

**THE EFFECT OF WORKING CAPITAL MANAGEMENT LEVELS ON  
FINANCIAL PERFORMANCE OF SMALL AND MEDIUM ENTERPRISES IN  
HOMABAY TOWN**

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## DECLARATION

I, the undersigned, declare that this is my original work and has not been submitted to any other college, institution, forum or University for academic credit.

**Signed.....**

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This project proposal has been submitted for examination with my approval as appointed supervisor.

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To all I say, May the Lord God richly bless you.

## **DEDICATION**

This research project is dedicated to my family for their love, support and encouragement.

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## **ABBREVIATIONS AND ACRONYMS**

|            |                                  |
|------------|----------------------------------|
| <b>CA</b>  | Current Assets                   |
| <b>CL</b>  | Current Liabilities              |
| <b>CCC</b> | Cash Conversion Cycle            |
| <b>ROA</b> | Return on Assets                 |
| <b>ROE</b> | Return on Equity                 |
| <b>STI</b> | Short Term Investments           |
| <b>SME</b> | Small and Medium-size Enterprise |
| <b>TA</b>  | Total Assets                     |
| <b>TC</b>  | Trade Credit                     |
| <b>WC</b>  | Working Capital                  |
| <b>WCM</b> | Working Capital Management       |

**KNBS** Kenya national Bureau of statistics

**NWC** Net working Capital

## **ABSTRACT**

Working capital management is very important to businesses operating in Kenya and other emerging markets as most of them are SMEs and have inadequate access to long term capital markets and rely heavily on owner financing, trade credits and inventories to finance their working capital. An optimal balance of the working capital components is thus paramount to ensure profitability and endurance of SMEs considering the critical role they play in reduction of poverty and creation of employment.

The aim of this study was to establish the effect of Working capital management levels on financial performance of SMEs in Homabay Town. The study adopted descriptive research design. The target population comprised 334 SMEs operating in Homabay town of which a sample of 100 SMEs was used. Both secondary and primary data was gathered for the period 2016 to 2018. Quantitative data was processed using OLS regression models and correlation analysis. Inferential statistics was used to establish the link between change of dependent variable (ROA) as a result of change in each of the independent variables (ACP, ITP, & APP) with Size used as control for the variables.

The study found that ACP, ITP and APP had an insignificant negative effect on financial performance of SMEs in Homabay town. The model without the control variable was also found to be insignificant with the independent variables predicting 0.006% of the ROA. When the three variables were regressed against the ROA with the control variable size introduced, the models' goodness fit improved 0.065 implying that all the predictor variables used in the model were able to explain about 6.5% of the variation in ROA meaning that SMEs in Homabay county performed better when their scale of operations as measured by assets held was smaller. The study recommends that SMEs should focus more on optimal

management of the total assets invested and not grow their asset base beyond their ability to manage as this will be detrimental to their performance.

# CHAPTER ONE

## INTRODUCTION

### 1.1 Background of the Study

Working capital (WC) is the portion of the overall capital of an establishment that is employed in the daily business operations. Working Capital management (WCM) is therefore concerned with the control and optimal use of current assets and current liabilities (CL) to maximize value (Smith, 1980; Padachi & Howarth, 2014). CA embody every establishment's asset that are likely to be conveniently sold, used or consumed by normal business processes that will bring about their conversion to cash value in a year's time (Hayes, 2019) and include; Cash, marketable securities, accounts receivable and inventory. Conversely, CL are short term liabilities (STLs) that payable within one year and include Accounts payables, STLs and other payables.

WCM is therefore, fundamental to an establishment's financial health as it helps to keep optimal balance between every component of WC (Watson & Head, 2007). The level of CA is important to an enterprise's liquidity situation and hence an establishment ought to have the capacity to make adequate cash to meet its STLs as they fall due in order to guarantee its going concern status. Thus, proper management of WC is critical to safeguard viability of any business as this will lead to improved performance, sustainability and competitiveness (Banos, 2010).

A larger portion of the total assets (TA) of Small and Medium Enterprise's (SMEs) are tied up in the CA compared to large firms (Peel, Wilson, & Howarth, 2000) with CLs being the major external funding source as such working capital investment

decisions are very important to their stability and performance. Administration of WC directly impinges on financial performance of SMEs as the proportion of the CA held will dictate the business opportunities taken up or missed out on and the returns derived from each investment and as such management need to recognize the crucial contribution it has on performance and come up with policies that suite the nature of their business and that will guarantee optimal returns. WCM embroils a trade-off between profitability as well as risk as decision that brings about surge in profits tend to increase exposure to liquidity risk while choices that tend to lower risks tend also to lower profits.

In Kenya, SMEs experience a myriad of challenges key among them being poor financial performance and volatility of cash flows (CFs) which impinge on their liquidity and as a result their ability to pay their STLs as they fall due and hence many of them collapse. This leads to concerns about the sustainability of this critical sector. This partly has been attributed to poor decision making resulting to poor financial management (Peterson, 2012) and non-optimal control of both short-term investments (STIs) and STLs.

### **1.1.1 Working Capital Management**

WCM is an accounting strategy put in place by enterprises to control and use optimally CA and CL to ensure that it achieves the most effective operations and achieve a desired profitability level taking into account its attitude towards risk and constraints in accessing credit. (Investopedia, 2018). Working capital (WC) are the resources used in routine operations (Adeniji, 2008) and comprise CAs and CLs.

WCM is key to business enterprises operating in Kenya and other emerging markets as most of them are SMEs and have inadequate access to long term capital markets and depend heavily on trade credits, individual financing as well as stocks for their cash financing needs, account receivable and inventory. (Abuzayed, 2011). Effective WCM makes sure that businesses have sufficient finances to meet their obligation as they fall due otherwise their cashflow position will be impinged on negatively. The incongruity between Cash inflows and outflows is a big problem affecting SMEs activities hence proper WCM is critical in ensuring potential negative effects on profitability is controlled (Banos, 2010)

Cash Conversion Cycle (CCC) has been employed to evaluate the effectiveness of WCM policies by managers. CCC is the period between purchases of inventories and the time cash is collected from credit sales less the payables period. It represents the time an establishment's resources are locked in the business cycle. A higher working capital investment is required if the CCC period takes longer and will lead to higher profits due to higher sales, but may equally negatively impact performance if the cost of investing in large inventories outweighs the benefits of holding more inventories (Deloof, 2003). WC policies indicate the risk attitudes of decision makers of a firm as it involves a tradeoff between risk and return, hence they can take various approaches in managing WC i.e. Aggressive, Moderate or conservative WCM approaches.

### **1.1.2 Financial Performance**

It is the level to which financial goals of an establishment have been accomplished. It is the degree to which an establishment's processes have been accomplished as measured financially (Yahaya, 2015). It defines establishment's total financial strength over a particular time period. Similarly, it is employed to match related

establishments within that business or to match businesses when put together. Profit is the excess of returns over costs for a given period.

Financial performance is a very important measure as firms with high profit potential have excess funds to re-invest in the business and hence have lower needs for external financing reducing borrowing costs and taking up new investment opportunities that could increase profit levels. They similarly bear better power to bargain with suppliers of commodities and other short-term finances as compared to loss making firms hence can bargain for longer credit periods and can also sell more on credit. Investigation by Abbadi and Abbadi (2012) have shown a positive substantial link between profit and WC.

Financial ratios are employed in assessing the financial condition of a firm, and these ratios include (i) Liquidity Ratio, (ii) Capital Structure/Leverage Ratios, (iii) Profitability Ratios, and (iv) Activity Ratios. (Bouba, 2011). The study will focus on profitability ratios as performance measure which is the degree to which the establishment can create income (profit) from utilization of establishment's assets (Mwangi & Angima, 2016). Accounting based measures from financial statement may be employed in assessing FP according to (Mwangi & Murigu, 2015). These ratios include Return on Assets (ROA) which is the (net income add interest)/ TAs, Return on Equity (ROE) and gross profit margin. ROA is useful in this investigation as it is a comprehensive assessment of the aggregate performance as it shows profit earned per cash value of invested assets. It points out how effectively a firm uses its financial and real investment to generate profits (Goudreau, 1992).

### **1.1.3 Working Capital management and Financial Performance.**

The trade-off theory proposed by Smith (1980) specified the significance of compromise between profitability and liquidity goals of WCM. They stated that a determined WC approach which is a small investment in CA will result in greater earnings and higher liquidity risk whereas a conventional policy leads to a lower return but with a lower risk exposure. This suggests that there is an optimal level where an entity can balance its costs and benefits to reap maximum profits at manageable levels of risks i.e. where value is maximized. Deloof (2003) in their investigation analyzing the link between investment in WC and firm's viability found that the smaller the WC investment the more profitable the establishment is. They however didn't take into account loss of sales and business interruptions associated with low WC levels.

Petersen and Rajan (1997) scrutinized certain vital concepts of trade credit (TC) and detailed financing advantages in TC, information acquisition, salvaging value from available asset, price discrimination by trade credit as well as transaction costs concepts. Data was sourced from large and small establishments in USA. They established that trade credit is more costly funding choice as compared to bank credit for small establishments and appropriate choice for big establishments thus the choice of financing working capital will influence profitability.

