

**EFFECT OF WORKING CAPITAL MANAGEMENT ON THE
FINANCIAL PERFORMANCE OF THE COMPANIES LISTED AT
THE NAIROBI SECURITIES EXCHANGE**

**BY
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DECLARATION

I, the undersigned state that this is my original work and has not been submitted for any degree or examination in any other institution.

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D61/85742/2016

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

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DEDICATION

I devote this study project to my dear parents Mr. and Mrs. Elijah Chepchulei for laying a strong foundation to my life. I owe you my success. My special dedication to my lovely wife Valentine Jeptanui and my daughter Shanna Kipsanai who have always remained my source of joy, inspiration and desire to excel in all I undertake. Am humbled to have you as my family.

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LIST OF ACRONYMS AND ABBREVIATIONS

CCC Cash conversion cycle

DCP Debtors Collection Period

EOQ Economic order quantity

NSE Nairobi Securities Exchange

WCM Working Capital Management

ABSTRACT

The main goal for the paper was to establish the impact of working capital management on the financial performance of the companies quoted under the NSE of Kenya. The study period was a five-year period from 2013 to 2017. The study involved the use of a descriptive research design using a sample of 20 quoted firms under the NSE. Secondary data from the audited financial statements of the listed companies and the NSE's reports were used. The data collected was systematically arranged in a way that aided the analysis using the Statistical Package for Social Sciences. Data was analyzed on the basis of the mean and the F test statistic was computed at 5% significance by regression analysis. To check for the model's strength and the effect of the management of working capital on the financial performance of the quoted firms under the NSE of Kenya, the paper did an analysis of variance (ANOVA). From the findings, the adjusted R square was 0.062 which implies that 6.2% of the influence of liquidity, leverage and firm size on the performance was explained by the model. This paper concluded that the management of working capital affects the financial performance of the quoted firms under the NSE of Kenya. This paper recommends that companies have to make sure of appropriate mechanisms are established so as to guarantee the payables, receivables and inventories are managed properly to guarantee better financial results.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Many firms embrace the management of working capital since it is an important factor when evaluating the performance of an organization. The nature of working capital is controlled by the idea of the benefits and the time span required transforming those assets into cash. Positive working capital is important for a firm keeping in mind the end goal to have the capacity to proceed with its daily tasks regarding adequate assets to fulfill short-term debts (Brigham & Houston, 2007).

The cash conversion cycle theory posits that, by ensuring the cash conversion cycle is shorter, the cash is received very quickly by an entity (Gitman, 1974). Miller-orr model approach states that firms can set the lower limit as per its needs of maintaining the optimal cash balances and the upper limit (Miller-Orr, 1996). Transaction cost economics theory argues that the optimal inventory level is gotten by the analysis of the costs and benefits of inventory (Williamson, 1975).

The listed firms have continually developed the strategies of ensuring idle cash is managed properly by investment in the financial assets which are more marketable in the market. Adequate working capital management guarantees the collection of accounts receivables soonest and any nonpaying debts are written off as bad debt. These strategies also ensure the maintenance of enough cash which ensure companies are more adequate more liquid and monies which might be idle are invested prudently in the firms and this in turn helps to better the performance (Lucey, 2000).

1.1.1 Working Capital Management

Hampton (1989) defined working capital management as the strategy firms employ in handling cash, inventories and any securities which are marketable. According to Shin (1998), the management of working capital is a strategy that is aimed at monitoring the current assets and the current liabilities of companies. By managing their cash properly, the daily obligations are adequately met and this will guarantee business continuity with minimal obligations. Failure to manage the inventories and cash properly, the firm is exposed to business risk as a result of financial distress. Working capital management is vital since it ensures the payables of various business enterprises, any receivables and the inventories are not mismanaged. Mismanagement of these crucial components leads to poor performance by the companies.

Prudent managing of the current assets together with current liabilities of firms guarantees a maintenance of the necessary cash needed by the firms by eliminating the idle cash. By maintaining the optimum cash levels, any outstanding debts of the firms is settled on time when required and it maintains the smooth flow of the processes in the firms. This will also do away with the instances of holding unnecessary too much cash by the firms which is prone to embezzlement by the management. Holding of too much cash is costly to the firms since they are forced to put the necessary mechanisms to safeguard cash which are costly (Hampton, 1989).

1.1.2 Financial Performance

According to Kemal (2011), financial performance is the measurement of proper utilization of the assets in a firm based on its mode of operation and how revenues are

generated. Financial performance is the measurement of an entity's policies and the various operations performed by the entities in monetary terms (Lucey, 2000). These outcomes are shown in the companies' profitability ratios, gearing measures and liquidity ratios. Profit has always been the major tool of gauging the performance of the firms and their growth. However; the actual factor which determines the growth of the businesses and their performance is how effectively and efficiently they have been employing the various resources for the betterment of the firms (Lucey, 2000).

Financial performance is critical in ensuring the firms prosper in any competitive business environment. Due to technological changes, the firms are faced with risks for example the sudden price fluctuations which calls for proper strategies of ensuring the financial performance is sound and better. The prosperity of any entity can be assessed by the analysis of their composite outputs in monetary terms this will enable the determination of effective and efficient employment of the resources (Gibbs, 2007). Return on an asset is the common determinant of financial performance.

