MASENO UNIVERSITY | BBA |
| 1994-1997 | KAHUHIA HIGH SCHOOL | KCSE |

### Work Experience

| | | |
|---|---|---|
| 2008 -DATE | Med Biotech Labs | Senior Accounts Officer |
| 2007 | Dyer and Blair (U) | Accountant |
| 2005-2006 | CARE Kenya | Finance Officer |

### Other Relevant Data

Honest, multitasking, hardworking and self motivated