Tauringana and Adjapong Africa (2013) contrary to the traditional WC aggressive policy recommends more investment to be made on working capital resulting to longer CCC which will in-turn improve performance as it will result into increased investment in inventory and receivables. This they say will reduce production



disruption and loss of demand and will result in increased sales as customers are given more time to pay.

The study by Awuor (2014) supports the view by Tauringana and Adjapong (2013) as she opines that WCM bears a direct bearing on the establishment's profitability as well as liquidity and hence management should avoid inadequate or excess outlay in CA as this tends to impair establishment's profitability due to opportunity lost by holding cash instead of investing.

Several existing theoretical investigations support the conventional view that aggressive WC policies enhance profitability (Deloof, 2003) and as such in this investigation we set out to contribute to the body of knowledge in this respect and expect a substantial link between WCM and profitability.

#### **1.1.4 Small and Medium Enterprises (SMEs)**

The importance of SMEs sector in Kenya is underlined in Kenya's vision 2030 – an outline for development intended for changing Kenya into a middle-income economy giving high living standards to its population by the year 2030; where SMEs have been given priority as major growth impetus for achieving vision 2030.

As noted by Kehinde (2010) SMEs do not look at their WC position and most overlook it and do not even bear a standard credit plan. Most of the SMEs in Homabay town do not care about their financial performance (FP) and only concentrate on managing the enterprise and concentrate more on cash receipt, payment and what is in the bank. This has greatly affected their viability as most of them cannot meet their obligations as they fall due hence some are wound up and, in

some cases, miss out on investment opportunities that could have boosted their profits. They at times incur unnecessary storage costs and insurance charges as a result of keeping higher than necessary inventory levels.

This has led to a good number of the SMEs failing to grow to large enterprises as envisaged in their conceptual plans. This confirms findings by Jindrichovska (2013) which found that the threat to SMEs survival are of a financial nature and most SMEs are faced with huge sums of funds usually entrenched in different components of WC which are ill handled with poor, or lack of credit policies in some cases because of absence of financial managing capacity (Njoroge, 2012)

According to 2016 survey by KNBS, Micro, SMEs employ 14.9 Million persons, with the unregistered businesses accounting for 57.8 per cent. Salaried workers in registered enterprises were 4.0 million. Aggregate SMEs constituted 81.1% of employment. MSMEs are substantial in jobs and wealth generation in the economy. In every nation they account for the biggest number of enterprises and basically key in job openings made which constitute one third to two thirds of the private sector's revenue.

In Kenya, MSMEs are establishments involving between 1 and 99 personnel. Under the Micro and Small Enterprises Act of 2002, micro establishments bear a highest annual revenue of Kenyan shilling 500,000 (\$5,000) and give employment to under 10 individuals. Small establishments bear between \$5,000 to \$50,000 annual revenues and employment to 10-49 individuals. Medium establishments -while not encompassed by the Act bear an annual revenue of between \$ 50,000 and US\$8 Million and employment to 50-99 individuals. (Government of Kenya, 2002)

As per the National Chamber of Commerce and Industry, Nyanza branch, micro, SMEs in Homabay County are varied comprising yards typically owned by Jua-Kali crafts persons; they embroil among others carpentry / metal workshops and garages. Another group of SMEs include wholesale and merchandizing stores, advertising bureaus, cyber cafes, specialized and individual service establishments, hotels/restaurants/bars, tailoring shops, saloons, boutiques, day care centers, land buying and job bureaus, dairy/poultry farming, fishing, small scale farming and selling of farm produce, transport business, sand harvesting and many more. A tour of the county confirmed that, indeed these are the major small business enterprises found in the town.

## **1.2 Research Problem**

WCM is a key undertaking to the business owner who has to ensure that the available WC level is neither too huge nor too little for its requirement. Sunday (2011) established that numerous SMEs fail to involve their WC in such a way as to maximize profit and their mixture of management strategies of cash, accounts receivable/payable and stock are largely suboptimal for efficient operations and future growth.

Business enterprises can either choose to minimize working capital or increase it by adopting policies geared towards reducing or increasing sales. Minimizing working capital will improve profitability (Deloof, 2003) by reducing the current assets related holding costs and lowering financing costs, but this if not controlled may result into loss of sales due to stock out and loss of credit customers. Investing heavily on current assets (conservative policy) contrary to existing theory, can also result in increased profitability. Higher stock amounts lower cost of likely interruption in production as well as business loss because of stock outs.

Globally the importance of WCM to businesses has been observed by Hien Tran (2017) using 200 Vietnamese industrial establishments registered in the Hanoi Stock Exchange (HSE) between the years 2010 and 2012 ascertained that WCM substantially impinges on profitability. The results of this study ascertained that SMEs proprietor is able to surge their establishment's profitability by decreasing the period of ARs /inventories /payables to an ideal lowest. Furthermore, a strength assessment of this investigation ascertains that there will be high profitability, with an ideal WC investment level in ARs/inventories/parables.

Kithii (2008) explored the link between WCM and profitability of various registered establishments in the Nairobi Stock Exchange (NSE) to establish how establishments control the WC and similarly explored the link between profitability, CCC and its various elements. They verified that there is substantial positive link between WCM and profitability of Kenyan firms.

Zimmerer, Searborough and Wilson ( 2008) noted that huge number of SMEs fail in their first five operational years, this finding was further supported by a report by Kenya National Bureau of Statistics (KNBS) (2017) that found that nearly 400,000 MSMEs fail to reach their second anniversary and only a small number of them reach their fifth anniversary, raising concerns as to the sustainability of this key sector of the economy.

Central Bank of Kenya (CBK) in a report established that SMEs account for 98 percent of all Kenyan businesses, generate 30 percent of the jobs every year and account for 18 percent of the GDP. This adds impetus to how significant the SME

sector is to the economy. These findings necessitated this study to find out how these limitations can be overcome by providing additional information to enterprises on WCM and its impact on profitability.

This research study will give emphasis to SMEs WC levels as several existing studies on WC have been done on large firms. There was little or obsolete material to enlighten SMEs policy formulation and execution. There had been little documented evidence of the bearing of WCM levels and policies on financial performance of SMEs in Kenya specifically – Homabay County. It was in this regard that this study seeks to establish the bearing of WCM levels on financial performance of SMEs in Homabay County.

### **1.3 Objective of the Study**

The aim of this investigation was to establish the effect of WCM levels on financial performance of SMEs in Homabay Town.

### **1.4 Value of the Study**

The research outcomes of this study would help business owners determine the ideal level of investment in CAs and in selecting suitable WC funding sources. This would help them make informed decisions on WCM with an understanding of its impact on their financial performance.

It would also be meaningful to the government both national and county administrations in the formulation of policies, regulations and guidelines that would help restructure and boost growth and operations in SMEs sector.

The information from the study would also assist the business owners in the designing strategies that are competitive pertaining to WCM and simultaneously improve their profitability and create more value.

This investigation would augment value to the knowledge body on SMEs operating in Peri Urban areas as very little research work has been done on this critical sector that support many livelihoods yet cannot sustain operations to the point of transitioning into large companies. This would also spur budding researchers into further research to help understand various WCM implications to SMEs survival in various parts of the country.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

The part focused on the concepts of WCM levels and their bearing on profitability of establishments as documented both locally and internationally. It highlighted theories and empirical studies and findings and identifies research gaps.

#### **2.2 Theoretical Literature Review**

This section reviews existing paradigms regarding WCM levels and their bearing on FP of establishments.

##### **2.2.1 Cash Conversion Cycle Theory (CCC)**

CCC helps establish WCM policies as it shows the period (days) it would take an entity to transform materials it obtains into cash through assessment of the number of days it holds stock, the duration it takes to receive cash from clients and similarly bearing in mind how long it takes to make payments to suppliers.

CCC would affect the decisions on the amount to invest in client and inventory accounts and the amount of TC since it signifies how WC components and cash flows of an establishment are related. It signifies how many days of operation is funding required. The lengthier the CCC the greater the capital requirement to sustain the same.

Richard and Laughlin (1980) argued that WCM is more vibrant extent of liquidity as it measures cash flows as an outcome of purchase, sales, payment and collection

process undertaken over time as compared to traditional ratios like current, quick acid test and cash ratios which could not give correct material on WC.

### **2.2.2 Tradeoff Theory**

The theory put forth by Smith (1980) ascertained the role of balance between the double aims of WCM which are Profitability and Liquidity. The model shows that a firm determines its ideal amount of holding cash on the basis of comparison of marginal costs and the advantages associate of holding cash. A higher CA investment will lead to a lower ROA as it would not bring sufficient returns, as such the firm must settle on current assets levels having considered all factors that are involved in its daily operations. The business can either choose a conservative approach, moderate approach or an aggressive approach to WCM depending on cash availability and its attitudes towards risk.

This model would help the study in understanding why SMEs need to maintain an optimum level of liquidity which meets its profitability expectations. The greater the WC the more the liquidity of an establishment and therefore the smaller the insolvency risk and as a result a decline in establishment's profitability. Conversely the smaller WC the lesser the establishment's liquidity and hence the higher the loss recording risk. A company may be profitable but with no liquid cash which can result to operation interruptions, the company can also be forced into winding up by its creditors.