1.1.3 Working Capital Management and Financial Performance

The firm's management of working capital partly controls its financial performance. Every firm aim to maximize the shareholders' value as well as maintaining its liquidity (Lazaridis & Tryfonidis, 2006). Therefore, for smooth running of an organization, the firm should operate in an optimal balance between liquidity and profitability. A firm concentrating on profitability and having less concern on liquidity may become insolvent and finally bankrupt causing it to shut down. In addition, without profits the objective of the firm (increasing the firms' value) cannot be achieved. Therefore, management team

should properly consider working capital management due to its direct and long term effects on the firm's profitability hence achieving an optimal level of the working capital and profitability (Afza & Nazi, 2007).

Effective use of various working capital components prompts a quick impact on an organization's financial performance. The management of working capital ensures a shorter cash conversion cycle with low number of days favoring the productivity since it diminishes the need for external financing. Firm inventories outline a center segment in working capital so as to call for practical management of stock levels. For firms to adequately deal with their stock, they are required to keep stock at optimum levels guaranteeing minimal financing costs due diminished levels of short-term capital held (Afza & Nazi, 2007).

1.1.4 Companies Listed at the Nairobi Securities Exchange

The NSE of Kenya was instituted in 1954, and it provides trading services for investment both the international and the local companies. NSE is very critical in Kenya due to its continued contribution for example encouraging firms to save thus helping them to reallocate funds from the inactive to the active money agents along with making long-term investment liquid for example transferring of securities. NSE has also helped firms to participate in local ownership of shares hence enabling Kenyans to own shares and invest in good companies hence leads to development of the economy (NSE, 2017). In Kenya, the business entities which have managed their current assets and liabilities properly have continually produced better financial results compared to the companies

with poor practices. Good practices guarantees transparency which is key in any entity (NSE, 2017).

1.2 Research Problem

Lazaridi and Tryfonidis (2006) confirmed that a good working capital management acts a major role in ensuring the achievement and survival of the corporate entities which should be grasped to improve the financial performance and this can be achieved by ensuring the cash conversion cycle is shorter, the cash is received very quickly by the business entity which in turn reduces the instances of cash shortages which will directly affect the financial performance (Gitman, 1974).

The business environment in Kenya is very competitive, for the firms to remain competitive and profitable, they have devised various strategies which are critical in ensuring the current assets and current liabilities are properly monitored and managed. Such strategies involves the payment of the creditors when due and continuous maintenance of the credit terms as per the agreement, utilizing of any discounts offered in the market and ensuring receivables are always collected on time (Roy, 2014).

A study by Bammeri and Dehani (2013) established a framework that incorporates various working capital components in a manner that optimizes profitability and liquidity with the aim of shareholders' wealth maximization. Mashar (2014) studied how profitability of commercial banks in Malaysia was influenced by the management of working capital though showed no significant influence for the management of working capital on profitability of commercial banks in Malaysia. Saad (2011) concluded that working capital and firm value association was insignificant for firms in Pakistan.

Locally, several empirical studies have been conducted on working capital, Kenga (2013) looked at the extent to which firm value of 23 firms listed at NSE were influenced by working capital management and found that working capital insignificantly influenced the value of the companies listed at NSE. Kiiio (2014) looked at how commercial banks' financial performance was influenced by working capital management in Kenya. The studies discussed above came up with contrasting conclusions. This was contributed by limited study period and inadequate sample, hence the need for the current study. This study sought to answer this study question; what could be the impact of Working capital management on the financial performance of the quoted firms under the NSE of Kenya?

1.3 Research Objective

This paper sought to establish the effect of working capital management on the financial performance of the quoted firms under the NSE of Kenya.

1.4 Value of the Study

The findings sensitizes the industry practitioners involved in making financing decisions by offering them a vital reference point on the need to determine and maintain optimal working capital management necessary to cushion them against risks.

The staff and management of companies, they are able to gain insight on how well to manage their working capital since it is believed to positively impact financial performance of the companies.

The research will add to the growing literature in the academic studies as it can act as empirical reference on working capital management researches for the scholars who are concerned for further studies on working capital management and financial performance.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

The section covers the theories and empirical works on firms' financial performance, determinants of financial performance, conceptual framework and finally summarizes the literature.

2.2 Theoretical Review

This study was based on three theories which were related to working capital management namely; Baumol's Cash Management Model (Baumol, 1952), the miller-orr model approach (Miller-orr, 1996), Cash Conversion Cycle Theory (Gitman, 1974) and Transaction cost economic theory (Williamson, 1975)

2.2.1 Baumol's Cash Management Model

The model was intended to keep the opportunity cost level related to holding money and trading costs of changing other assets to cash flow. The methodology is fundamentally the same as the EOQ Model for stock size yet it manages diverse factors. It posits that firms hold some marketable liquid assets or securities for easy conversion into cash (Baumol, 1952). As indicated by this stipulation, money is accepted to begin from a certain level, and afterward decreases gradually to a zero value. In this stipulation, a financial manager needs to choose on apportioning the liquid assets linking cash with the marketable securities (Pandey, 2008). However, this trade-off lies upon the opportunity cost of holding money which increases as the cash level (Cornett et al. 2009).