### **2.2.3 The Miller- Orr Model**

The paradigm proposed by Miller and Orr (1966) is an important cash managing tool for establishments having indeterminate cash flows. The paradigm gives two control limits; upper and lower as well as point of return. If the establishment's CFs change



erratically and reach the upper limit, then it requires a proper counteractive undertaking to come back to a standard cash equilibrium level and if the establishment's cash flows decline lower than the lower limit, it similarly requires a proper counteractive undertaking.

A firm's cash ought to be upheld at a standard amount, otherwise it could similarly lead to surged cost because of mismanagement, embezzlement or waste; excessive or insufficient cash balance level for example may possibly result in a halt in operations of the establishment (Padachi, 2006). The model is an applicable tool in WCM as it enables the establishment to know when to invest in marketable securities or take up other investment options when excess cash is available and when to cash in the securities as need for cash arises at lower limit.

### **2.3 Determinants of Financial Performance**

Profitability of a firm has a direct impact on the capital level that is put in CA and CL. Factors that impinge on FP can either be internal or external. Internal factors are largely within the control of the business decision makers and their effect on profitability can be controlled and they include corporate governance, firm size, leverage, liquidity (cashflow), WCM (CCC used as its proxy). They mostly result from decisions taken by the company in their operations. External factors are usually outside the control of the firm and they include interest rates, inflation, economic growth, taxation, exchange rate among others aspects.

#### **2.3.1 Size of the Firm**

Large firms would have lower production costs hence make more profits as a result of economies of scale. Agyei et al, (2013). Studies have also shown that larger establishments are similarly required to have many suppliers and have favorable

bargaining position than small firms hence have lower input costs as thus higher profit margins per unit they as they can obtain longer credit periods. (Mongrut et al, 2014).

### **2.3.2 Sales Growth**

Sales is probably the key determinant of WC amounts as the volume of sales and the WC required to achieve those sales are directly related. The assets maintained will depend on the sales target to be achieved. In an investigation undertaken in the US, Kieschnick et al (2006), established that prospective sales growth bears a positive link with the establishment's WCM, which possibly ascertains that establishments seem to maintain higher inventories for prospective sales growth. Previous research undertaken in various nations in varied sectors bears positive as well as negative influence of trade credit on sales growth. Increase in trade credit keeps debtors balance high, an element of working capital. Sales impact the profit as revenue levels is directly impacted by volume of sales having factored in the expenses.

Aslam and Hussein (2017) studied the relation of trade credit and sales growth with respect to a developing nation like Pakistan. Panel data (fixed effect) model was employed in the estimation of results decided on the basis of Housman test. In addition to use of trade credit as independent variable, control variables (age, size and lagged sales growth) were also added in the model. The outcomes of the investigation verified that trade credit has very significant positive bearing on sales growth of the firms proclaiming the recommendation for the use of trade credit to enhance the sales revenues.

### **2.3.3 Leverage**

Gearing influences an establishment's WC requirements as geared enterprises are careful not to increase debt beyond what they can manage and hence will lower their current assets investments. SMEs have low value assets and unpredictable profits hence are considered to be riskier borrowers hence have very limited sources of funds and are forced to borrow from shylocks, friends and other institutions that charge very high interest rates further eating into their profits (Ndagijimana & Oketch, 2014).

### **2.3.4 Economic Growth**

Economic growth is assessed by a country's actual growth rate of GDP. (Lamberson, 1995) reported that small size establishments react in different ways in WCM because of the variations in economic undertakings, this is through surging WC in the event of economic recession. It is similarly ascertained by (Walker, 1991) that the economic situation has a substantial bearing on the debtors' buying power, availability of credit and operational costs hence influence the performance of all firms. Since this is a factor that affects all the small firms. This factor will not be used in our model as the duration of SMEs operation in Kenya is relatively short to realize its impact.

### **2.3.5 Working Capital Management**

WCM embroils the management of receivables, payables, inventory and Cash. Faster collection of amounts owed will boost cash availability which can be reinvested in the business to increase profits or put into other revenue generating ventures as they arise. Uncontrolled collection policy can also be detrimental as customers could be lost in the process reducing sales hence proper management of receivables is required. Proper management of inventories will ensure no stock outs and minimal holding

costs hence profits will be maximized as insurance costs are minimized and sales improved.

Proper payables management is critical as goodwill could be created in the process resulting into favorable terms and discounts and credit could also be obtained. All these WCM components work together to ensure proper utilization of cash and proper balance is maintained so as not to lose investment opportunities when they arise and at the same time not to run the risk of not being able to pay when they fall due.

#### **2.4 Empirical Literature Review**

Previous investigations on WCM dealt mostly with developed markets and in most cases on large companies, giving mixed results because of different time lengths and different measurement of variables.

Pedro Juan and Martinez (2007) set out to determine the bearing of WCM on profitability for a panel of 8,872 Spanish SMEs between the years 1996-2002. ROA was adopted as the dependent variable, and WCM as the independent variable as measured using ACP, APP, CCC. Control variables employed were sales growth and establishment's size. They found a substantial adverse relationship between SMEs profitability and number of days of accounts receivable and days of inventory. They however could not ascertain if the number of APP impinges on SMEs ROA. This study concludes that leaders are able to create value by decreasing their inventory and number of days for which their accounts are outstanding and also by reducing the CCC.

Ben Le (2019) explore the bearing of WCM on an establishment's valuation, risk as well as profitability with a panel data methodology on 497 establishments encompassing the period 2007-2016 and fixed effects regressions. They tried to ascertain if a decrease in Net working capital (NWC) is related to greater firm value. He postulated that an establishment's value may be derived by discounting Future cash flows. The dependent variables used in establishing the link between WCM and performance was return on invested capital (ROIC) while the independent variables used were Components of CCC. He used stock return volatility as the control variable. The study confirmed a substantial adverse link between NWC and firm valuation, profitability and risk. They concluded that WCM is key for establishments not having as much of access to capital and is important when establishments are increasing their investments in economic regaining.

Maria Amelia Pais et al (2015) using panel regression (fixed effects) looked at the WCM and its bearing on profitability of SMEs for 6,063 Portuguese SME firms which they sampled using instrumental variables covering a period 2002-2009 and ascertained that decline in the held inventory and the period it takes establishments to pay their commercial bills and to receive payments from its clients are linked with greater profitability. This supported the view that the application of a more vibrant WCM procedures boosts business's profitability.

Ndagijimana and Okech (2014) investigated the determining factors of WCM Practices in SMEs in Nairobi by explicitly inspecting how accounts receivable, accounts payable and CCC affect WCM in SMEs in Nairobi, Kenya. Their investigation verified a substantial positive link between accounts receivable/payable

and CCC, WCM practices. They similarly found out that SMEs are normally perceived to be riskier than larger corporates. In most cases, SMEs do not have adequate collateral to provide to mainstream banking institutions to enable them access credit. Also, the lack of proper structures and book keeping become a challenge in assessing the operations of SMEs. Consequently, majority of the SMEs get their funding from friends, micro financing institutions (MFIs) and shy-locks that inappropriately charge relatively huge interest with various sections not indicated during the period of proceeding the funding assistance. This affects SMEs adversely in the course because of inflated interest rates charged since it becomes expensive to service thereby causing a liquidity problem.

Darush and Peter (2014) looked at the bearing of CCC on establishment's performance (profitability) of Swedish SMEs between the years 2008 and 2011. In their investigation using apparently unlinked regression (SUR) model, they analyzed a cross section panel data encompassing 13, 797 SMEs undertaking four different kinds of businesses and found that CCC substantially impinges on profitability. They also noted that size, age and business affiliations substantially impinge on performance. They concluded that improved working capital policy could enhanced establishment's profitability through CCC reduction hence additional value creating to the establishment.

Valipour, Moradi and Farsi (2012) employed correlation and multiple regression approach to ascertain the bearing of firm features on WCM. The sample encompassed 83 establishments recorded on Tehran Stock Exchange between the years 2001 and 2010. Establishment's features encompass profitability, establishment size, operating

CF, sale growth and current/quick/ debt ratios. The analysis firstly encompassed the link between the establishment's characteristics and CCC were explored in each establishment and the outcomes ascertained that profitability, establishment size, operating cash flow, sale growth and current/quick/ debt ratios impinge on the establishment's WCM. Secondly, the establishments were split into 3 kinds: large, medium and small. After that the link between establishment's characteristics and CCC was explored independently. The outcomes ascertained that effective aspects in big establishments entailed profitability, OCF, sales growth and debt ratio. In medium establishments, the effective aspects entailed establishment's size, profitability, sales growth and debt ratio, and small establishments were impinged on by sale growth, profitability and current/quick/debt ratios. This investigation evidently ascertains that, in Tehran, sales, profitability and debt are the major aspects influencing WCR for establishments irrespective of their size.

Ahmed Elbadry (2018) sought to ascertain the determining factors of WC in the SMEs in Egypt and elucidate its bearing on WCM by inspecting the link between the key determining factors of WCM and every aspect of WCM. They analyzed data from 138 SMEs in Egypt and funded by national bank of Egypt between the years 2010 and 2013 and with OLS regression models to inspect the bearing of WC determining factors on WC as measured by CCC, they found an adverse and substantial bearing of SMEs' tangible fixed assets, profitability and leverage on WC. They similarly found that industry embodies a substantial determinant of WC in SMEs in Egypt and that most SMEs follow an aggressive policy in managing WC.

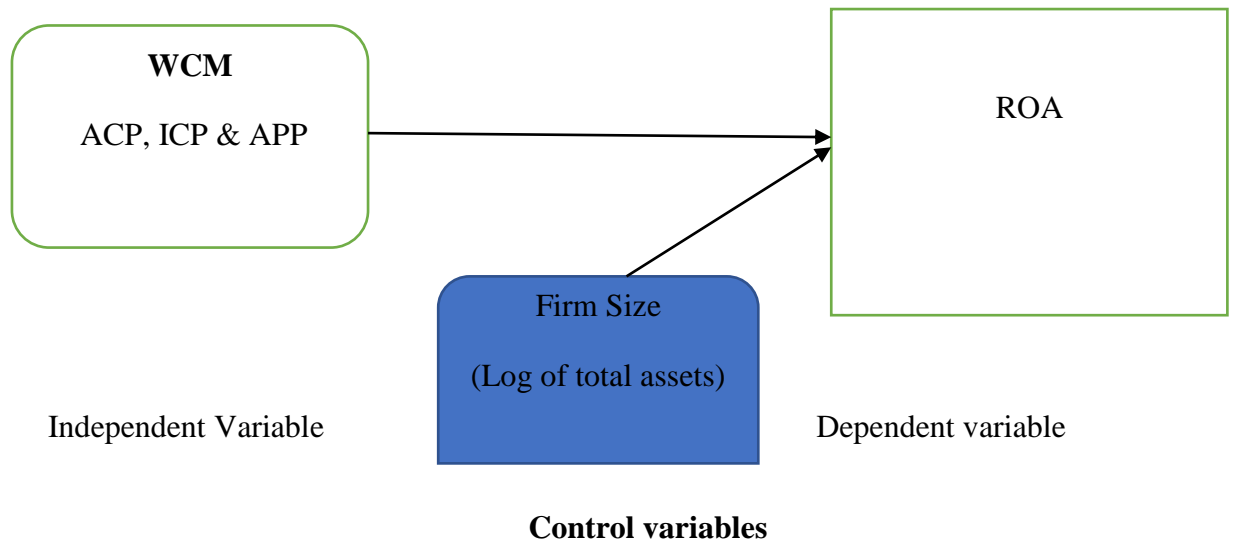
Monika (2013) found out that achieving desired liquidity for a firm requires structures and qualified personnel to manage the systems. MSMEs generally do not have the capacity to hire and maintain such staff. If the MSME survives and graduates to the next level with increased resources, it was able to put in place requisite structures which would then enhance the ability to monitor and control liquidity appropriately. Large companies have the ability to set up adequate policies and to employ qualified staff to ensure success in their working capital management.

## **2.5 Conceptual Framework**

Miles and Huberman (1994) pointed out that a conceptual framework elucidates the main issues studied either graphically or in any form. It encompasses the key factors or variables of an investigation and their supposed associations (Robson, 1993). Robson similarly contends that establishing a conceptual framework helps one to be clear regarding what an investigator thinks they are undertaking. It aids in selection of which connections are to be critical and hence, what information is going to be sourced and examined. This study undertakes to identify key variables of WCM practices and their bearing on profitability of SMEs in Homabay town.

Selection of the variables was swayed by earlier investigations. The ratios relating to WCM that will be computed from the data to be gathered for the purpose of this study are: ROA, ARs period (ARP), inventory conversion period (ICP), Natural log of TA and leverage. ROA is utilized as the dependent variable to represent financial performance. Establishment's size assessed as normal record of TA is our control variable and WCM as measured by CCC, ACP, ICP and APP will be our independent variables. This relationship is presented in the Figure 2.1:





**Figure 2.1: Conceptual Framework**

## **2.6 Summary of the Literature Review**

From the discussion theoretical and empirical review of the existing literature, it was evident that several researchers have tried to ascertain the bearing of WCM levels on FP of business entities. It was also noted that these researchers focused mostly on large firms and not the SMEs in operation in emerging markets such as Kenya creating a research gap that calls for this study to be done to fill it. This investigation linked the Knowledge Gap on SMEs operating in Peri-urban Areas.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

This part encompassed the research approaches that the investigation adopted to fulfil the objective of the investigation. These include research design, population of study, sample design, data collection instrument, and data analysis.

#### **3.2 Research Design**

This investigation utilized a descriptive research design whose data was derived from secondary sources (published and unpublished statements) and primary data obtained from sample survey results generated from questionnaires which was administered to the selected participants through one on one interviews and through email for some.

As per Mugenda and Mugenda (2003) a descriptive survey research is perhaps the most appropriate approach in analyzing original material for description of a relatively big population. Further, Ndagijimana and Okech (2014) noted that this approach yields the best results as participants would provide the necessary feedback without undue inconvenience and therefore facilitates coverage of the desired sample in a timely manner.

#### **3.3 Population of Study**

As noted by Ngechu (2004) a population is a distinct group of individuals, services, features, and happenings, set of objects or family units that are being inspected. The units of analysis were the members or population elements. The target population for this investigation are all formally registered SMEs operating within Homabay county and based in Homabay town that have been operational for at least three years.

According to the KNBS survey of 2016, Homabay County has 48,000 licensed MSMEs and 134,400 unlicensed MSMEs. The licensed SMEs are made up of 93.6% Micro sized enterprises, 5.9% small, and 0.5% Medium enterprises. The target population are 334 SMEs operating in Homabay town and that have been in operation for at least three years (between 2016-2018) of the 3,072 formally registered and licensed SMEs.

### 3.4 Sample

The investigation adopted stratified sampling techniques to ensure that SMEs partaking various activities are demonstrated. Orodho (2003) noted that stratified sampling is suitable for a population from which a sample is to be taken that does not make up a homogenous set.

A sample size of 10% - 30% was adopted as this was considered as adequate representation as established by Mugenda and Mugenda (2003). Hence, a sample of 100 SMEs was used for this investigation as shown in Table 3.1. To realize this research for ease of administration the strata for this study was comprised of wholesale and retail, Transport and logistics and distributors, Manufacturing, engineering and construction, financing and services sectors.

**Table3.1: SME Sample Distribution per Sector**

| Sector                                    | No. of Businesses | Sample     |
|---|-------------------|------------|
| Manufacturing, Engineering & Construction | 45                | 14         |
| Wholesale & Retail                        | 158               | 47         |
| Distribution, Transport & Logistics       | 7                 | 2          |
| Finance & Service Sectors                 | 124               | 37         |
|   | <b>334</b>        | <b>100</b> |

### **3.5 Data Collection**

Creswell (2003) terms data collection a mechanism by which material is sourced from the picked themes of a research. Both secondary and primary data was gathered. These data were sourced using self-administered questionnaires to licensed businesses that meet the definition of SMEs according to the SMEs act and that have been operating for a minimum of three years. The investigation utilized data collection forms to source the data of dependent and independent variables. Data was collected for the period 2016 to 2018.

### **3.7 Data Analysis**

Both quantitative and qualitative methods was adopted for data processing and analysis. Quantitative data was processed using regression and correlation analysis to ascertain the link between WCM and profitability using Statistical Package for Social Sciences (SPSS). Inferential statistics which include ANOVA and Correlation analysis was employed to establish the link between change of dependent variable (ROA) as a result of change in each of the independent variables (ACP, ICP & APP).

Regression analysis was employed to reveal the dependence of profitability of SMEs on WCM. F-statistics values in the model was used to test the statistical significance of the model and F-statistics figures in the ANOVA would verify the importance of every component in the model.

For qualitative measurement, data was recorded and organized in a number of thematic areas on the basis of the research objective and interpretation of the data drawn.

### 3.7.1 Analytical Model

The OLS regression models are the typically employed paradigms in reviewing the associations between the investigation variables (Denham, 2010). This study employed panel data analysis including pooled OLS multiple regression and fixed effect model to analyze the data that was sourced and then used to generate conclusions from various econometric results. This is important as various sectors samples are heterogeneous hence eliminating the possibility of bias results. The study excluded external variables. The analytical model to be employed is expressed as under;

$$ROA = \alpha + \beta_1(ACP) + \beta_2(ITP) + \beta_3(APP) + \beta_5SIZE + *$$

The above equation stipulates that financial performance (profitability) measured as ROA is a function of account collection period, inventory turnover period, accounts payable period.

$\alpha$  – a Constant

$\beta_1$ -  $\beta_7$  – Regression coefficients

\* - Error term

#### 3.7.1.1 Measurement of variables

##### Dependent Variable

ROA was our dependent variable (a measure of performance). We measure ROA as net income divided by Total assets.

$$ROA = (\text{Net profit})/\text{Total assets}$$

### **Independent Variables**

- 1.) Average collection period (ACP) -  $(\text{Average Account Receivables} / \text{Credit Sales}) * 365$
- 2.) Inventory turnover period (ITP) –  $(\text{inventory} / \text{Cost of sales}) * 365$
- 3.) Average payable period (APP) -  $(\text{Payables} / \text{Purchases}) * 365$

### **Control Variables**

Size - Log (TA)

#### **3.7.1.2 Summary and Conclusion**

This study was motivated by the increasing significance of the SMEs as a way jobs creation and revenue for the youth and their major contribution to the economy. WCM has been a key challenge to SMEs particularly in the emerging markets like Kenya.