The opportunity costs shows the interest forgone for funds which are held in cash instead of being invested. The trading costs are the costs incurred by a firm which are due to sell or purchase of marketable securities (Pandey, 2008). If an organization chooses to keep up a low cash level it should carry out many transactions prompting high trading costs leading to low opportunity cost since there are little reserves. On the other hand, if a firm prefers to keep high money reserves, its opportunity cost will be high due to high amount of un-invested cash while its transaction cost will be low due to few transaction costs (Pandey, 2008).

Baumol cash management model has various weaknesses such as; the model assumes that the firm has a consistent cash flow rate which is unrealistic since payment rates vary. The model also assumes that the firm will not receive any cash within the specified period. Since most firms would like more cash inflows than outflows, and normally have money inflows constantly, this presumption is clearly unrealistic. Finally, the model does not give room for cash savings to cushion urgent cash demand (Cornettetal.2009).

2.2.2 Cash Conversion Cycle Theory

According to this theory, when cash conversion cycle is shorter, working capital is better (Gitman, 1974). The stock holding period indicates how long inventories were kept before the disposal. If the rate of inventory turnover is high, the time of holding inventory is minimal. Debtors' collection period is the time frame offered by the business entity to the debtors to settle the receivables. Creditors' payment period is the time the buyers of inventories are offered by the manufacturers and distributors to settle their accounts. It is computed by average creditors divided by annual credit purchases multiplied by 365 days. This theory helps us to determine the necessary optimal cash.

Cash conversion cycle plays a crucial role in the working capital management, it will indicate the proper time frame for purchasing of inventories. The success of the firm will depend on the prudent management of the short term liabilities and short term assets. If the conversion cycle is longer the sales of the firm are high, therefore, the firm can relax the policies on credit. By ensuring the cash conversion cycle is shorter, the cash is received very quickly by the business entity this will reduce instances of cash shortages which will directly affect the financial performance (Gitman, 1974).

2.2.3 The Miller-Orr Model Approach

Miller and Orr (1966) suggested that there are two control restrains specifically; the upper and lower control restrains and in addition an arrival point. In the event that the company's cash flows vary haphazardly to hit below lower limit, at that point it purchases adequate attractive securities to return to an ordinary level of money balance. Also, when the company's money streams go beneath as far as possible, it offers adequate attractive securities to take the money balance back to the attractive level. This model is significant to working capital administration as it can help decide the points of confinement inside which a firm can hold its money and subsequently its working capital administration.

Miller-Orr model depends on the assumption that the relative variety and the mean are consistently distributed with the estimation of zero. The firm can set lower limit at any level according to its needs of keeping up the optimum cash balance and upper limit. When the balances are at upper limit, the firm buys securities and the parity of money comes back to wanted sums. In the event of persistent cash shortage, it demonstrates a condition of under capitalization and the requirement for extra lasting capital and unless

this is acquired the entity might be constrained bankrupt. At the point when the creditor's pressure is so high, the firm may decrease the amount of stock carried forward and main investment activities are considered or even the present resources required for typical trading activities and quickening money inflows which would some way or another be normal in later periods like squeezing account holders which may contrarily influence the financial performance (Miller-Orr, 1996).

2.2.4 Transaction Cost Economics Theory

Transactions costs are those costs which firms incur without any knowledge of their existence. Transaction cost economics theory argues that the optimal stock level is arrived at by analyzing the costs and benefits of stock (Williamson, 1975). The estimated annual use of inventories is determined by inventory ordering costs and inventory holding costs. These two costs are always met in any inventory transactions. Stock holding costs include interest in stocks, storage, insurance rates, security, building maintenance and heating. They form carrying and ordering costs.

Ordering costs basically involve the acquisition of stock and include the cost of associated with the preparation of purchase orders or requisition forms, inspection of inventories receiving of inventories, recording of inventories, handling of inventories and buying- department staff costs. Carrying costs, on the other hand, involves the movement of the stock. Firms should maintain optimum inventory by monitoring what to order which is governed by product specification, value analysis and how much to order (Williamson, 1975).

2.3 Determinants of Financial Performance

Profit maximization and cost minimization are the major objectives of the firms. This can be achieved by improved financial performance which is influenced by the following factors; working capital management, management efficiency, leverage and macroeconomic variables.

2.3.1 Working Capital Management

As indicated by Deloof (2003) many organizations reserve cash for working capital and utilizing exchange payable as a key wellspring of financing. So the manner in which it is dealt with can significantly affect the productivity of the firm. Lazaridis and Tryfonidis (2006) showed that working productivity will demonstrate how the administration will react as far as dealing with the working capital management. Ganeshan (2007) additionally contends that benefit of the organizations can be expanded through productive management of working capital.

Vishnani (2007) additionally emphasized that every organization must be cautious when putting huge amount of assets in working capital, this is on account of that it can diminish the performance of the organization significantly. Binti and Binti (2010) looked at the impact of market valuation of firms in Malaysia and found that current ratio has insignificant impact on market valuation of Malaysian firms. Eljelly (2004) established the relationship of liquidity and profit as estimated by current ratio and cash inadequacy on stock firms in Saudi Arabia and concluded no correlation between the firm's productivity and its liquidity level, as estimated by current ratio through linear regression and correlation analysis.