This investigation established the effect of WCM levels on SMEs' profitability and shows how they impact on policies taken by business managers to efficiently manage their WC.

## CHAPTER FOUR

### DATA ANALYSIS, RESULTS AND DISCUSSION

#### 4.1 Introduction

This part focused on data analysis, interpretation, and presentation. The objective of the study was to examine the effect of WCM levels on the FP of SMEs in Homabay town. The chapter centered on a discussion of descriptive statistics, diagnostic tests, regression analysis and correlation analysis. The chapter then finalized with a section on the discussion of the outcomes.

#### 4.2 Response Rate

The study used a sample of 100 small and medium enterprises within Homabay town and this translated into a response rate of 86%. As per Mugenda and Mugenda (1999), in research a response rate of 50 percent is sufficient for analysis and reporting; a rate of above 60 percent is good or excellent. The response rate is shown in table 4.1.

**Table 4.1: Response Rate**

| <b>Respondents</b> | <b>Frequency</b> | <b>Percent (%)</b> |
|--------------------|------------------|--------------------|
| Respondents        | 86               | 86%                |
| Non-respondents    | 14               | 14%                |
| <b>Total</b>       | <b>100</b>       | <b>100.0%</b>      |

Table 4.1 shows that the research recorded a response rate of 86 percent which was good for data analysis and therefore was enough for data analysis and interpretation.

#### 4.3 Descriptive Statistics

The variables to be measured in this investigation are ROA, average collection period (ACP), the inventory turnover period (ITP), Size, and the average payable period

(APP). Table 4.2 points out the means and standard deviation (SD) of the variables under investigation. The mean column is a representation of the average values for each of the variable. Numerical dataset with higher mean values will be considered to be having a higher influence. The standard deviation will be used to indicate how far the numerical values are distributed from the mean and the notion applied will be that the further a numerical value is from the mean, the higher the volatility.

**Table 4.2: Descriptive Statistics**

| <b>Descriptive Statistics</b> | <b>N</b> | <b>Minimum</b> | <b>Maximum</b> | <b>Mean</b> | <b>Std. Deviation</b> |
|-------------------------------|----------|----------------|----------------|-------------|-----------------------|
| ROA                           | 258      | .00            | 199.75         | .8553       | 12.43176              |
| ACP                           | 258      | .00            | 365.00         | 44.3766     | 72.72952              |
| ITP                           | 258      | .00            | 443.67         | 56.7176     | 89.89649              |
| APP                           | 258      | .00            | 379.65         | 56.1440     | 65.94024              |
| Size                          | 258      | 8.10           | 20.07          | 14.9944     | 1.74666               |

From the findings in Table 4.2, SMEs receive payments for sales after 44 days with a SD of 73 days and they take an average of 57 days to sell their stocks. APP had a mean of 56 with a SD of 66 respectively meaning that SME's took an average duration of 56 days to clear their payables. The return on assets (ROA) streamed a mean of .85 and a SD of 12.43. This meant that on average SME's in Homabay County were able to make a return of 0.085% on the capital invested.



#### 4.4 Background Information

This section sought to discuss the findings on respondents' and SME's background. Items discussed included forms of business ownership, gender of the respondent, position of the respondent at the firm. Preparation of financial records, financial records maintained and period of budget preparation.

##### 4.4.1 Form of Business Ownership

The study sought to determine the forms of ownership that were operated by the SMEs. The study established sole proprietorship and limited companies were the major forms of ownership employed by the SMEs as presented in Table 4.3

**Table 4.3: Forms of Business Ownership**

|                     | <b>Frequency</b> | <b>Percent</b> |
|---------------------|------------------|----------------|
| Sole proprietorship | 7                | 8.13           |
| Limited company     | 79               | 91.87          |
| <b>Total</b>        | <b>86</b>        | <b>100.00</b>  |

Table 4.3 indicates that a frequency of 7 in the form of ownership of SMEs in Homabay was projected and this translated to 8.13%. This was interpreted to mean that not many SMEs in Homabay embraced the sole proprietorship type of ownership rather most of the SMEs were limited companies which had a frequency of 79 and this translated into 91.87% to mean that a bigger percentage of the SMEs in Homabay embraced the limited company form of ownership as opposed to a sole proprietorship.

##### 4.4.2 Gender

The investigation sought to ascertain the gender of the working employees of the SMEs and their projection was as pointed out in Table 4.4

**Table 4.4: Gender**

|              | <b>Frequency</b> | <b>Percent (%)</b> |
|--------------|------------------|--------------------|
| Male         | 56               | 65.11              |
| Female       | 30               | 34.89              |
| <b>Total</b> | <b>86</b>        | <b>100.00</b>      |

Table 4.4 shows that the male gender streamed a frequency of 56 with a representation of 65.11% while the female gender projected a 30 frequency with 34.89%. This 70/30 gender threshold portrayed that majority of investments in SMEs in Homabay town is dominated by male.

#### **4.4.3 Designation of the Respondent**

The investigation sought to determine the positions that the research participants held at the different SMEs that were in operation. Table 4.5 shows the distribution on the same.

**Table 4.5: Position of the Respondents**

|              | <b>Frequency</b> | <b>Percent</b> |
|--------------|------------------|----------------|
| Owner        | 14               | 16.3           |
| Manager      | 57               | 66.3           |
| Other        | 15               | 17.4           |
| <b>Total</b> | <b>86</b>        | <b>100.0</b>   |

The investigation vouched for an indication of the designation of the research participants involved in the investigation. The owners of the SMEs were estimated to be at a frequency of 14 with a projected percentage of 16.3%. The remaining

percentages were distributed between managerial positions and other positions with a frequency of 57 and 15 respectively. SMEs led by managers projected a higher percentage at 66.3% and this therefore meant that most SMEs had managers who formed a major part of the respondents.

#### **4.4.4 Preparation of Financial Records**

The investigation sought to verify whether the SMEs in operation prepared financial records. Table 4.6 shows the analysis.

**Table 4.6 Preparation of Financial Records**

|                  | <b>Frequency</b> | <b>Percent</b> |
|------------------|------------------|----------------|
| Yes -Complete    | 36               | 42             |
| Yes - Incomplete | 45               | 52             |
| No               | 5                | 6              |

From the findings as per Table 4.6 42% of the SMEs in Homabay town prepared complete financial statements that is P&L, Balance sheet and Asset schedules, 52% had the financial records in one form or the other in different books but not in the form of financial statements as required the standards, while 6% maintained not enough records to aid preparation of financial records.

#### **4.4.5 Financial Records Maintained**

The investigation sought to ascertain the type of financial records that were maintained by the SMEs. From the table 4.7 below, the financials records maintained by the SMEs ranged from a P&L, a balance sheet, asset register, bank reconciliation, stock inventory records and the list of debtors and creditors.

**Table 4.7: Financial Records Maintained**

| <b>Financial Record</b>          | <b>Frequency</b> | <b>Percent (%)</b> |
|----------------------------------|------------------|--------------------|
| P&L accounts                     | 71               | 83.0               |
| Balance sheet                    | 36               | 41.8               |
| Asset register                   | 57               | 66.3               |
| Bank reconciliation              | 43               | 50.0               |
| Stock Inventory records          | 36               | 41.86              |
| List of debtors and<br>creditors | 50               | 58.1               |

As Table 4.7 points out 83% of all SMEs in Homa Bay maintained a P&L account at a frequency of 71 this was meaningful in tracking the financial performance of the SMEs and the overall conclusion was that only a few SMEs did not keep a P&L accounts this being 17%. % of the SMEs similarly used a balanced sheet to monitor the financial pulse of their business (the information from companies that did not have was obtained from various records they maintained) and similarly to track the assets and liabilities of their company. An asset register was similarly used for financial maintenance by the SMEs by a frequency of 57 at the score of 66.3%. The asset register was maintained by SMEs in a bid to enable their business to keep track of their status in terms of procurement, price, depreciation and current value of the assets they have. Bank reconciliation efforts were similarly placed into consideration with 50% of the SMEs in Homabay operating bank reconciliation at a frequency of 43. Stock inventory records were similarly kept by SMEs at a frequency of 36 which projected a 41.86% additionally the list of creditors and debtors were similarly part of

the efforts of maintaining financial records at a frequency of 50 and a percentage of 58.1%.

#### **4.4.5 Period of Budget Preparation**

The investigation sought to ascertain how often the SMEs prepared financial records. The study tested whether the SMEs prepared budgets daily, weekly, monthly, quarterly and annually. Table 4.7 point out the outcome.

**Table 4.7: Period of Budget Preparation**

| <b>Period</b> | <b>Frequency</b> | <b>Percent</b> |
|---------------|------------------|----------------|
| Daily         | 7                | 8.3            |
| Weekly        | 22               | 25.0           |
| Annually      | 57               | 66.7           |
| Total         | 86               | 100.0          |

From the findings as per Table 4.7, the budget preparation period for the SMEs were done daily, weekly and annually. 8.3% of the SMEs in Homabay prepared their budgets daily with a low frequency of 7 while 25.0% of the SMEs prepared their budgets weekly at a moderate frequency of 22. Additionally, annual preparation of budgets was highly embraced by SMEs in Homabay county with a high frequency of 57 at 66.7%. This meant that most SMEs prepared their budgets annually. The benefit accrued from this is that most SMEs could keep track of their financial performance on an annual basis and project an advance financial plan and budget that would enhance their operation for the following financial year of their business operation

#### 4.5 Normality Test

Kurtosis and skewness is a measure of normality and were used to form part of the descriptive statistics that were used in the study. For this study, skewness was used to measure the distribution of data. The rule of thumb applicable in this case is that: If skewness is below -1 or above 1, the distribution is highly skewed. If skewness is between -1 and -0.5 or between 0.5 and 1, the distribution is moderately skewed. If skewness is between -0.5 and 0.5, the distribution is approximately symmetric. While kurtosis was categorized as Mesokurtic=3 which was equated to a statistic kurtosis similar to that of the normal distribution. Another category was the Leptokurtic (*Kurtosis* > 3) which connotes that when the distribution is longer, tails are fatter and the peak is higher and sharper than Mesokurtic, which implies that data are heavy-tailed or profusion of outliers. Additionally the platykurtic: (*Kurtosis* < 3) was used to point out that the distribution is shorter and tails are thinner than the normal distribution

**Table 4.8: Normality Test**

|                         | Skewness  |            | Kurtosis  |            |
|-------------------------|-----------|------------|-----------|------------|
|                         | Statistic | Std. Error | Statistic | Std. Error |
| Years in operation      | 2.007     | 0.637      | 2.970     | 1.232      |
| Business Ownership      | -3.464    | 0.637      | 12.000    | 1.232      |
| Number of employees     | 0.871     | 0.637      | 0.064     | 1.232      |
| Gender                  | 0.000     | 0.637      | -2.444    | 1.232      |
| Designation             | 0.000     | 0.637      | 0.733     | 1.232      |
| P&L ac                  | 2.055     | 0.637      | 2.640     | 1.232      |
| Balance Sheet           | 2.055     | 0.637      | 2.640     | 1.232      |
| Asset Register          | 0.812     | 0.637      | -1.650    | 1.232      |
| Bank Reconciliation     | 0.000     | 0.637      | -2.444    | 1.232      |
| Stock Inventory Records | -0.388    | 0.637      | -2.263    | 1.232      |

|  |        |       |        |       |
|--|--------|-------|--------|-------|
| List of Debtors and creditors            | 0.388  | 0.637 | -2.263 | 1.232 |
| Frequency of preparing financial records | -1.455 | 0.637 | 1.388  | 1.232 |
| ROA                                      | 2.314  | 0.637 | 2.167  | 1.232 |
| ACP                                      | -3.236 | 0.637 | 12.000 | 1.232 |
| ITP                                      | 0.913  | 0.637 | 0.071  | 1.232 |
| APP                                      | 0.873  | 0.637 | -2.777 | 1.232 |
| SIZE                                     | -0.311 | 0.637 | -2.113 | 1.232 |

The variables with a skewness is below -1 or above 1, pointed out that the data distribution is highly skewed. Therefore, the years in operation (2.007), business ownership (-3.644), P&L account (2.055), balance sheet (2.055), ROA (2.314), ACP (-3.236) and frequency of preparing financial records (-1.455) exhibited a high skewed distribution. The variables with a skew between -1 and -0.5 or 0.5 and 1 had a moderate skew. For this Study, the key variables under study had a moderate skewness of APP (0.873), ITP (0.913), asset register (0.812) and number of employees (0.871) hence the data acquired represented a normal population distribution.

#### **4.6 Correlation Analysis**

To determine the strength of relation between the variables the study employed the use of Pearson's coefficient of correlation. Pearson's coefficient of correlation measures the linear association between any two variables and takes values from the range of -1 and 1 with positive 1 indicating a strong positive link and -1 indicating a strong adverse link. We expect that if proper and efficient management of working capital improves profitability then a adverse link between the components of WC and ROA will be ascertained. The outcomes of the correlation are as presented in table 4.9

**Table 4.9: Correlation Analysis**

|             |                     | <b>ROA</b> | <b>ACP</b> | <b>ITP</b> | <b>APP</b> | <b>Size</b> |
|-------------|---------------------|------------|------------|------------|------------|-------------|
| <b>ROA</b>  | Pearson Correlation | 1          |            |            |            |             |
|             | Sig. (2-tailed)     |            |            |            |            |             |
|             | N                   | 258        |            |            |            |             |
| <b>ACP</b>  | Pearson Correlation | -.038      | 1          |            |            |             |
|             | Sig. (2-tailed)     | .538       |            |            |            |             |
|             | N                   | 258        | 258        |            |            |             |
| <b>ITP</b>  | Pearson Correlation | -.041      | -.115      | 1          |            |             |
|             | Sig. (2-tailed)     | .512       | .065       |            |            |             |
|             | N                   | 258        | 258        | 258        |            |             |
| <b>APP</b>  | Pearson Correlation | -.049      | .247**     | -.108      | 1          |             |
|             | Sig. (2-tailed)     | .436       | .000       | .083       |            |             |
|             | N                   | 258        | 258        | 258        | 258        |             |
| <b>Size</b> | Pearson Correlation | -.246**    | .043       | .342**     | .297**     | 1           |
|             | Sig. (2-tailed)     | .000       | .493       | .000       | .000       |             |
|             | N                   | 258        | 258        | 258        | 258        | 258         |

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

From the findings as picked in Table 4.9, ACP was found to have an insignificant association with financial performance SMEs in Homabay town since it provided negative correlation value of -0.038 with a *P* – value of 0.538 which seem to be  $>0.05$ . ITP also had an insignificant correlation towards return on asset given a weak  $p = 0.512$  and negative correlation of -0.041. Likewise, APP had a weak  $p$  – value of 0.436  $>0.05$  and negative correlation of -0.049 which could imply that account payable period is not significantly associated with ROA of SMEs operating within Homabay town. On the other hand, the size of SMEs produced a significant



correlation on ROA with a value of  $-0.246$  and a strong  $p$  – value of  $0.000$  meaning that SMEs in Homabay county performed better when their scale of operations as measured by assets held was smaller indicating that smaller business units are easier to manage hence more profitable compared to larger ones in Homabay Town.

#### 4.7 Regression Analysis

The study conducted a regression analysis to help ascertain whether ACP, ITP, APP and size had an bearing on the ROA of SMEs. The regression was done at 95% significance level. The tables below of model summary, ANOVA and Regression coefficients output presents the findings from the data analyzed.

##### 4.7.1 The Bearing of ACP, ITP and APP on Financial Performance

**Table 4.10: Model Summary**

| Model | R                 | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|-------------------|----------|-------------------|----------------------------|
| 1     | .074 <sup>a</sup> | .006     | -.006             | 12.47026                   |

a. Predictors: (Constant), APP, ITP, ACP)

The model summary in Table 4.10 points out that the coefficient of determination  $R$  square is  $0.006$ . This implies that  $0.60\%$  of the variation in ROA is due to the predictor variables captured in the study. This similarly implies that  $99.4\%$  of the variation in ROA is attributed to the measurements of error and other aspects that could have had a bearing on the ROA of SMEs but not captured in the study.

**Table 4.11: Analysis of Variance**

|   | <b>Model</b> | <b>Sum of Squares</b> | <b>df</b> | <b>Mean Square</b> | <b>F</b> | <b>Sig.</b>       |
|---|--------------|-----------------------|-----------|--------------------|----------|-------------------|
| 1 | Regression   | 220.136               | 3         | 73.379             | .472     | .702 <sup>b</sup> |
|   | Residual     | 39498.864             | 254       | 155.507            |          |                   |
|   | Total        | 39719.000             | 257       |                    |          |                   |

a. Dependent Variable: ROA

Table 4.11 depicts the variables used in the analysis of the variance by using regression and residual models. From the findings, the  $F$  – significance value of  $p$  obtained was 0.702 which is above 0.05 hence the model points out that the predictor variables used are unsubstantial in predicting financial performance and therefore the study should fail to reject the null hypothesis that ACP, ITP and APP have no substantial influence on financial performance of SMEs in Homabay town.

**Table 4.12: Coefficients**

|   | <b>Model</b> | <b>Unstandardized Coefficients</b> |                   | <b>Standardized Coefficients</b> | <b>T</b> | <b>Sig.</b> | <b>95.0% Confidence Interval for B</b> |                    |
|---|--------------|------------------------------------|-------------------|----------------------------------|----------|-------------|--|--------------------|
|   |              | <b>B</b>                           | <b>Std. Error</b> | <b>Beta</b>                      |          |             | <b>Lower Bound</b>                     | <b>Upper Bound</b> |
| 1 | (Constant)   | 1.981                              | 1.225             |                                  | 1.617    | .107        | -.432                                  | 4.394              |
|   | ACP          | -.006                              | .011              | -.033                            | -.507    | .613        | -.027                                  | .016               |
|   | ITP          | -.007                              | .009              | -.050                            | -.787    | .432        | -.024                                  | .010               |
|   | APP          | -.009                              | .012              | -.046                            | -.709    | .479        | -.033                                  | .015               |

a. Dependent Variable: ROA

From the findings given in Table 4.12, it can be construed that holding all other variables constant financial performance will be 1.981. All the predictor variables used in the model namely ACP, ITP, as well as APP were found to have an unsubstantial bearing on financial performance of SMEs since they produced a weak  $p$  – value of  $>0.05$ .