2.3.2 Leverage

Miller (1958) defines leverage as that fraction of leverage in firm's capital composition. A highly geared firm has more debt than equity in its capital composition. Leverage can be determined by the debt ratio. The capital mix can affect the ultimate value of the firm either negatively or positively. Generally, increase in debts in capital structure increases leverage due to the interest tax shield. Risk perceptions by the investors are not influenced by the employ of debts in the capital composition and thus the cost of debt remains constant. High amounts of debt normally attract high-interest rate which can adversely affect the operations of a business entity which can lead to financial distress. However, prudent use of debt can increase the returns to the shareholders; it is believed that high-risk high return hence increased profitability which will, in turn, encompass the positive effect on fiscal performance.

2.3.3 Macroeconomic Factors

Increase in the gross domestic product increases the revenues generated by the companies. When companies generate high revenue it implies that the financial performance is sound and better. However, the decline in the gross domestic product implies that the revenues are minimal and this adversely affects the financial performance. Inflation on the other hand affects the financial performance negatively or positively, high inflation rates reduce income level, hence negatively affecting the profits of companies, when the inflation rates are minimal. The interest rates are also a major factor affecting the financial performance. When the rates of interest are very high, the profits of the companies are low because high interest rates attract high default rates (Evgeny, 2015).

2.3.4 Management Efficiency

Management efficiency is a key determinant of financial performance. How business entities effectively utilize their resources will either have appositive or negative influence on the financial performance which will eventually affect their profitability. Management efficiency aims at avoiding the wastage of materials, money and time in business organizations. Management efficiency can be determined by the earnings growth. The growth of net income over a period of time is an indicator of improved financial performance. Management efficiency can also be determined by expenses to assets ratio (Gibbs, 2007).

2.4 Empirical Review

Mwake (2016) established the effect of the management of working capital on the value quoted firms with NSE of Kenya using the period 2009-2014.64 companies listed at NSE were surveyed. Due to time and resource constraints, a sample of 27 quoted firms at NSE was targeted for the study. Simple linear regression model was also employed in the analysis. He concluded that firms prefer short term debts to long term. This implies that there are more short-term financing needs among companies listed at NSE hence the concern for working capital management.

Kenga (2013) did a study to investigate working capital and firm value association of firms in Nairobi, Kenya. He used the sample size of 23 companies from a population of 70 firms in 2008 to 2012 period. Secondary information of the study variables was accessed from the websites of the firms. From the analysis, he found negative influence of working capital management on the value of quoted firms under the NSE.

Jamal (2014) determined influence of the management of working capital policies on profitability of manufacturing companies in India. A sample of 103 manufacturing firms was selected from 314 manufacturing companies. The paper made use of the secondary data in the period 2009-2013. The study also employed multiple regression models to show the association linking the research factors. The paper confirmed an insignificant influence of management of working capital policies on performance of the manufacturing companies in India.

Kamar (2013) focused on influence of the management of working capital variables on performance of insurance companies in Turkey for the period of 2008-2012. A taster sample of 18 insurance firms was selected from the population of 42 insurance companies. Secondary data were collected from the companies' published audited financial statements for analysis. Components of working capital considered include; mean of collection period and profitability. The study also employed the linear regression model in the analysis. The study suggested that the management of working capital variables insignificantly influence profitability of insurance companies in Turkey.

Kithii (2012) did a survey on the effect of the management of working capital policies on profitability of investment companies in Nairobi, Kenya in 2008 - 2010. Only 30 investment firms in Kenya out of 365 investment firms were considered for the study. The study also employed a linear regression model in the survey. He concluded that time taken for the investment companies to obtain cash from their clients had a negative significant on the financial performance.

Ochieng (2016) confirmed a significant positive correlation linking the management of working capital with the insurance firms' value of Kenya in period between 2010 and 2015. A sample of 7 insurance firms was selected from a total of 15 insurance companies. The survey employed secondary data gathered from the firm's websites. A linear regression model was employed to analyze the study showed that management of working capital strongly influenced the fiscal performance of the Kenyan insurance companies in positively.

Roy (2014) analyzed the changes on the firms' financial performance for the pharmaceutical companies in Pakistan due to working capital management variables. The period of study was from 2000 to 2012. 340 pharmaceutical companies were considered but only 152 firms were targeted to be the study's taster sample. From the findings of the study it was evident that working capital affected the financial performance.

The investigation utilized the secondary information which was promptly accessible from the sites of the organizations. Only cash change cycle was observed to be decidedly associated with profit. However, the impacts of the independent factors aside from the average payment time frame were not significant however the general model was significant.

Mashar (2014) analyzed how working capital management impacted the profit of the commercial banks in Malaysia. A sample of 33 commercial banks was selected from 67 commercial banks. The study used the secondary data. The study also employed multiple regression models to show the relationship between the study variables. He

concluded that the performance of the commercial banks did not significantly improve due to working capital management policies.