#### 4.7.2 The Bearing of Firm Size on the Relationship between ACP, ITP and ATP on Financial Performance

**Table 4.13: Model Summary**

| Model | R                 | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|-------------------|----------|-------------------|----------------------------|
| 1     | .255 <sup>a</sup> | .065     | .050              | 12.11485                   |

a. Predictors: (Constant), Size, ACP, ITP, APP

The model summary illustrated in Table 4.13 points out that the coefficient of determination  $R$  square was 0.065. This implies that with the introduction of the control variable the model goodness fit improved 0.065. This has implication that all the predictor variables used in the model are able to explain about 6.5% of the variation in ROA. This similarly implies that 93.5% of the variation in ROA is attributed to the measurements of error and other aspects that could have had a bearing on the ROA of SMEs but not captured in the study.

**Table 4.14: ANOVA**

| Model |            | Sum of Squares | df  | Mean Square | F     | Sig.              |
|-------|------------|----------------|-----|-------------|-------|-------------------|
| 1     | Regression | 2586.263       | 4   | 646.566     | 4.405 | .002 <sup>b</sup> |
|       | Residual   | 37132.736      | 253 | 146.770     |       |                   |
|       | Total      | 39719.000      | 257 |             |       |                   |

a. Dependent Variable: ROA

b. Predictors: (Constant), Size, ACP, ITP, APP

Table 4.14 presents a summary of ANOVA output when the control variable size is included. From the findings, the model's  $F$  – statistics is 4.405 and  $p$  value is 0.002 which is below 0.05 hence the all the predict variables used in model are substantial in determining financial performance of SMEs. This could similarly have an indication that the study should reject the null hypothesis that ACP, ITP, APP together with size do not influence financial performance of SMEs in Homabay town.

**Table 4.15: Coefficients**

| Model      | Unstandardized Coefficients |            | Standardized Coefficients | t      | Sig. | 95.0% Confidence Interval for B |             |
|------------|-----------------------------|------------|---------------------------|--------|------|---------------------------------|-------------|
|            | B                           | Std. Error | Beta                      |        |      | Lower Bound                     | Upper Bound |
| (Constant) | 29.841                      | 7.040      |                           | 4.239  | .000 | 15.976                          | 43.705      |
| 1 ACP      | -.005                       | .011       | -.032                     | -.507  | .612 | -.027                           | .016        |
| ITP        | .008                        | .009       | .056                      | .835   | .405 | -.010                           | .026        |
| APP        | .009                        | .013       | .048                      | .712   | .477 | -.016                           | .034        |
| Size       | -1.980                      | .493       | -.278                     | -4.015 | .000 | -2.951                          | -1.009      |

a. Dependent Variable: ROA

Furthermore, the outcomes of coefficients in Table 4.15 point out that only firm size was able to influence financial performance of SMEs substantially since it provided a coefficient value of -1.980 supported by a strong  $p$  – value of 0.000. This could be an indication that small sized SMEs in Homabay town tend to perform better financially

as compared to larger SMEs, probably due to the fact that they are easily managed as compared to the large ones. However, ACP, ITP, and APP still did not have substantial bearing on ROA of business in Homabay town.

#### **4.8 Discussion of the Findings**

The study sought to find out the bearing of WCM on performance of SMEs. Using ROA as the independent variable and ACP, ITP and APP as the independent variables, the study ascertained a weak adverse correlation between ACP, ITP & APP and the ROA that were unsubstantial in the model indicating that a change these variables would not have a substantial bearing on financial performance of SMEs in Homabay town. These findings contradicts the outcomes from the study carried out by Hien Tran (2017) on 200 Vietnamese industrial ascertainties registered in the Hanoi Stock Exchange (HSE) between the years 2010 and 2012 where they ascertained that WCM substantially impinges on profitability and ascertained that SMEs proprietor can increase their ascertainties profitability by decreasing the period of ARs and inventories to an ideal lowest. APP had a weak adverse correlation of (-0.49) which was however unsubstantial ( $p=.436$ ) to ROA point out ing that a delay in payment of debts has no bearing on performance. This finding supports similar finding in a study done by Deloof, (2003) which pointed out that APP had an unsubstantial bearing on performance as evaluated by ROA.

The size of SMEs had a adverse correlation to ROA (-1.980) meaning that the smaller the size of SMEs the better the performance. It was similarly ascertained to be substantial in influencing financial performance ( $p=0.000$ ) because SMEs in Homabay do not have sufficient systems to manage properly huge asset base hence

better smaller units' performance could probably be attributed to reduction in pilferages and holding costs.

The coefficient of determination (R square) was ascertained to be 0.006, when the independent variables were regressed against the ROA pointing out that ITP, ACP & APP variables in the model accounted for only 0.6% of the change in the performance. All these variables were ascertained to be unsubstantial in the model. Introduction of the control variable SIZE saw an improvement of model causing the interaction of the model variables to substantially explain 6.5% of the change in ROA. This still implies that 93.5% of the variation in ROA is attributed to the measurements of error and other aspects that could have had a bearing on the ROA of SMEs but not captured in the investigation.

Descriptive statistics was used to analyze data on the ROA, ACP, ITP, and APP, size. The analysis output presented as mean revealed that on average SME's in Homabay County were able to make a return of 0.8% on their investments. The ACP with a mean of 44.38 reflected that the SMEs were able to collect their debts within a short period of below two months. ITP had a mean of 56.7 thus pointing out that inventory was disposed-off at an average of 57 days. APP had a mean of 56.11 pointed out that SME's took an average duration of 56 days to clear their payables. Most SMEs in Homabay had an average of 14.99 in relation to their Size this meant that most of them operated in small sizes.

The study response rate was 86% that was sufficient for data analysis and therefore was enough for data analysis and interpretation. Forms of business ownership among the SME's were sole proprietorship at 8% while 92% were limited companies. The male gender streamed a frequency of 56 with a representation of 70% while the

female gender projected a 43 frequency with 30% that is half of the research participants being of the female gender.

The study vouched for an indication of the designation of the research participants who participated in the study. The owners of the SMEs were estimated to be at a frequency of 14 with a projected percentage of 16.3%. The remaining percentages were distributed between managerial positions and other positions with a frequency of 57 and 15 respectively. SMEs led by managers projected a higher percentage at 66.3% and this therefore meant that most SMEs had managers who formed a major part of the research participants.

From the findings, the budget preparation period for the SMEs were done daily, weekly and annually. 8.3% of the SMEs in Homabay prepared their budgets daily with a low frequency of 7 while 25.0% of the SMEs prepared their budgets weekly at a moderate frequency of 22. Additionally, annual preparation of budgets was highly embraced by SMEs in Homabay county with a high frequency of 57 at 66.7%. This meant that most SMEs prepared their budgets annually. The benefit accrued from this is that most SMEs could keep track of their financial performance on an annual basis and project an advance financial plan and budget that would enhance their operation for the following financial year of their business operation.

The investigation sought to ascertain the type of financial records that were maintained by the SMEs. The findings revealed that the financials records maintained by the SMEs ranged from a P&L account, a balance sheet, asset register, bank reconciliation, stock inventory records and the list of debtors and creditors. The availability of these financial records enabled the study draw its conclusions. On the other hand, distribution of data was tested through the use Skewness revealing that the data distribution was highly skewed.

## **CHAPTER FIVE**

### **SUMMARY, CONCLUSION AND RECOMMENDATIONS**

#### **5.1 Introduction**

The part outlined the summary, conclusion, and recommendations of the study. Additionally, it similarly gave limitations of the research and recommendations for further research. The findings were summarized in line with the goal of the research which was to ascertain the bearing of WCM levels on the financial performance of SMEs in Homabay town.

#### **5.2 Summary of Findings**

This research study set out to determine the bearing of WCM levels on performance of SMEs based in Homabay town. To this end, the study adopted a descriptive research design to study a population of 334 SMEs operating within Homabay town using a sample of 100 SMEs.

The study found that SMEs can improve their performance by ensuring that they maintain small business units of operations that are efficient and economical to run. The study similarly found that the number of days they take to collect from customers and time taken to sell their stocks and settle their debts have no substantial bearing on their financial performance.

The study found out that a majority of the SMEs do not maintain complete financial records. They however, have records of different activities maintained separately and by different individuals in some cases, this could easily lead to delayed and poor decision making leading to avoidable losses. Periodic preparation of financial statements would help SMEs make timely and informed decisions.



Optimal Investment in the total assets was singled out as the key driver to financial performance of SMEs in Homabay town and they ought not to grow to sizes beyond their ability to manage as this would adversely affect their financial performance. However, WCM is still critical in helping reduce opportunity costs incurred by availing cash to take advantage of new opportunities, and moving stocks fast enough to reduce inventory holding costs to the bare minimum.