2.5 Conceptual Framework

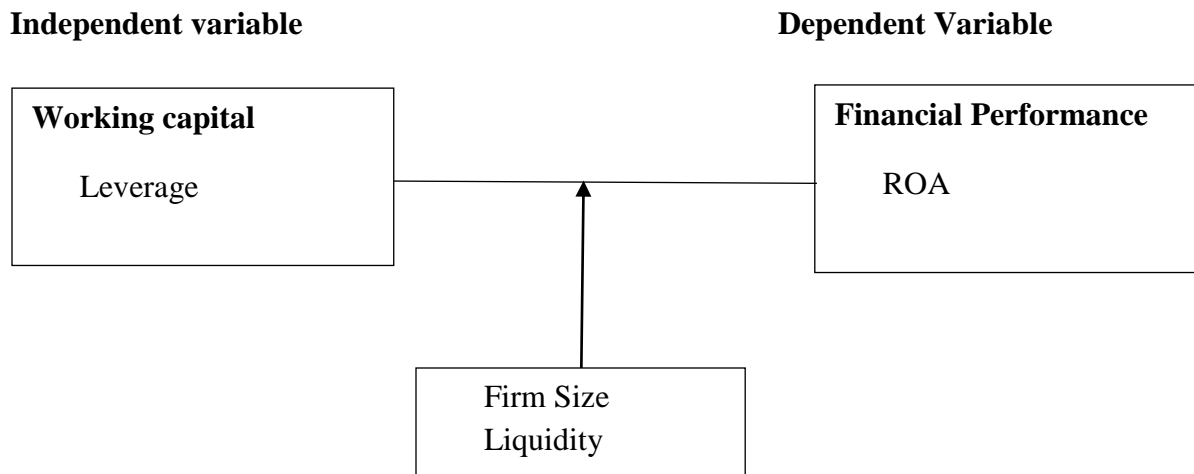


Figure 2.1: Conceptual Framework

2.6 Summary of Literature Review

The chapter encompasses the theories that were reviewed which include, Baumol's Cash Management Model (Baumol, 1952), the miller-orr model approach (Miller-orr, 1996), Cash Conversion Cycle Theory (Gitman, 1974) and Transaction cost economic theory (Williamson, 1975). Determinants of financial performance were also discussed, Various empirical works were also reviewed which include; Mwake (2016), Kenga (2013), Kiio (2014), Jamal (2014), Kamar (2013), Kithii (2012), Ochieng (2016), Roy (2014), Petit (2016) and Akrir (2015) and the conceptual framework.

From the literature reviewed, the researchers confirmed different study findings, others confirmed that management of working capital significantly affected their financial

performance others confirmed that the management of working capital were insignificant on fiscal performance. From the previous studies, shorter period of time was used and sample size was limited. This study therefore sought to address those research gaps.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

The part in detail explored the study methodology that was employed when conducting this research which included the appropriate study design, targeted population, procedure of the collection of the required information and analysis of data.

3.2 Research Design

The research design is the method of conducting research (Mugenda, 2005). This study employed the descriptive research design since it was helpful in describing the variables that were analyzed.

3.3 Population and Sample

A population is a group of factors to be analyzed (Mugenda, 2005). The study used a population of 65 listed firms under the of Kenya and 20 companies were sampled out for investigation.

3.4 Data Collection

Secondary information which was easily accessible from the NSE and capital markets authority for analysis in the period of study 2013 to 2017 was utilized for the study.

3.5 Data Analysis

Data analysis entails the necessary procedures took so as to bring a meaning together with an order to the gathered data (Mugenda, 2005). To determine the nature of the

correlation and effect of management of working capital on the financial performance, the following linear regression model was used;

$$Y = \beta_0 + \beta_1x_1 + \beta_2x_2 + \beta_3x_3 + e$$

Where Y is the financial performance= ROA

β_0 is the free term of the equation. β_1, β_2 and β_3 are the coefficients of independent factors and they measure the responsiveness of Y to unit change in variable x.

x_1 = Leverage = total liabilities/total assets

x_2 = Liquidity = Current assets/current liabilities

x_3 = Firm size = Natural logarithm of total assets

e = the error term

3.6 Test of significance

An F-test at 5% significance level was done in order to establish the strength of the model, and the changes in financial performance due to the working capital of the firms quoted under the NSE of Kenya. A t -test was also used in the description of the sample.

CHAPTER FOUR

DATA ANALYSIS, FINDINGS AND INTERPRETATION

4.1 Introduction

The section provides the analysis that was performed on the data obtained. Data was analyzed in terms of descriptive statistics, correlation and regression. The chapter ends with presentation of discussions and findings.

4.2 Descriptive Statistics

Liquidity, leverage and firm size were used as the independent variables in the paper while the dependent factor was the return on assets. The standard deviations, means, maximum values and minimum values for the study variables under study were tabulated as shown below.

Table 4.1: Descriptive Statistics Analysis

Variable	N	Minimum	Maximum	Mean	Standard deviation
Liquidity	100	0.04	1.25	0.07	0.17
Leverage	100	0.15	1.14	0.55	0.20
Firm size	100	8.39	20.07	9.98	1.26
Return on assets	100	-0.12	0.47	0.85	0.10

From the findings, the minimum number of leverage was 0.04, the maximum number was 1.25, the mean was 0.07 and the standard deviation was 0.17 which indicated a moderate variation in liquidity. The minimum number of leverage was 0.15, the maximum number was 1.14, the mean was 0.55 and the standard deviation was 0.20 which imply very small

variations. The minimum value of firm size was 8.39 and the maximum number was 20.07, the mean was 9.98 and the standard deviation was 1.26 which shows big variations. The minimum number of return on assets was -0.12, the maximum number was 0.47. The mean was 0.85 and the standard deviation was 0.1 which shows a small variation.