### **5.3 Conclusion**

The study concludes that Average collection period (ACP), Average payable period and Inventory turnover period (ITP), had no significant impact on the return on assets of SMEs and that SIZE of the enterprises was the key determinant of their financial performance as shown by the regression analysis. This could be an indication that small sized SMEs in Homabay town tend to perform better financially as compared to larger SMEs, probably due to the fact that they are easily managed as compared to the large ones.

In addition, the study also found that performance was also influenced by other factors that were not captured by the study but still had a significant effect on the operation of the SMEs.

### **5.4 Recommendations**

The study recommends SMEs put more emphasis on managing the total assets invested and that it employs an optimal level of total assets that it has good systems to properly manage in-order to improve performance. SMEs should similarly take appropriate measures to ensure no stock outs and no unnecessary loss of potential credit customers as they pursue an optimal WCM approach to managing working

capital components even though they do not substantially affect their financial performance. SMEs should similarly pay their creditors in time in order to cultivate goodwill and possibly get discounts for early payments.

It recommends that further studies ought to be undertaken to understand how WCM variables together with other variables not captured by the study may influence the performance of SMEs.

### **5.5 Limitations of the Study**

The study was limited to a SMEs operating within Homabay town and that were in operation between 2015 and 2018. However, there are many other SMEs operating in Homabay County that commenced operations after the study period that need to be included in future studies.

There are many other aspects that should be considered in future studies that were not captured by the model used. These need to be studied together with WCM so as to ascertain their combined bearing on performance they could probably cover the aspects not explained by our study model.

Considering a longer study period would similarly allow for external aspects such as GDP and interest rates to be included in future research studies that were not factored in this study.

### **5.6 Suggestions for Further Research**

The study suggests that further research ought to be undertaken to highlight the influence of WCM levels on SME performance in different geographical settings.

Same Research study should be replicated over a longer study period incorporating External variables to determine their combined bearing on SMEs performance. Other aspects such as GDP, Interest rate, Corporate Governance, taxes, SMEs age, sales growth among others should be considered in future studies that were not captured by the model used so as to ascertain their bearing on performance.

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# APPENDIXES

## APPENDIX: 1 - QUESTIONNAIRE

### Introduction

Kindly tick in the boxes provided as appropriate. All the information provided here will be considered private and confidential for the purpose of this academic research only.

### Part 1

#### Section A: Background Information

1. Name of the firm:

.....

2. Firms Business / Economic Activity:

.....

3. Period Firm has been in operation in: .....Years

.....Months

4. Form of ownership:

What is the form of business ownership of the firm? Tick appropriately.

a. Sole proprietorship .

b. Limited Company .

c. Cooperative Society .

d. Partnership .

5. What is the numbers of employees working in the firm?

Permanent: .....

Contractual: .....

6. What is your gender? (Tick appropriately).

a) Male .

b) Female .

7. What is your position in the firm?

a.) Owner .

b.) Manager .

c.) Others (Specify) .....

**Section B: Accounting Data**

a.) Do you prepare any kind of financial records? Yes . No .

b.) What kind of financial records do you maintain?

1. Profit and loss accounts .

2. Balance sheet .

3. Asset register .

4. Bank reconciliation .

5. Stock/Inventory records .

6. List of Debtors and Creditors .

c.) How often do you prepare financial records? Tick all that apply.

1. Daily .

2. Weekly .

3. Monthly .

4. Quarterly .

5. Annually .

d.) Kindly provide us with annual financial records in part (b) above for the years

2016 – 2018



### **Section C: Key Business Indicators**

1. Could you kindly provide me with the following? (All information will be used solely for the purpose of this academic research and will be treated with the utmost confidentiality)

| <b>Indicator</b>   | <b>Year 2016</b> | <b>Year 2017</b> | <b>Year 2018</b> |
|--|------------------|------------------|------------------|
| Total Sales (In Kenya Shillings)                             |                  |                  |                  |
| Credit Sales (In Kenya Shillings)                            |                  |                  |                  |
| Cost of Sales (In Kenya Shillings)                           |                  |                  |                  |
| Credit Purchases (in Kenya Shillings)                        |                  |                  |                  |
| Accounts receivables (In Kenya Shillings)                    |                  |                  |                  |
| Accounts Payables (In Kenya Shillings)                       |                  |                  |                  |
| Inventory (In Kenya Shillings)                               |                  |                  |                  |
| Total Borrowed funds payable in a period of less than 1 year |                  |                  |                  |
| Total Borrowed funds payable in a period of more than 1 year |                  |                  |                  |
| Total fixed assets   |                  |                  |                  |
| Total current assets   |                  |                  |                  |
| Total Depreciation   |                  |                  |                  |

2. Please kindly provide me with the Net profit before Tax figures in Kshs for each of the years indicated 2016-2018.

## APPENDIX: 2 FINANCIAL STATEMENTS - COPY

|  |  |                     |                          |
|--|--|---------------------|--------------------------|
| <i>Koguok General Stores</i>           |  |                     |                          |
| Annual report and financial statements |  |                     |                          |
| For the year ended 31 December 2018    |  |                     |                          |
| <b>STATEMENT OF FINANCIAL POSITION</b> |  |                     |                          |
|  |  |                     |                          |
|  |  |                     | <b>As at 31 December</b> |
|  |  | <b>2018</b>         | <b>2017</b>              |
| <b>FIXED ASSETS</b>                    |  | <b>640,685.00</b>   | <b>660,500.00</b>        |
|  |  |                     |                          |
| <b>CURRENT ASSETS</b>                  |  |                     |                          |
| Stocks in Trade                        |  | 343,000.00          | 350,000.00               |
| Debtors and Deposits                   |  | 166,600.00          | 170,000.00               |
| Cash balance                           |  | 1,115,512.37        | 640,369.16               |
|  |  | <b>2,265,797.37</b> | <b>1,820,869.16</b>      |
| <b>LESS CURRENT LIABILITIES</b>        |  |                     |                          |
| Creditors accrual                      |  | 250,000.00          | 850,000.00               |
| <b>NET CURRENT ASSETS</b>              |  | <b>2,015,797.37</b> | <b>970,869.16</b>        |
| <b>TOTAL NET ASSETS</b>                |  | <b>2,656,482.37</b> | <b>1,631,369.16</b>      |
| <b>FINANCED BY:</b>                    |  |                     |                          |
| <b>CAPITAL ACCOUNT</b>                 |  |                     |                          |
| Balance brought forward                |  | 1,631,369.16        | 688,265.00               |
| Add: Net profit for the year           |  | 1,025,113.21        | 943,104.16               |
|  |  | <b>2,656,482.37</b> | <b>1,631,369.16</b>      |
| Less Drawing                           |  |                     | 0.00                     |
| <b>TOTAL CAPITAL EMPLOYED</b>          |  | <b>2,656,482.37</b> | <b>1,631,369.16</b>      |
|  |  | 0.00                | 0.00                     |
|  |  |                     |                          |
|  |  |                     |                          |
| .....PROPRIETOR                        |  |                     |                          |

**Select Management Services**  
**Statement of Financial Position**  
**As at 31st Dec 2018**

|                                | 31-Dec-16<br>KSHS   | 31-Dec-17<br>KSHS   | 31-Dec-18<br>KSHS   |
|--------------------------------|---------------------|---------------------|---------------------|
| <b>Fixed Assets</b>            |                     |                     |                     |
| Gross Block                    | 807,000.00          | 807,000.00          | 807,000.00          |
| Depreciation <sup>1</sup>      | -                   | -                   | -                   |
|                                | <b>807,000.00</b>   | <b>807,000.00</b>   | <b>807,000.00</b>   |
| <b>Current Assets</b>          |                     |                     |                     |
| Inventories                    | -                   | -                   | -                   |
| Sundry Debtors                 | -                   | -                   | -                   |
| Cash and Bank Balances         | 290,390.21          | 177,607.27          | 113,169.05          |
| Other Current Assets (WHT)     | 70,000.00           | 140,000.00          | 210,000.00          |
| Loans and Advances             | -                   | -                   | -                   |
|                                | <b>360,390.21</b>   | <b>317,607.27</b>   | <b>323,169.05</b>   |
| <b>TOTAL ASSETS</b>            | <b>1,167,390.21</b> | <b>1,124,607.27</b> | <b>1,130,169.05</b> |
| <b>Non-current Liabilities</b> |                     |                     |                     |
| Share Capital                  | 1,310,000.00        | 1,310,000.00        | 1,310,000.00        |
| Reserves and Surplus           | (142,609.79)        | (185,392.73)        | (179,830.95)        |
| Secured Loans                  | -                   | -                   | -                   |
| Unsecured Loans                | -                   | -                   | -                   |
|                                | <b>1,167,390.21</b> | <b>1,124,607.27</b> | <b>1,130,169.05</b> |
| <b>Current Liabilities</b>     |                     |                     |                     |
| Creditors                      | -                   | -                   | -                   |
| Provisions                     | -                   | -                   | -                   |
| <b>TOTAL LIABILITIES</b>       | <b>1,167,390.21</b> | <b>1,124,607.27</b> | <b>1,130,169.05</b> |
|                                | -                   | -                   | -                   |