4.4 Correlation Analysis

Table 4.2: Correlation Matrix

		Liquidity	Leverage	Firm size	Return on assets
Liquidity	Pearson correlation Sig. (2-tailed) N.	1 100			
Leverage	Pearson correlation Sig. (2-tailed) N.	-0.04 0.696 100	1 100		
Firm size	Pearson Correlation Sig. (2-tailed) N.	-0.073 0.469 100	-0.053 0.602 100	1 100	
Return on assets	Pearson Correlation Sig. (2-tailed) N.	0.203 0.043 100	0.098 0.330 100	0.174 0.08 100	1 100

The results of the correlation analysis above shows that a positive link connects liquidity with financial performance as gauged by the return on assets and the relationship is significant. The correlation coefficient was 0.203 and the p-value was 0.043 which is less than 0.05. The findings showed further that leverage was positively related to financial performance with correlation coefficient 0.098 and p-value 0.330 implying it was insignificant since it was bigger than 0.05. Firm size was positively linked to economic

performance and the effect was insignificant since the correlation coefficient was 0.174 and the p value was 0.08 which is greater than 0.05.

4.4.1 Regression Analysis

Table 4.3: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.301	0.091	0.062	0.098

The value of the correlation coefficient from the table above is 0.301 which implies that a weak positive connection links the study factors. The adjusted R square was 0.062 this implies that 6.2% of the influence of liquidity, leverage and firm size was explained by the model.

Table 4.4: Summary of One Way ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	0.093	3	0.031	3.185	0.027
Residual	0.930	96	0.010		
Total	1.023	99			

The results in table above shows the value of F statistic was 3.185 at 5% significance level and the statistic was significant, the P-value was 0.027 which is less than 0.05 implying that the overall model was considerable.

Table 4.5: Regression Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	T	Sig.
1	(Constant)	-0.115	0.086		-1.344	0.182
	Liquidity	0.132	0.058	0.222	2.269	0.026
	Leverage	0.060	0.049	0.117	1.204	0.232
	Firm size	0.016	0.008	0.196	2.007	0.048

The findings of the regression analysis show that liquidity is positively related to financial performance. It implies that any increase a unit of liquidity will accrue to a raise in the financial performance by 0.132. Leverage will accrue to a raise in the financial performance. To the meaning that an increase in unit of debt would accrue to rise in the financial performance. Firm size was confirmed to be directly related to the financial performance which implies that as the size of the firms increase, financial performance increases by 0.016 units.

The standardized beta coefficient of liquidity was 0.222 which means that sales has moderate influence on the financial performance. The standardized beta coefficient of leverage was 0.117 which implies that leverage has a weak impact on the fiscal performance, the standardized beta coefficient of firm size was 0.196 meaning a weak influence of firm's size on the financial performance.

4.5 Interpretation of the Findings

According to the descriptive statistics tabulated, averagely, the firm sizes shows an upward trend in growth of the companies recording the minimum value of 8.39 and the maximum value of 20.07 and a relatively large variation was confirmed in terms of their growth. The growth of company sizes can be attributed to adoption of good working capital management practices. Over the same studied period, the financial performance of the companies showed a great variation where some companies reported losses while others reported high profits. Net loss of the companies can be as a result of poor entities' management of the working capital. From the regression analysis results the research established that working capital variables affected the financial performance and they include liquidity, leverage and firm size. The three independent variables which were analyzed were able to explain their effect on the financial performance up to 6.2% as shown by adjusted R square. This is to the implication that the three independent variables inputs 6.2% on the financial performance and the remaining 93.8% is contributed by the factors not included in the study.

This research found out that the coefficient of liquidity was 0.132 meaning that liquidity positively influences financial performance. The coefficient of leverage 0.060 meaning that leverage positively influences the financial performance. Moreover, firm's size was positively linked to the financial performance. This implies that the management of working capital affects the performance of finances. This paper results agrees with the study carried out by Roy (2014) who made conclusions that management of working capital affected the fiscal performance of the companies in Pakistan.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

The section covers the study summary, conclusions, recommendations for policy, the limitations along with the recommended fields for further studies.

5.2 Summary of the Findings

This paper aimed at assessing the ultimate influence of the management of working capital plus how it affected the firms' financial performance. This paper findings confirmed a positive link connecting liquidity and financial performance. Increase in liquidity implies more profits to the firm which indicates that the firm has a big market share in the industry. Many firms adopt optimal financial decisions which are aimed at increasing their liquidity.

According to the results, the leverage also affected financial performance positively. Leverage is concerned with debt financing by the business firms. Leverage has a positive effect on company's financial performance but also risky depending on how the firms utilize it. This implies that optimal utilization of debt enhances the financial performance. The ANOVA was employed to determine how strong the model was in the analysis. From the analysis of the regression statistics, the research concluded that the three major factors which include liquidity, leverage and firm size had an effect on the financial performance. The variables were able to explain their influence on the financial performance up to 6.2% and the rest is contributed by other variables not considered in this study meaning the model was considerable.

5.3 Conclusions

From the study, a moderately positive correlation was found to be there linking liquidity with the financial performance. The correlation coefficient was obtained to be 0.203 which was an indication of a moderate relationship and the relationship was considerable as the p value of 0.043 which was not more than 0.05. A very weak positive correlation was found to link leverage with the financial performance, correlation coefficient was confirmed to be 0.098 which was an indication of a very weak relationship. However, the relationship was insignificant since the p value of 0.330 was more than than 0.05. A positive connection was confirmed to link firm's size to the financial performance. This relationship was not significant ($p > 0.05$).

From the findings of this study, it was confirmed that working capital management had a positive connection with fiscal performance. This was supported from the research which confirmed that the variables which were analyzed proved the existence of positive connection linking working capital to the fiscal performance and they included liquidity, leverage and firm size. The relationships were confirmed to be significant between liquidity and financial performance. However, the relationships were confirmed to be not significant between firm size, leverage and financial performance. This study concludes the same findings with that of Saad (2015) who made conclusions the management of that working capital affected financial performance of the companies in Malaysia.

5.4 Recommendations

Liquidity was confirmed to be a major determinant of the financial and performance of the entities, therefore it is recommended that entities should ensure they are more liquid

at all times since it was confirmed to be positively related to the financial performance. Low liquidity implies poor performance of firms.

This study recommends that firms should aim at increasing their sales which translates to growth of their firms to greater heights in terms of the assets base and market share since more sales implies more profitable than smaller sales. Firms with high sales volume enjoy monopoly power due to market control.

The paper makes recommendations that business entities have to adequately guarantee the meeting of their obligations especially the short term ones, this will guarantee trust from the creditors and shareholders, this will ensure continued distribution of the finished products into the market. Failure to settle the dues by the companies contributes to poor performance.

5.5 Limitations of the Study

One of the key challenge which the researcher faced was time constraint. This was due to the fact that the study utilized secondary data which was obtained from several sources which included Capital Markets Authority, the individual companies and the Nairobi Securities Exchange. The time was not adequate for the entire data collection exercise and analysis.

The entire exercise needed more financing which ranged from the data collection, data analysis, writing materials and printing of the research work which called for total sacrifice to achieve the objectives. Despite the limited financial resources, the entire research process was successful.

Aspects which are qualitative in nature were not captured by the secondary data which are also able to affect the share prices of the companies. Such qualitative aspects include good corporate governance practices and good customer relations.

5.6 Suggestions for Further Research

The paper recommends that in the near future, a research to be conducted which should incorporate both the primary data together with secondary data. As the primary data will help in capturing information not captured by the secondary data.

This paper makes recommendations that a research have to be undertaken but now focusing on the non-listed firms to establish how their working capital management will affect their financial performance. This will help in the comparison of the financial performances of the listed and non-listed companies.

The paper suggests that a research to be undertaken but now focusing on a particular segment on Nairobi securities exchange from the seven segments at Nairobi securities exchange. For example a study can be done on the banking segment.

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APPENDIX I: LIST OF COMPANIES LISTED AT NSE

1. Eaagads Ltd
2. Kapchorua Tea Co. Ltd
3. Kakuzi
4. Limuru Tea Co. Ltd
5. Rea Vipingo Plantations Ltd
6. Sasini Ltd
7. Williamson Tea Kenya Ltd
8. Car and General (K) Ltd
9. Barclays Bank Ltd
10. Stanbic Holdings Plc.
11. I&M Holdings Ltd
12. Diamond Trust Bank Kenya Ltd
13. HF Group Ltd
14. Uchumi Supermarket Ltd
15. Bamburi Cement Ltd
16. E.A.Cables Ltd
17. KenolKobil Ltd
18. KenGen Ltd
19. Umeme Ltd
20. Sanlam Kenya PLC
21. Liberty Kenya Holdings Ltd
22. CIC Insurance Group Ltd
23. KCB Group Ltd
24. National Bank of Kenya Ltd
25. NIC Group PLC
26. Standard Chartered Bank Ltd
27. Equity Group Holdings
28. The Co-operative Bank of Kenya Ltd
29. Express Ltd
30. Sameer Africa PLC
31. Kenya Airways Ltd
32. Nation Media Group
33. Standard Group Ltd
34. TPS Eastern Africa (Serena) Ltd
35. Scangroup Ltd
36. Longhorn Publishers Ltd
37. Deacons (East Africa) Plc
38. Athi River Mining
39. Crown Paints Kenya PLC
40. E.A.Portland Cement Ltd

41. Total Kenya Ltd
42. Kenya Power & Lighting Co Ltd
43. Jubilee Holdings Ltd
44. Kenya Re-Insurance Corporation Ltd
45. Britam Holdings Ltd
46. Olympia Capital Holdings ltd
47. Centum Investment Co Ltd
48. Trans-Century Ltd
49. Home Afrika Ltd
50. Kurwitu Ventures
51. B.O.C Kenya Ltd
52. British American Tobacco Kenya Ltd
53. Carbacid Investments Ltd
54. East African Breweries Ltd
55. Mumias Sugar Co. Ltd
56. Unga Group Ltd
57. Eveready East Africa Ltd
58. Kenya Orchards Ltd
59. Flame Tree Group Holdings Ltd
60. Safaricom PLC
61. StanlibFahari-REIT
62. New Gold Issuer
63. Atlas Development
64. Nairobi Business ventures
65. Nairobi Securities Exchange ltd

APPENDIX 2: DATA

COMPANY	YEAR	SIZE	LEVERAGE	LIQUIDITY	ROA
OLYMPIA	2013	10.32	0.38	0.25	0.122
	2014	9.01	0.57	0.2	0.096
	2015	9.58	0.6	0.476	0.133
	2016	9.61	0.5	0.909	0.159
	2017	8.39	0.45	0.192	0.041
STANLIB	2013	10.22	0.85	0.179	0.118
	2014	10.06	0.63	0.135	0.047
	2015	9.42	0.68	0.13	-0.009
	2016	10.91	0.64	0.112	0.0567
	2017	9.45	0.64	0.103	0.0328
FLAME TREE	2013	8.71	0.36	0.013	0.0418
	2014	9.25	0.83	0.014	0.0328
	2015	9.53	0.73	0.018	0.02
	2016	11.01	0.31	0.021	0.051
	2017	20.07	0.4	0.029	0.279
KENYA ORCHADS	2013	10.31	0.47	0.022	0.041
	2014	9.15	0.31	0.022	0.054
	2015	9.75	0.65	0.011	0.064
	2016	9.7	0.54	0.011	0.044
	2017	8.88	0.47	0.012	-0.123
UNGA GROUP	2013	10.43	0.411	0.018	0.28
	2014	9.67	0.79	0.019	0.074
	2015	9.54	0.62	0.01	0.035
	2016	11.58	0.89	0.015	0.09
	2017	9.36	0.77	0.015	-0.119
CENTUM	2013	8.74	0.81	0.012	0.0187
	2014	9.34	0.54	0.004	0.19
	2015	11.06	0.41	0.011	0.069
	2016	10.11	0.41	0.02	0.022
	2017	9.4	0.38	0.02	0.128
CARBACID	2013	10.43	0.53	0.018	0.0355
	2014	9.58	0.19	0.016	0.078
	2015	9.75	0.62	0.019	0.162
	2016	9.8	0.53	0.022	0.0238
	2017	8.53	1.14	0.016	0.052
BAT	2013	10.57	0.19	0.018	0.039
	2014	9.63	0.55	0.017	0.118
	2015	9.51	0.58	0.012	0.037
	2016	11.13	0.68	0.02	0.0263

	2017	9.49	0.43	0.029	0.067
B.O.C	2013	9.45	0.57	0.029	0.029
	2014	9.56	0.62	0.034	0.145
	2015	11.08	0.27	0.04	-0.033
	2016	9.72	0.38	0.04	0.1148
	2017	9.61	0.78	0.045	0.47
KURWITU	2013	10.47	0.72	0.059	0.23
	2014	9.42	0.51	1.25	0.22
	2015	9.84	0.64	0.038	-0.069
	2016	9.83	0.55	0.5	0.22
	2017	9.84	0.39	0.455	0.134
HOME AFRICA	2013	8.76	0.39	0.042	0.233
	2014	10.26	0.61	0.016	0.122
	2015	9.74	0.65	0.026	0.096
	2016	9.58	0.73	0.015	0.133
	2017	11.25	0.39	0.007	0.159
KENYA RE	2013	9.55	0.45	0.009	0.041
	2014	9.45	0.311	0.009	0.118
	2015	10	0.19	0.01	0.047
	2016	11.11	0.32	0.012	-0.009
	2017	9.72	0.47	0.015	0.0567
E.A. CEMENT	2013	10.56	0.74	0.014	0.0328
	2014	9.32	0.46	0.014	0.0418
	2015	9.91	0.65	0.015	0.0328
	2016	9.89	0.61	0.016	0.02
	2017	8.6	0.63	0.052	0.051
ARM	2013	10.73	0.63	0.047	0.279
	2014	11.19	0.85	0.032	0.041
	2015	9.57	0.29	0.029	0.054
	2016	11.34	0.75	0.029	0.064
	2017	9.49	0.53	0.014	0.044
SAMEER	2013	9.42	0.31	0.015	-0.123
	2014	9.93	0.15	0.02	0.28
	2015	9.51	0.28	0.02	0.074
	2016	11.13	0.57	0.02	0.035
	2017	10.08	0.54	0.02	0.09
EXPRESS	2013	10.72	0.68	0.017	-0.119
	2014	9.37	0.36	0.02	0.0187
	2015	9.95	0.96	0.021	0.19
	2016	9.87	0.58	0.019	0.069
	2017	8.46	0.86	0.019	0.022

NIC	2013	10.78	0.86	0.02	0.128
	2014	10.33	0.28	0.02	0.0355
	2015	9.62	0.59	0.074	0.078
	2016	11.44	0.77	0.073	0.162
	2017	9.45	0.41	0.063	0.0238
UMEME	2013	9.34	0.58	0.058	0.052
	2014	9.58	0.27	0.058	0.039
	2015	9.44	0.53	0.056	0.118
	2016	11.2	0.27	0.052	0.037
	2017	10.13	0.45	0.035	0.0263
SASINI	2013	10.71	0.45	0.031	0.067
	2014	9.36	0.24	0.03	0.029
	2015	9.98	0.67	0.02	0.145
	2016	9.91	0.71	0.017	-0.033
	2017	8.58	0.98	0.009	0.1148
CIC	2013	10.86	0.98	0.014	0.47
	2014	9.54	0.39	0.033	0.23
	2015	9.71	0.62	0.014	0.22
	2016	11.47	0.78	0.012	-0.069
	2017	8.77	0.54	0.01	0.22